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March 18, 1997

Ms. Juliette Shin
Alameda County Department of Environmental Health
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97 MAR 19 AM 10:59
ENVIRONMENTAL PROTECTION

TRANSMITTAL OF UST CLOSURE REPORT
UST REMOVAL PROJECT
ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

GSA CONTRACT NO. GS-09P-96-KZC-0013
GSA PROJECT NO. RCA21602

Dear Ms. Shin:

On behalf of the General Services Administration, CAL INC is pleased to submit the UST Closure Report for Tank Nos. 3 and 4 at the Alameda Federal Center.

Please contact either Joe Krohn or me if you have any questions regarding the submittal.

Sincerely,

G. Robert Barry
Project Manager

attachments

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UNDERGROUND STORAGE TANK CLOSURE REPORT UST REMOVAL PROJECT ALAMEDA FEDERAL CENTER 620 CENTRAL AVENUE ALAMEDA, CALIFORNIA

CONTRACT NO. GS-09P-96-KZC-0013
GSA PROJECT NO. RCA21602

PREPARED ON BEHALF OF:

GENERAL SERVICES ADMINISTRATION
450 GOLDEN GATE AVENUE, 3RD FLOOR
SAN FRANCISCO, CALIFORNIA

PREPARED BY:

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2040 PEABODY ROAD, SUITE 400
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FEBRUARY 1997

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1.0 INTRODUCTION

This report presents the results of the UST Removal project conducted at the Alameda Federal Center located in Alameda, California. The work was conducted on behalf of the General Services Administration, Construction Services Branch (GSA) in accordance with Contract GS-09P-96-KZC-0013.

1.1 Purpose and Scope

The overall purpose of the project was to remove two underground storage tanks (USTs), associated product piping, and contaminated soil. The scope of work for the investigation was based on the GSA Specification Number GS-09P-96-KZC-0013 (the Spec.) and included the following tasks:

- removing existing asphalt;
- installing a well point dewatering system;
- installing sheet pile shoring;
- excavating, profiling, and disposing of 472 tons of contaminated soil;
- removing and disposing of UST contents (approximately 100 tons of sand);
- removing two 10,000 gallon underground fuel storage tanks;
- profiling, treating, and disposing of 242,000 gallons of water generated during dewatering activities; and,
- restoring the site.

All work performed during the investigation was conducted in accordance with CAL INC's Project Work Plan (PWP) dated September 1996, which was reviewed and approved by the GSA, the Alameda County Health Services Agency Department of Environmental Health (Alameda County), and the City of Alameda Fire Department (the Fire Dept.).

1.2 Report Organization

The remainder of this report is organized into the following sections:

- site description and background;

- field activities;
- sampling and analytical program;
- results of chemical analyses;
- materials handling and disposal;
- site restoration;
- and conclusions and recommendations.

All tables and figures appear in Appendix 1. Photographs of site activities are presented in Appendix 2. A summary of all analytical data is presented in Appendix 3. Appendix 4 contains hazardous waste manifests and certificates of disposal, while non-hazardous manifests and certificates of disposal are contained in Appendix 5. Appendix 6 contains Alameda County's Inspection Reports. Appendix 7 contains the permits obtained during the project. Appendix 8 contains the EBMUD Groundwater Discharge Report. Materials testing results are contained in Appendix 9.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 Site Description

The Alameda Federal Center is located in the northwest portion of the City of Alameda, approximately 500 feet east of the San Francisco Bay shoreline (Figure 1). It is situated in a relatively flat tidal plain area which slopes gently south towards the Bay. The site covers an area of approximately 10 acres. The Alameda Federal Center maintains several buildings used for administrative office and storage functions (Figure 2). The focus of the activities conducted for this project was located southeast of Building 1 and north of Building 8, as shown on Figure 3.

Two USTs (USTs #3 and #4) were operated at the Alameda Federal Center reportedly to provide diesel fuel to steam generating boilers located in the northwestern portion of the facility. The layout of the USTs and product piping is shown in Figure 4. Each UST had a capacity of 10,000 gallons. The two USTs removed during this project have been out of service since prior to 1950. At that time the USTs were filled with sand.

Product piping located within the limits of the excavation area was removed during this project (Figure 4). The product piping was encased in concrete along with two steam pipes which were wrapped with asbestos (Figure 5). All concrete, product piping, and asbestos located within the excavation area were removed and disposed as a part of this project. Product and steam piping that extended beyond the excavation limits was cut at the excavation limits and sealed with

3.0 FIELD ACTIVITIES

3.1 Introduction

This section presents a description of the field activities conducted at Alameda Federal Center in conjunction with the UST removal. The field activities were conducted during the period of October 16, 1996, through January 17, 1997. In general, the field activities consisted of the following tasks:

- installing and operating a dewatering and water treatment system;
- removing and disposing of overlying asphalt;
- removing and disposing of asbestos containing material (ACM) associated with steam piping adjacent to USTs #3 and #4;
- installing an excavation support system (shoring);
- removing and disposing of 472 tons of contaminated soil;
- removing and disposing of UST contents (approximately 100 tons of sand);
- removing and disposing of USTs and associated piping;
- backfilling the excavation with clean, imported pea gravel fill material; and
- restoring the site to previous conditions.

A discussion of the regulations pertinent to the project and descriptions of each of the above tasks are presented in the following sections.

3.1.1 Personnel

All work conducted under the project was conducted under the GSA Construction Services Branch. Mr. James Lew was the Contracting Officer's Technical Representative. Ms. Norma Hermocillo was the Contracting Officer. Mr. Scott Hutchison of Abide International provided oversight for GSA. Mr. Larry Harlan of Cape Environmental was the Architectural/Engineering Manager. Mr. Robert Barry of CAL INC was the Project Manager, site superintendent. Joseph Krohn was the QC System Manager assigned to the project. Key personnel that were involved with the project are given in (Table 1).

3.1.2 Equipment

Equipment used during the UST removal and excavation work included a Hopto 550 Excavator, an 210 Air Compressor, a 60-pound electric Jack Hammer, a 90-pound pneumatic Jack Hammer, a Bobcat 753 with a Hydraulic Hammer, a Bobcat 753 with a smooth bucket, a 12-inch Cut Off Saw with metal cutting blades, 25-ton and 75-ton Hydraulic Cranes, a 42-inch Dynapac 101 Double-drum Smooth Roller, 2-inch and 3-inch Trash Pumps, a 5000-pound Forklift, and various hand tools.

3.2 Deviations from Project Work Plan

Deviations in the actual scope of work versus the work outlined in the PWP included changes in the soil sampling strategy, and the removal of the ACM-containing concrete. A discussion of these deviations is presented in the following sections. ↑ Asbestos Containing Material

3.2.1 Soil Sampling Strategy

The PWP originally included sampling of stockpiled soil to evaluate the suitability of the excavated soil as backfill. The Spec. states that soil was considered unsuitable for backfill if any detectable petroleum hydrocarbons were present. Significant amounts of petroleum contamination were observed during dewatering well emplacement. To streamline the excavation process and to minimize site disturbance, soil was sampled in place and the results were used to confirm field observations that all soil would be unsuitable for backfill. Analytical results confirmed that all soil was unsuitable for backfill, thus soil stockpiling and soil stockpile sampling was not conducted.

3.2.2 Removal of ACM-Containing Concrete

The PWP and the Spec. did not identify the presence of a concrete-encased utility trench in the excavation area. However, upon the commencement of site activities, a concrete-encased utility trench was encountered. All of the utilities contained within the concrete were inactive. Three product pipes were encased in concrete along with two steam pipes which were wrapped with asbestos (Figures 6 and 7). All concrete, product piping, and asbestos located within the excavation area were removed and disposed as a part of this project.

3.3 Asbestos-Containing Material Removal and Disposal

Upon the commencement of site activities, a concrete-encased utility trench was encountered (Figure 4). The concrete-encased utility trench was 2 feet wide, 2 feet deep, and ran beyond the length of the 45 foot excavation. All of the utilities contained within the concrete were inactive. The concrete contained five steel pipes. Three product pipes were encased in concrete along with two steam pipes, which were wrapped with a wet, white fibrous substance (Figure 7). A sample of the fibrous substance was collected and sent to EMSL in San Mateo, California, for asbestos

analysis.

The asbestos sample was collected from the top of the 5-inch diameter pipe approximately 15 feet south of the northern excavation limit. At that point the pipe was not encased in concrete and had been excavated during site activities. The sample was immediately placed in a plastic bag and was shipped to the analytical laboratory under chain of custody.

Sample results confirmed that the substance was 60 percent chrysotile asbestos (Appendix 3). Site activities were suspended to allow an Asbestos Abatement Plan (AAP) to be written, and reviewed and approved by GSA. Following GSA review and approval of CAL INC's AAP, CAL INC proceeded to set up a tented containment area to allow work to proceed without releasing asbestos fibers to the environment (Appendix 2). The strategy was to build a containment area, cut the concrete into manageable sections, lift them from the excavation using an excavator, and to dispose of them.

A containment system with negative air pressure and air filtration was set up. Jack hammers were used to cut the concrete and expose sections of pipe. The pipes were then cut using hand tools and a cut off saw. All ACM was double-bagged. The containment was removed and the excavator was used to place the first section of ACM-containing concrete into a waste receptacle. As the excavator lifted the concrete, however, the concrete split under its own weight along a concrete pour line exposing the asbestos-wrapped pipes. The section of concrete was completely wrapped in plastic to contain the ACM and it was loaded into the waste receptacle.

A new strategy was adopted to prevent the remaining concrete from breaking and exposing asbestos. Under containment, the concrete was broken into rubble, cleaned, and all ACM was carefully separated from the concrete and steam piping, and wrapped in plastic. The remaining concrete was broken up using a Bobcat 753 equipped with a bull-nosed hydraulic hammer. After all of the ACM was bagged, the containment system was removed. Bagged materials included ACM-contaminated concrete and soil, and steam piping.

The bagged ACM and steam piping were placed into a waste receptacle and transported by Falcon Disposal Service, Inc. on October 14, 1996, to the California Asbestos Monofill in Copperopolis, California, where it was disposed. Approximately 6 cubic yards of ACM were disposed. A copy of the hazardous waste manifest and the certificate of disposal are given in Appendix 4. The non-hazardous concrete rubble (approximately 10 tons) was placed into a waste receptacle and was transported by Falcon Disposal Service, Inc. to Bauman Landscaping in Richmond, California, where it was recycled. A copy of the non-hazardous waste manifest is included in Appendix 5.

3.4 UST Content Profiling

According to available records, USTs #3 and #4 contained diesel-contaminated sand and a small amount of liquid. However, previous analytical results available were greater than two years old (Table 3) and the disposal facility required a more recent analysis for profiling. Thus, UST

contents samples were collected and submitted for analysis on October 31, 1996. Sample results are contained in Table 3. Laboratory reports are contained in Appendix 3. Prior to UST sampling, the surface of the liquids in the USTs were inspected for the presence of free floating product. Free product layers were observed in each of the USTs. Because UST contents liquids were to be processed through the water treatment system, it was not necessary to profile them. Thus, the free product layers were not sampled.

The UST sand samples were collected using a hand auger. Samples were placed into appropriate sample containers, and submitted to the project's analytical laboratory, Superior Analytical Laboratory (SAL), Martinez, California. Samples were analyzed for Total Petroleum Hydrocarbons (TPH) quantified as gasoline (TPH-G) (EPA 8015M), TPH quantified as diesel (TPH-D) (EPA 8015M), benzene, toluene, ethyl benzene, and xylene, (BTEX) (EPA 8020), Oil & Grease (SWWM 5520), semi-volatile organic carbons (SVOCs) (EPA 8270), and California Assessment Metals (CAM 5 Metals) (EPA 6010) analyses. UST contents were profiled for disposal to the Altamont Landfill in Livermore, California. The analyses and field observations confirm that the former UST contents were not diesel, but Bunker oil, a much darker, thicker, liquid fuel product.

3.5 UST Removal and Sampling

This section presents a description of the UST removal activities conducted at the site. UST removal activities were conducted at the site during the period of November 21 through December 6, 1996. All UST removal activities were conducted under the direction of Mr. Robert Barry. All earth work including excavation, UST rigging and removal, and backfilling was conducted by Mr. Joe Madison of Pacific Excavators, of Alamo, California.

The UST removals were conducted under permit/authorization from the Fire Dept. and Alameda County. Photographs taken during the UST removal are presented in Appendix 2. A copy of the UST removal permits are presented in Appendix 7. Hazardous waste manifests and certificates of destruction for the removed USTs are presented in Appendix 4. A description of the regulations applicable to the work and a detailed description of the UST removal activities are presented in the following sections.

3.5.1 Applicable Regulations

The UST closure was conducted in accordance with the requirements of 40 CFR Part 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST). Potentially hazardous materials including the USTs, ACM, contaminated soil, and tank contents were profiled pursuant to the requirements of 40 CFR Part 261, Identification and Listing of Hazardous Waste.

In the State of California, UST removal projects are regulated under California Code of Regulations (CCR) Title 22. Regulations are implemented in California by the Department of Toxic Substances Control Board (DTSC). Regulations are implemented by the local

enforcement agency.

State and local regulation implementation was conducted by the local enforcement agency, Alameda County, and the Fire Dept. Copies of all permits obtained from city and county regulatory agencies are presented in Appendix 7. Alameda County and the Fire Dept. were notified prior to UST removal and sampling. Representatives of both agencies were present at the time of removal.

3.5.2 Dewatering System Installation and Operation

The temporary dewatering wells were installed prior to excavation activities to lower the water table to approximately 16 feet bgs during the UST removal activities. A well permit was obtained from Zone 7 Water Agency (Zone 7) prior to installation of the wells (Appendix 7). The soil encountered at the site was significantly different from that shown in the Spec. The bore logs in the Spec. indicate that medium- to fine-grained sand would be encountered from approximately 4 to 20 feet bgs. The soil that was encountered was clayey gravel.

The dewatering well points were installed by Viking Drillers. The boreholes were drilled using a Watson 1000 drill rig. Following pre-drilling the holes, the wells were "jetted" into the formation using a Hydrolift truck with a hole punch.

A total of 11 two-inch diameter wells were installed to depths ranging from 20 to 23 feet at the locations shown in Figure 6. A well completion diagram is given as Figure 11. The wells were installed inside a 6-inch diameter jetted borehole, and completed with a (#3) sand pack. The wells were connected to a piping manifold and pumping system as shown on Figure 4. The dewatering system was composed of the dewatering wells, an electric vacuum pump, a generator, and a 20,000 gallon temporary holding tank (Baker tank), as shown in Figure 5. The dewatering system was connected to the water treatment system, which is described in the following section.

CAL INC began dewatering the excavation area on November 5, 1996. On November 21, 1996, CAL INC confirmed that the water level in the excavation was approximately 8 feet bgs rather than the anticipated 16 feet bgs. This was due to the low permeability of the clayey gravel soil. To keep standing water out of the excavation, CAL INC began intermittent supplementary pumping of water from the excavation area using centrifugal pumps on November 26, 1996. This pumping continued through December 11, 1996, when use of the dewatering system was finished. All of the temporary dewatering wells were removed or destroyed on December 17, 1996.

3.5.3 Water Treatment System Installation and Operation

Groundwater removed during dewatering activities was pumped from the wells into a 20,000 gallon temporary holding tank (Baker tank), as shown in Figure 5. Water from the Baker tank was pumped using centrifugal pumps from the Baker tank through a granulated activated carbon (GAC) filtration water treatment system and discharged to the sanitary sewer (East Bay

Municipal Utility District (EBMUD)). A copy of the EBMUD wastewater discharge permit is given in Appendix 7. The wells, Baker tank, and treatment system were connected together by a system of 2-inch PVC pipes. The centrifugal pumps were set to operate when the water level in the Baker tank reached approximately 4 feet depth. The centrifugal pumps operated at approximately 50 gpm when pumping. Approximately 224,000 gallons of treated water were discharged to EBMUD. A report to EBMUD describing the water discharges is presented in Appendix 9.

Samples of the groundwater and treated water were collected to ensure that the treatment system was operating as specified. Sample results are shown in Table 4. Laboratory analytical reports are given in Appendix 3. On December 6, 1996, the water treatment system (GAC units) achieved "breakthrough" and began discharging untreated water to the sanitary sewer. CAL INC collected a sample and immediately shut down the water removal system. On December 11, 1996, CAL INC replaced the GAC in the secondary treatment unit and restarted the system, which continued filtering the water as designed. Use of the dewatering and water treatment systems was finished on December 11, 1996. A total of 224,000 gallons were treated and discharged.

The degraded GAC was placed in drums which were kept on site. The GAC was sampled by U.S. Filter /Westates for profiling on December 11, 1996. The drummed GAC and GAC units were transported as a non-hazardous waste on January 16, 1997, by U.S. Filter/Westates to Westates Carbon Arizona in Parker, Arizona, where it underwent regeneration. A copy of the certificate of destruction is given in Appendix 5.

The Baker tank was cleaned by Pesco, Inc. on December 17, 1996. The rinsate (sludge) was removed from the Baker tank using a vacuum truck. The sludge was transported by Pesco, Inc. to Redwood Landfill, in Novato, California on December 18, 1996, where it was disposed. A copy of the sludge manifest and certificate of disposal is given in Appendix 5. The Baker tank was removed on January 17, 1997.

3.5.3 Excavation Support System (Shoring)

An excavation support system (shoring) was designed and installed to prevent damage to surrounding structures, such as buildings and retaining walls, during excavation activities. The shoring consisted of sheet piles and steel I-beams (walers). The sheet piles were pushed vertically into the soil at the limits of the excavation to a depth of approximately 20 feet bgs. The walers were hung from the sheet piles using chains and welded into a rectangular shape. The rigid rectangular shape of the walers prevented the sheet piles from collapsing into the excavation. The shoring system was installed on November 15 through 20, 1996. Two sections of sheet piles were not placed to allow the storm sewer's continued operation (Figure 8). This did not affect the shoring effectiveness.

Following excavation and UST removal the shoring was removed on December 17, 1996. A 75-ton crane provided by Allied Crane was used to remove the sheet piles. Two sheet piles were

unable to be removed and were left in place. These are located on the eastern side of the excavation.

3.5.4 Monitoring Well Destruction

In preparation for installing the walers for the shoring on November 18, 1996, monitoring well MW-3 was destroyed. MW-3 was located within the excavation area. A copy of the well destruction permit and a letter report to Zone 7 outlining the well destruction is given in Appendix 8. Photographs of the well destruction appear in Appendix 2.

3.5.5 Excavation

Excavation around the USTs occurred on November 21, 22, 26, and 27, 1996. Excavated soils were loaded into waiting trucks and the soil was immediately transported to the disposal facility. Inspection of the USTs after exposing the tops and sides indicated that the tops of the USTs were outfitted with a 16-inch diameter manway. The manways were facilitated with 4-foot square brick manholes completed to near the surface. The manholes were destroyed during excavation. The bricks were disposed with the excavated soil.

The storm sewer which crossed the excavation area was not removed during excavation activities. Rather, it was left functioning in place and supported using a piece of sheet pile shoring. The sheet pile lay across the walers directly above the storm sewer. Chains and rope were tied around the storm sewer and the sheet pile, effectively hanging the storm sewer pipe from the sheet pile. The concrete storm sewer pipe was punctured in two places during excavation activities, but continued to function normally.

The excavation reached a depth ranging from 11 to 14 feet bgs. The concrete slabs used to anchor the USTs were left in place at a depth of 14 feet bgs with GSA and Alameda County approval. The exact dimensions of the concrete slabs were not determined.

Table 6 illustrates the amounts of soil removed during the project. Excavation began on November 21, 1996, and finished on December 6, 1996. A total of 472.00 tons (approximately 337.14 cubic yards) of soil were excavated from around the USTs in the excavation area.

The natural static water level in the excavation area appears to vary between 5 and 7.5 feet bgs. As a result, petroleum-contaminated soil in the excavation area appears to be limited to a narrow soil horizon between approximately 5 and 8 feet bgs. Soil above and below this horizon appear uncontaminated.

3.5.6 UST Cutting

During excavation, all UST appurtenances such as underground fill lines and suction lines were removed in preparation for cutting the USTs. The USTs were cut to allow UST contents to be removed prior to UST removal. The lower explosive limit (LEL) and the percentage of oxygen

in the USTs were monitored prior to UST cutting. The LEL in both USTs was 0% and the oxygen level in both USTs was near 20%. The organic vapor analyzer (OVM) measured 0 mg/kg organic vapors. Because the USTs formerly contained Bunker fuel, which has a very low vapor pressure, and because the LEL was 0%, the Fire Dept. allowed CAL INC to cut the USTs using an acetylene torch under the supervision of a certified Marine Chemist. UST inerting was not necessary.

A copy of the Hot Work Permit issued by the Marine Chemist obtained prior to cutting the USTs is included in Appendix 7. The UST tops were cut off under the supervision of the Fire Dept. (Captain McKinley and Inspector Edwards) and the Marine Chemist (Mr. Henry Sorenson). Photographs of the UST cutting are presented in Appendix 2. After being cut off, the UST tops were set beside the USTs in the excavation using the excavator.

3.5.7 Removal of UST Contents and USTs

On December 3 and 4, 1996, the UST contents were removed and disposed. The USTs were approximately 90 percent full. Each UST contained approximately 40 cubic yards of Bunker-fuel-contaminated sand and approximately 200 gallons of liquids. The liquids were a mixture of water and Bunker fuel. Liquid contents were pumped into the Baker tank for treatment. After pumping all the liquids feasible, the sand was removed using the excavator. Because the sand was supersaturated with water, clean, dry soil was imported and mixed with the sand in the USTs to dry the sand. The sand/soil mixture was then loaded into waiting trucks and transported to the disposal facility. During the sand/soil mixing and removal process, more liquids were removed to the excavation and then pumped into the Baker tank. Following sand removal using the excavator, the UST interiors were shoveled and swept clean of all solids and liquids.

An 8-foot long 6-inch diameter solid stem drill auger was found in UST #4. The origin of the auger is not clear. Previous reports do not indicate that an auger was lost during drilling activities and there are no borings identified on previous site maps where UST #4 is located. There was a small hole (approximately 3 inches diameter) in the top of UST #4 where the auger had penetrated the UST.

Approximately 160 tons of clean, dry soil was imported and mixed with the wet UST sand. A total of 256.28 tons of contaminated sand/soil mixture was removed from the USTs and disposed. Thus, approximately 96.11 tons of UST sand was removed and disposed. Lutrel Trucking transported the sand/soil mixture to Altamont Landfill in Livermore, California, where it was disposed.

On December 6, 1996, a small amount of liquid had entered the USTs from the excavation through holes in the USTs. The water was pumped out of the USTs. The USTs were then removed from the excavation using a 25-ton crane by Engineered Crane Service (California license #M25604) under observation by CAL INC, the GSA Construction Services Branch, GSA Alameda facility personnel, Alameda County, and the Fire Dept. Each UST was immediately lowered to the ground where it was cleaned and inspected for holes. Each UST was loaded onto

a lowboy trailer after cleaning and inspection.

The USTs were constructed of lap welded steel plate and covered with a protective bituminous coating. Each UST was approximately 17 feet long and 10 feet in diameter. UST #3 was in fair condition with protective coating intact over most of the UST. Some small holes were noted in the eastern end of the UST. UST #4 was in fair condition, with protective coating intact over most of the UST. Some small holes were noted in the northern and eastern end of the UST and minor surface scaling on the UST bottom.

The USTs and associated piping were transported to Erickson, Inc, in Richmond, California, where they were cleaned and then cut up for recycling as scrap steel. A copy of the Certificate of Destruction is included in Appendix 4. A copy of Alameda County's Inspection Report is included in Appendix 6.

3.5.8 Excavation Inspection and Soil Sampling

After removal of the USTs, the excavation bottom was probed using the excavator bucket to assess subsurface conditions beneath the USTs. The probing confirmed that the USTs were secured to concrete slabs which were underlying both USTs at approximately 14 feet bgs. The excavation was inspected by CAL INC and Alameda County. Heavy soil staining (contamination) was noted between 5 and 8 feet bgs on all sides of the excavation. Soil below 8 feet bgs was not stained. The excavation bottom was between 11 and 14 feet bgs. The excavation bottom appeared relatively uncontaminated. The natural static groundwater level is approximately 5 feet bgs. Thus, it appears that the petroleum products which may have been released at the site did not contaminate soil below approximately 8 feet bgs.

The number of samples collected from the limits of the excavation and sample locations were approved in the field by Alameda County. Four samples were collected from the sidewalls of the excavation and one sample was collected from the excavation bottom. The samples were collected from the sidewalls ranged from 6 to 7 feet in depth. The sidewall sample locations were chosen with input from Alameda County and were chosen from the most stained soil. The sample collected from the excavation bottom was collected to confirm that the excavation bottom was uncontaminated. Table 4 provides a summary of the results of confirmation soil sampling in the excavation area. Laboratory analytical reports are presented in Appendix 3. A copy of Alameda County's Inspection Report is included in Appendix 6.

3.5.9 Storm Sewer Repair

The storm sewer, which was damaged during excavation activities, was repaired on December 13, 1996. Pacific Excavators used a wooden form to place concrete patches on the two small holes in the sewer line. Rigid plastic was used to keep the concrete from entering the pipe during pipe repair. The pipe was tested using running water and the elevations of the drain inlets were surveyed to ensure that water flow was not compromised.

3.5.10 Excavation Backfill

The excavation was backfilled on December 12, 1996. Prior to backfilling the excavation, a geotextile liner was placed on the excavation bottom to stabilize the bottom. Fifty tons of 1½-inch crushed rock was placed on the excavation bottom to stabilize the bottom (from approximately 14 feet to 11 feet bgs). Approximately 400 tons of 3/8-inch pea gravel was placed in the excavation (between approximately 11 feet and 1 foot bgs). A geotextile liner was placed between the pea gravel and the road base placed above it (from 12 to 3 inches bgs). Figure 12 shows an idealized cross section through the excavation area.

3.5.11 Site Surveying Results

Surveying was conducted to ensure that the concrete-block wall adjacent to the excavation area was not damaged during the project. Ten points were surveyed on the concrete block wall (Post #1 through Post #10) and Building #1 and Building #8 were surveyed as well. A control point (Top of the Water Valve) was established and used as a reference during each measuring period.

Two types of measurements were collected. The first was a measure of vertical movement taken at each of the ten posts. The second was a measure of relative horizontal movement taken at each of the ten posts. Results of surveying are shown in Table 10. Results of the surveying did not indicate any significant movement of the concrete wall or nearby buildings. However, slight movement of the wall was detected (vertically (downward) approximately 0.02 inches, and approximately 0.5 inches (maximum) eastward).

The only evidence of damage to the wall was a tiny crack (approximately 1/16-inch wide and 3 feet high) in the concrete block wall (see Photographs, Appendix 2).

4.0 SAMPLING AND ANALYTICAL PROGRAM

This section presents a discussion of the soil and water sampling procedures and analytical methodologies that were utilized for the project. All sampling and analytical work conducted on the project was conducted in accordance with the GSA-approved PWP. The specific laboratory analyses were conducted by Superior Analytical Laboratory (SAL), Martinez, California, a State of California-approved laboratory. The sampling program consisted of the collection of samples from the following areas: 1) UST contents (sand) samples collected for profiling purposes; 2) water samples collected from the water treatment system; 3) soil samples from the excavation area collected to ensure that soil was unsuitable for backfill; and 4) confirmatory soil samples from the excavation sidewalls and excavation bottom to confirm soil conditions at the end of the project. Summaries of all samples collected and analyzed for the project are presented in Appendix 3. A description of each type of sampling activity is presented in the following sections.

4.1 Soil Sampling

Soil sampling during the investigation included the collection of samples from the excavation area, excavation sidewalls, and excavation bottom. Summaries of all soil samples collected during the project are presented in Appendix 3. The specific locations of the samples collected are shown in Figure 9. A description of the soil sampling activities and procedures is presented below.

4.1.1 Field Screening

Because all materials in the excavation area were being disposed of, soils removed during the UST excavation activities were not typically screened with a PID. However, excavated materials that were visibly stained and had obvious petroleum odors, typically had readings below 10 mg/kg with the PID. This was presumably due to the low vapor pressure of the petroleum products (Bunker oil) present in the soil.

4.1.2 Soil Sampling Procedure

Soil samples were collected using a hand-driven soil sampler or were collected directly into sample containers. The soil sampler consisted of a stainless steel casing that contained a 6-inch long, 2-inch diameter tube which was driven into the soil by a slide hammer attached to the end of a sampler assembly. Upon retrieval of the sample tube, the tube was capped using teflon tape and a plastic cap, appropriately labeled, and refrigerated pending shipment to the analytical laboratory.

4.2 Water Sampling

Water samples were collected from the discharge of the dewatering system at the Baker tank, at the discharge point at the first GAC unit, and the discharge point to the sanitary sewer. Samples were collected directly into sample containers. All sample containers were appropriately labeled, and refrigerated pending shipment to the laboratory.

4.3 Sample Handling

At the end of each day of sample collection, all samples were repackaged with fresh ice and packing material. Ice chests used for transporting samples were waterproof and made of plastic. Samples were packed in such a way that they did not touch during shipment. Chain-of-custody forms were signed and sealed in "zip-lock" plastic bags and affixed to the top, inside lid of each ice chest. The ice chests were either transported to the analytical laboratory by CAL INC or by laboratory personnel.

Chain-of-custody procedures were used for tracing the possession and handling of individual samples from the time of field collection through laboratory analysis. Documentation of custody

is accomplished through a chain-of-custody record, that lists each sample and the names of individuals responsible for sample collection, shipment, and receipt. Copies of chain-of-custody forms are given in Appendix 3.

Samples submitted to SAL included chain-of-custody records. The chain-of-custody record was properly signed and the date of collection and shipment recorded, along with the sample site identifications and requested analyses for each sample. The laboratory used the chain-of-custody form to document the condition of samples on arrival at the laboratory. Sample labels were affixed to all sample bottles, jars, and tubes. The sample labels marked in indelible ink with the field sample number and other required information. All labels used on the containers were of a permanent type.

4.4 QA/QC Samples

This section presents a summary of the type of samples obtained in the field for use in assessing the analytical laboratory performance, including precision, accuracy, representativeness, comparability, and sensitivity (PARCC parameters). A description of the type and frequency of QA/QC samples collected during the investigation are presented below.

4.4.1 Quality Control (QC) Samples

Due to the low numbers of samples collected for this project, no QC samples were collected for this project.

4.4.2 Quality Assurance (QA) Samples

Additional volumes of sample were routinely collected to allow the laboratory to conduct QA analysis on the samples submitted.

4.5 Sampling Equipment Decontamination

All sampling equipment and tools that came in contact with sample media were decontaminated by washing with water containing Alconox detergent, followed with a deionized water rinse, and second deionized water rinse. All rinsate water generated during the sampling equipment decontamination activities was placed in the Baker tank and treated prior to discharge to the sanitary sewer.

5.0 RESULTS OF CHEMICAL ANALYSES

This section presents the results of analyses conducted on soil and water samples collected during the investigation. A description of the appropriate regulatory action levels and the results of analyses presented by matrix type are presented in the following sections.

5.1 Applicable or Relevant and Appropriate Requirements (ARAR's)

Applicable or Relevant and Appropriate Requirements (ARARs) of the Federal, State and Local governing agencies are summarized in this section. In general, ARARs are used for this project for determining waste disposal criteria and for comparison of soil testing results to applicable state and county regulations to determine whether contaminant levels in soil are a potential threat to groundwater quality. In summary, the following ARARs apply to the project:

In this project the Spec. stated that any detectable contamination in soil rendered the soil unsuitable for backfill. This is the most stringent ARAR for soil.

Potentially hazardous materials including the USTs, UST liquids and sludges, contaminated soil, and contaminated rinse water were profiled pursuant to the requirements of 40 CFR Part 261, Identification and Listing of Hazardous Waste.

5.2 Soil

This section presents the results of chemical analyses on soil samples collected during the project. Analytical results for soil samples collected from the excavation area are presented in this section. A summary of all analytical results for soil is presented in Table 3. A copy of the analytical reports is presented in Appendix 3. A discussion of the results in comparison to appropriate regulatory levels is presented in the following sections.

5.2.1 Excavation Sidewall and Bottom Samples

A total of 4 soil samples were collected from the excavation sidewalls, one sample was collected from the excavation bottom. The sidewall samples were collected to evaluate conditions at the limits of the excavation. The sidewall samples were collected from soil that displayed the most visible staining and hydrocarbon odor (between 6.0 and 7.0 feet bgs). The sample locations are described as follows: northwest corner, north sidewall, east sidewall, and the southeast corner (Figure 10). The excavation bottom sample was collected near the southwest corner of the excavation at 13.0 feet bgs. The excavation bottom sample was collected to evaluate conditions below the stained soil horizon (approximately 5 to 8 feet bgs).

Soils in the excavation area that were visibly stained and had obvious petroleum odors, typically had readings below 10 mg/kg with the PID. This was presumably due to the low vapor pressure of the petroleum products (Bunker oil) present in the soil.

The five soil samples collected were analyzed for TPH-G, BTEX, VOCs, SVOCs, CAM 5 Metals, and Oil & Grease. Results show that the four sidewall samples contained petroleum hydrocarbons ranging between 1100 and 6000 mg/kg diesel and between 2100 and 6300 mg/kg Oil & Grease. In contrast, the excavation bottom sample contained 37 mg/kg diesel and less than 85 mg/kg Oil & Grease. These analytical results combined with field observations illustrate that,

while there is petroleum contamination in the soil around the excavation area, the contamination is limited to a narrow soil horizon between 5 and 8 feet bgs.

The excavation dimensions were approximately 44 feet by 26 feet. The grossly contaminated soil horizon appears to extend horizontally from approximately 5 to 8 feet bgs (3 vertical feet). Thus, approximately 2300 cubic feet of soil was grossly contaminated. Based upon the analytical data, the average concentration of petroleum product characterized as diesel is 3850 mg/kg. Using these parameters, the approximate amount of petroleum product removed during this project is 1000 gallons or 9000 pounds.

5.2.2 UST Contents Samples

UST contents samples were collected for waste profiling purposes. One sample was collected from each of the UST's fill ports. Previous analytical results were available, however, the previous results were greater than two years old (Table 4). The disposal facility required a more recent analysis for profiling purposes, so samples were collected and submitted for analysis on October 31, 1996. Sample results are contained in Table 4. Laboratory reports are contained in Appendix 3. Prior to UST sampling, the surface of the liquids in the USTs were inspected for the presence of free floating product. Free product layers were observed in each of the USTs. Because UST contents liquids were to be processed through the water treatment system, it was not necessary to profile them. Thus, the free product layers were not sampled. Water samples were submitted to SAL, Martinez, California, for TPH-G, TPH-D, BTEX, Oil & Grease, SVOCs, and CAM 5 Metals analyses.

Analytical results indicate that UST #3 contained 7900 mg/kg diesel, 5000 mg/kg Oil & Grease, and a variety of SVOCs, while UST #4 contained 14 mg/kg diesel and 580 mg/kg Oil & Grease. The analyses and field observations confirm that the former UST contents were not diesel, but Bunker oil, a much darker, thicker, liquid petroleum product.

5.3 Water

This section presents the results of chemical analyses on water samples collected during the project. Water samples were collected at three points in the groundwater treatment system: at the discharge point from the groundwater removal system, at the discharge from the first granular activated carbon (GAC) treatment unit, and downstream of the second GAC treatment unit at the discharge to the sanitary sewer. Water was collected and analyzed for BTEX, TPH-D, and Oil & Grease. Samples were collected on October 25, November 15, and December 6, 1996. Samples were collected directly into sample containers.

A summary of all analytical results is presented in Table 5. A copy of the analytical report is presented in Appendix 3.

Groundwater samples showed generally concentrations of BTEX less than 2 micrograms per liter (µg/L). TPH-D, and Oil & Grease were detected at concentrations up to 5100 µg/L. While these

samples may not be representative of aquifer conditions between 18 and 22 feet bgs where the dewatering wells were screened, this may indicate that groundwater between 18 and 22 feet bgs may be slightly contaminated.

In both cases where samples were collected when the treatment units were working as designed (10-25-96 and 11-15-96), the levels of contaminants decreased after treatment. For samples TW-1-3 and TW-2-3 (12-6-96), while TPH-D and Oil & Grease were greater than 37,000 µg/L, BTEX components were below 3 µg/L. This confirms that "breakthrough" of the GAC treatment units had occurred and indicates most of the contaminants are diesel weight or heavier petroleum products.

6.0 MATERIALS HANDLING AND DISPOSAL

6.1 Asphalt

On October 21, 1997, Pacific Excavators removed the existing asphalt covering the excavation area. Most of the approximately 8 tons of asphalt was transported to Gallagher & Burke of Oakland, California, where it was recycled. On January 6, 1997, asphalt that had been inadvertently damaged during excavation (approximately 5 tons) was removed, transported, and recycled at Gallagher & Burke.

6.2 Asbestos-Containing Material

Approximately 6 cubic yards of ACM were removed from the excavation area. The bagged ACM and steam piping were placed into a waste receptacle and transported by Falcon Disposal Service, Inc. on October 14, 1996, to the California Asbestos Monofill in Copperopolis, California, where it was disposed. A copy of the hazardous waste manifest and the certificate of disposal are given in Appendix 4.

6.3 Concrete

Approximately 10 tons of concrete rubble was generated during asbestos abatement. The concrete was placed into a waste receptacle and was transported by Falcon Disposal Service, Inc. to Bauman Landscaping in Richmond, California, where it was recycled.

The concrete slabs used to anchor the USTs were left in place at a depth of 14 feet bgs. The exact dimensions of the concrete slabs was not determined.

6.4 Soil

Soil in the excavation area from 3 inches bgs to a depth of between 11 and 14 feet bgs was removed and disposed. While much of this soil contained limited amounts of petroleum contamination, this soil was considered unsuitable for backfill. Table 6 illustrates the amounts of

soil removed during the project. Excavation began on November 21, 1996, and finished on December 6, 1996. A total of 472.00 tons (approximately 337.14 cubic yards) of soil were excavated from around the USTs in the excavation area. All soil was disposed of as non-hazardous waste at the Altamont Landfill, Livermore, California. Non-hazardous waste manifests are included in Appendix 5.

6.5 UST Contents

The USTs each contained approximately 50 tons of bunker fuel contaminated sand and approximately 200 gallons of liquids. The liquids were a mixture of water and bunker fuel. Liquid contents were pumped directly into the Baker tank or into the excavation, and then into the Baker tank. The liquids were then processed through the water treatment system.

The sand was removed using the excavator. Because the sand was supersaturated with water, and the Altamont Landfill would not accept saturated material, approximately 160 tons of clean, dry soil was imported and mixed with the wet UST sand. A total of 256.28 tons of contaminated sand/soil mixture was removed from the USTs and disposed. Thus, approximately 96.11 tons of UST sand was removed and disposed. Lutrel Trucking transported the sand/soil mixture to Altamont Landfill in Livermore, California, where it was disposed.

6.6 Underground Storage Tanks

On December 6, 1996, the USTs were removed from the excavation using a 25-ton crane by Engineered Crane Service (California license #M25604) under observation by CAL INC, the GSA Construction Services Branch, GSA Alameda facility personnel, Alameda County, and the Fire Dept. Each UST was immediately lowered to the ground where it was cleaned and inspected for holes. Each UST was loaded onto a lowboy trailer after cleaning and inspection.

The USTs were constructed of lap welded steel plate and covered with a protective bituminous coating. UST #3 was in fair condition with protective coating intact over most of the UST. Some small holes were noted in the eastern end of the UST. UST #4 was in fair condition, with protective coating intact over most of the UST. Some small holes were noted in the northern and eastern end of the UST and minor surface scaling on the UST bottom.

The USTs and associated piping were transported to Erickson, Inc, in Richmond, California, where they were cleaned and then cut up for scrap steel recycling. A copy of the Certificate of Destruction is included in Appendix 7.

6.7 Water

Water generated during dewatering activities was treated using a granulated activated carbon (GAC) filtration treatment system and discharged to the sanitary sewer EBMUD, as described in section 3. No spills occurred. A total of 224,000 gallons were treated and discharged.

6.8 Granular Activated Carbon

The water treatment system generated approximately 4 tons of petroleum-contaminated granular activated carbon (GAC). The degraded GAC was placed in drums which were kept on site. The GAC was sampled by U.S. Filter /Westates for profiling prior to disposal on December 11, 1996. The drummed GAC and GAC units were transported as non-hazardous waste on January 16, 1997, by U.S. Filter/Westates to Westates Carbon Arizona in Parker, Arizona, where it underwent regeneration. A copy of the certificate of destruction is given in Appendix 7.

7.0 SITE RESTORATION

Following excavation backfill, the existing asphalt was recut, aggregate base was placed and compacted, the site was repaved, and finally, striped. On January 5, 1997, aggregate material was analyzed for moisture density analysis by Kleinfelder, Inc. (Appendix 6). The resulting moisture density curve (MD curve) showed that the maximum dry density was reached at an optimum moisture of 6.9 percent (Appendix 9).

On January 6 and 7, 1997, approximately 40 tons of aggregate base was placed in the excavation area and compacted. A Bobcat was used to spread the aggregate base and a compactor was used to compact the aggregate base. On January 7, 1997, field density testing was conducted by Kleinfelder, Inc. using a nuclear gauge, confirming that at least 95 percent compaction was reached. Appendix 9 contains results of the field density testing.

On January 9, 1997, ReNew Sealers sprayed the prime coat in preparation for the pavement. On January 10, 1997, ReNew Sealers placed and compacted the asphalt-concrete pavement. A drainage test was conducted to ensure that water drained to the existing drain inlet. On January 17, 1997, ReNew Sealers painted parking space and handicap striping and a placed handicap sign on the concrete block wall. On January 23, 1997, CAL INC, the GSA COTR, Abide, and GSA facility personnel agreed that the scope of work had been substantially completed.

8.0 CONCLUSIONS AND RECOMMENDATIONS

All project objectives have been achieved. The USTs have been removed and a substantial portion of the contaminant load has been removed.

8.1 Conclusions

1. A concrete-encased utility trench containing 5 steel pipes was encountered crossing the excavation area. Two of the pipes were wrapped with asbestos. All asbestos-containing material (ACM) within the excavation area was removed and disposed. Approximately 6 cubic yards of ACM were removed from the excavation area. Product piping outside the

excavation area still contains some Bunker fuel product. Steam piping outside the excavation area is still wrapped with asbestos.

2. Two 20,000-gallon USTs removed from the excavation area and disposed. The USTs appeared to have a few small holes. The USTs contained Bunker fuel, not diesel as was previously reported.

3. Soil surrounding the excavation area between approximately 5 and 8 feet bgs appears contaminated with petroleum products. Soil above and below this profile is relatively uncontaminated. The origin of the petroleum contamination is probably the USTs or from past practices in using the USTs. Approximately 1000 gallons (9000 pounds) of petroleum contamination was removed from the excavation and disposed as a part of this project.

4. The USTs were filled with sand prior to 1950. Any contamination associated with the USTs was probably caused prior to 1950. There was a significant contaminant load around the USTs. Therefore, either there was no driving force to cause contaminant migration, or the contaminants were not able to migrate due to contaminant properties or soil properties. The driving force for contaminant migration is gravity and the slope of the groundwater table. Both of these are typical for sites around the Bay Area, so there appears to be plenty of driving force for contaminant migration.

5. Bunker fuel has a high viscosity (it's thick like molasses) and is relatively insoluble. Thus, it is not very mobile in the soil. In addition, observations made in the field indicate that, when the soil structure was disturbed (during excavation or during well emplacement), the fuel became mobile and would run down the soil surface or pool on the water surface. Thus, when MW-3 was emplaced, some of the fuel became mobile and appeared as free product in the well. After the free product was removed during groundwater sampling, it "disappeared". The Bunker fuel was still present, it was just not mobile.

6. Previous results of groundwater sampling indicate very low levels of petroleum products in the groundwater sampled from 3 to 13 feet bgs. Thus, the groundwater does not appear to dissolve much of the petroleum products, nor are the petroleum products very mobile.

8.2 Recommendations

1. An Operations and Maintenance Plan should be developed to manage in place the existing ACM-wrapped steam pipes identified in the area of excavation. (U.S. EPA, 1990. Managing Asbestos In Place.) It is recommended that for the protection of future contractors working at this site, an information transfer system be put in place to transfer information from the GSA Facility Managers and other personnel working at the facility to the personnel in the GSA Construction Services Branch, specifically identifying areas containing ACM.

2. A soil boring, soil sampling, groundwater monitoring, and well installation program should be developed and implemented to further define the lateral extent of petroleum impacted soil. Based on existing data collected as a part of this project (Sections 3.5.8 and 5.2.1), the petroleum product does not appear to have migrated vertically. The soil sampling program should address the collection of soil from the area surrounding the former UST location and southward toward the Bay. The work will most likely require coordination with the adjacent private land owners to the west. A work plan should be developed and approved by Alameda County prior to implementation of the sampling program.

3. Groundwater sampling should be conducted to define the lateral extent of petroleum impacted groundwater. As soil sampling is being conducted, free product measurements and grab groundwater samples should be collected from the soil borings. The grab groundwater sampling results will allow definition of the lateral extent of petroleum impacted groundwater, and positioning of any future monitoring wells.

4. A groundwater monitoring program consisting of monthly water level measurements and quarterly groundwater sampling should be implemented to monitor the direction of groundwater flow and the extent of impacted groundwater. Monitoring wells should be installed based upon the information obtained during grab groundwater sampling. The groundwater monitoring program should include the existing on-site wells and any future on- and off-site wells.

5. After the lateral and vertical extent of soil and groundwater contamination have been defined, a final remediation plan (FRP) should be developed for the site. The FRP should address any residual soil contamination and processes required to monitor or clean up the site's petroleum impacted soil and groundwater.

APPENDIX 1

TABLES AND FIGURES

TABLE 1

PROJECT PERSONNEL
GSA Alameda
UST Removal Project

Personnel	Company	Responsibility
James Lew	GSA	Contracting Officer's Technical Representative Resident Engineer
Norma Hermocillo	GSA	Contracting Officer
Scott Hutchison	Abide International	Construction Management Site Supervisor
Larry Harlan	Cape Environmental	Architectural/Engineering Manager
Joseph Krohn	CAL INC	Program Manager, Quality Assurance
Robert Barry	CAL INC	Project Manager, Site Superintendent, Site Safety Officer
Steve Essert	CAL INC	Project Soil Scientist
Joe Madison	Pacific Excavators	Excavation and UST removal contractor
Juliet Shin	Alameda County Health Services Agency	Permitting UST Removal and Sampling Oversight
Capt. McKinley and Inspector Edwards	City of Alameda Fire Department	Permitting UST Removal and Sampling Oversight

TABLE 2

EXCAVATED SOIL SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number	TPH-G (mg/kg)	B/T/E/X (mg/kg)	TPH-D (mg/kg)	TPH-Motor Oil (mg/kg)	8240 VOCs (mg/kg)	8270 SVOCs (µg/kg)	6010 Cd/Cr/Ni/Pb/Zn (mg/kg)	5520 Oil & Grease (mg/kg)
SS1-2.5'	ND	0.010 Toluene 0.027 Benzene	38	110	ND	ND	4.1 Cd 18 Cr 16 Ni ND Pb 82 Zn	84
SS1-7.0'	ND	0.009 Xylenes	190	220	ND	490 Fluoranthene 560 Pyrene	ND Cd 10 Cr ND Ni ND Pb 170 Zn	80
SS1-12.0'	ND	0.007 Ethyl Benzene	38	52	ND	330 Pyrene	ND Cd ND Cr ND Ni ND Pb 180 Zn 21 Mercury ND (Hg WET)	370
SS2-4.0'	3.3	0.063 Xylenes	ND	ND	ND	ND	ND Cd 9.5 Cr 12 Ni ND Pb 100 Zn	ND
SS2-6.5'	ND	ND	3200	3000	ND	ND	ND Cd 5.8 Cr 7.0 Ni ND Pb 96 Zn	4000
SS2-11.0'	ND	ND	490	510	ND	ND	ND Cd ND Cr ND Ni 15 Pb 140 Zn	530

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
TPH-Motor Oil	Total Petroleum Hydrocarbons as Motor Oil
8240	Volatile Organic Compounds
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)

TABLE 3

UST CONTENTS SAMPLE RESULTS
GSA Alameda
UST Removal Project

1996 Sample Results						
Location	8015M TPH-G (mg/kg)	8020 B/T/E/X (mg/kg)	8015M TPH-D (mg/kg)	5520 Oil & Grease (mg/kg)	8270 SVOCs (µg/kg)	6010 Cd/Cr/Ni/Pb/Zn (mg/kg)
Tank 3	ND	ND	7900	5000	2-methyl-naphthalene 7700 Acenaphthelene 2100 fluorene 3700 phenanthrene 4100 pyrene 3400	ND\24\10\40\42
Tank 4	ND	ND	14	580	ND	ND\19\11\36\50

Sample Results from T & T (1994)								
Location	TPH-G	B/T/E/X	TPH-D	418.1	8080	8270 (mg/kg)	6010 Cd/Cr/Ni/Pb/Zn	8010
Tank 3 Liquid	ND	ND	69000	600000	ND	ND	ND	NR
Tank 3 Solids	ND	ND	4800	12800	ND	ND	ND/22/33/10/47	ND
Tank 4 Soilds	ND	ND\ND\12\64	220		NR	ND	ND/17/21/ND/15	NR

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
418.1	Total Recoverable Hydrocarbons
8080	Pesticides, PCBs
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)
8010	Chlorinated Hydrocarbons
ND	Not detected
NR	Not run (not analyzed)

TABLE 4
SOIL SAMPLES COLLECTED AFTER UST REMOVAL
SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number Location	TPH-G (mg/kg)	B/T/E/X (mg/kg)	TPH-D (mg/kg)	8240 VOCs (µg/kg)	8270 SVOCs (µg/kg)	6010 Cd/Cr/Ni/Pb/ Zn (mg/kg)	5520 Oil & Grease (mg/kg)
S-1-7.0' NW Corner	ND	0.17 Ethyl Benzene 0.14 Xylenes 18 Unknowns	6000	ND	4700 Acenaphthene 4800 Pyrene	ND Cd ND Cr 1.6 Ni 3.2 Pb 83 Zn	6300
S-2-7.0' North Sidewall	ND	0.059 Ethyl Benzene 0.052 Xylenes 9.5 Unknowns	4500	ND	ND	ND Cd ND Cr 1.4 Ni 4.2 Pb 67 Zn	5000
S-3-6.0' East Sidewall	ND	0.009 Ethyl Benzene 0.15 Xylenes 1.9 Unknowns	1100	6.2 Benzene 25 Xylenes	ND	ND Cd 14 Cr 12 Ni 6.2 Pb 72 Zn	2900
S-4-6.0' SE Corner	ND	0.019 Ethyl Benzene 0.016 Xylenes 4.1 Unknowns	3800	ND	ND	0.64 Cd ND Cr 1.2 Ni 8.8 Pb 250 Zn	2100
S-5-13.0' Southwest Excavation Bottom	ND	ND	37	ND	ND	ND Cd 3.5 Cr 5.8 Ni 5.2 Pb 54 Zn	<85

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
TPH-Motor Oil	Total Petroleum Hydrocarbons as Motor Oil
8240	Volatile Organic Compounds
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)
5520	Oil & Grease
ND	Not detected

TABLE 5

WATER SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number	Collection Date	8020 B/T/E/X (µg/L)	8015M TPH-Diesel (µg/L)	5520 Oil & Grease (µg/L)
Groundwater Samples				
GW-1	10-25-96	1.1 Toluene 1.0 Xylenes	320 D	5100
GW-2	11-15-96	0.5 Xylenes	240 D	ND
GW-3	12-6-96	ND	90 D	ND
Water samples collected after passing through GAC Treatment Unit #1				
TW-1-1	10-25-96	0.6 Toluene 1.5 Xylenes	140 D	ND
TW-1-2	11-15-96	ND	60 MO	ND
TW-1-3	12-6-96	3.3 Xylenes 0.7 1,3-dichlorobenzene 2.3 1,4-dichlorobenzene	51000 D	190000
Water samples collected after passing through GAC Treatment Unit #2				
TW-2-1	10-25-96	0.6 Xylenes	80 D	ND
TW-2-2	11-15-96	ND	70 MO	ND
TW-2-3	12-6-96	0.7 Xylenes 1.6 1,4-dichlorobenzene 1.1 1,2-dichloroenzene	37000 D	110000

B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
5520	Oil & Grease
ND	Not detected
D	Chromatographic pattern resembles diesel
MO	Chromatographic pattern resembles motor oil
µg/L	Micrograms per liter

TABLE 6

EXCAVATED SOIL
GSA Alameda
UST Removal Project

DATE	SOIL EXCAVATED (tons)	SOIL EXCAVATED (cubic yards)
11-21-96	187.17	133.69
11-26-96	177.88	127.06
11-27-96	63.00	45.00
12-4-96	24.90	17.79
12-6-96	19.05	13.61
Total	472.00	337.14

TABLE 7

UST CONTENTS (SAND) REMOVED AND DISPOSED
GSA Alameda
UST Removal Project

DATE	CLEAN, DRY SOIL ADDED TO USTs (tons)	TOTAL WET, CONTAMINATED SAND/SOIL MIXTURE REMOVED AND DISPOSED (tons)	TOTAL UST SAND REMOVED AND DISPOSED (tons)
12-3-96	99.42	130.08	30.66
12-4-96	60.75	126.20	65.45
Total	160.17	256.28	96.11

TABLE 8

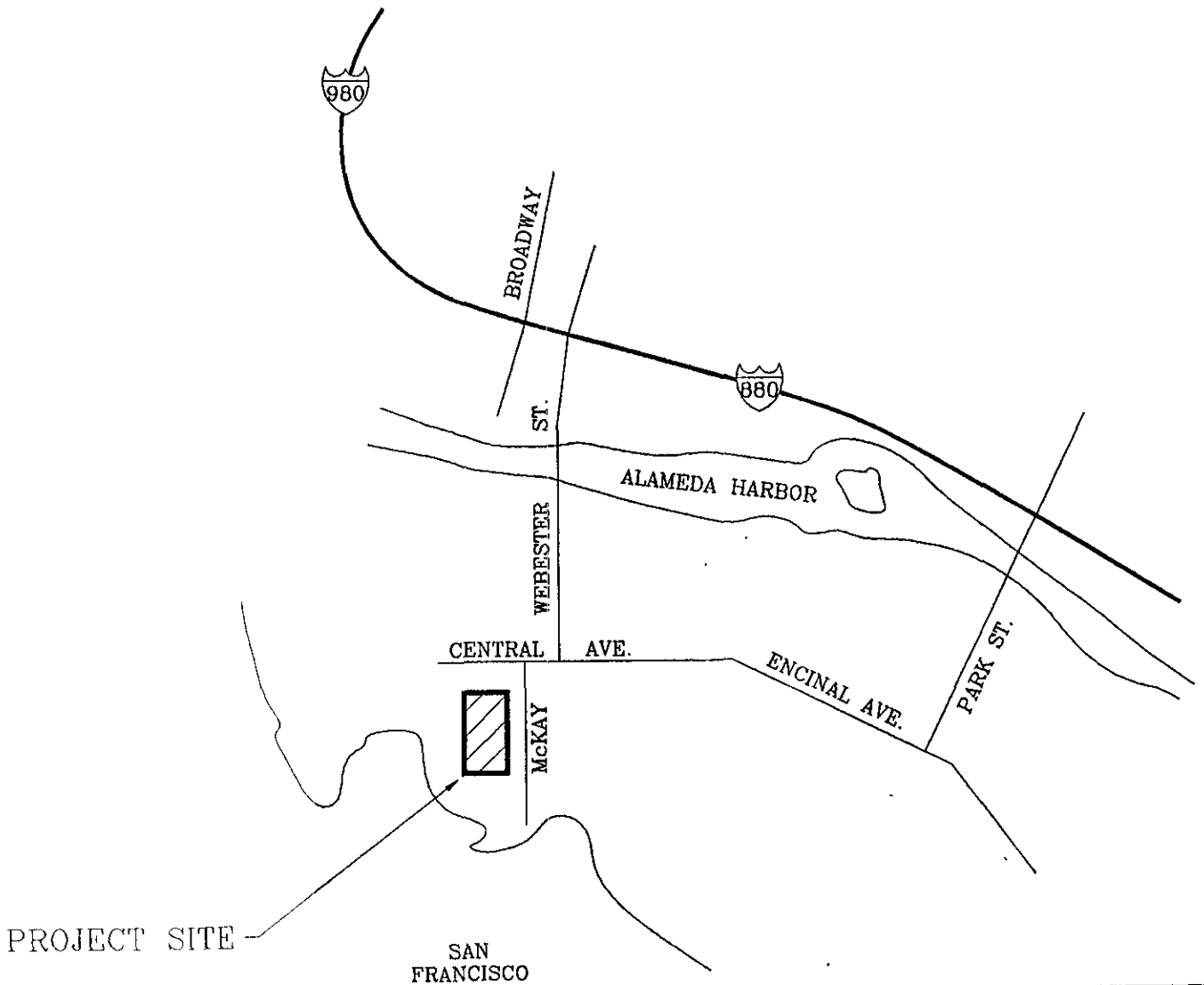
DISPOSAL SUMMARY
GSA Alameda
UST Removal Project

DATE	MATERIAL	TOTAL AMOUNT DISPOSED	DISPOSAL FACILITY
10-24- 96 and 12-30-96	Asphalt	approx. 13 tons	Gallagher & Burke (recycled)
11-13-96	Asbestos-Containing Material	approx. 4 tons	California Asbestos Monofill
11-14-96	Concrete	approx. 10 tons	Bauman Landscaping (recycled)
11-21-96 through 12-6-96	Soil	472.00 tons	Altamont Landfill
12-3-96 and 12-4-96	UST Contents (Sand/Soil Mixture)	256.28 tons	Altamont Landfill
12-7-96	USTs	Two -10,000 gallon USTs	Erickson, Inc.
1-10-97	Granular Activated Carbon	approx. 2 tons	Westates Carbon Arizona
11-5-96 through 12-11-96	Wastewater	approx.267,000 gallons	EBMUD

TABLE 9
SITE SURVEY INFORMATION

ALAMEDA FEDERAL CENTER 620 CENTRAL AVENUE, ALAMEDA, CA
SOL. NO. GS-09P-96-KZC-0013
GSA PROJECT NO. RCA21602

Vertical Movement	10/16/96	10/23/96	diff.	10/31/96	diff.	11/18/96	diff.	11/25/96	diff.	12/6/96	diff.	12/17/96	diff.	12/20/96	diff.
Top of Water Valve	5 36	5.48	0.12	5.56	0.20	5 58	0.22	5.42	0.06	5 52	0.16	5.32	0.04	5.39	0.03
Building #1	-	5.52	-	5.59		5.62		5.46		5.58		5.36		5.42	
Building #8	-	5.68	-	5.74		5 78		5 60		5.68		5 53		5 58	
Post #1	-	-	-	-	-	-	-	-	-	-	-	-		-	
Post #2	0 65	0.78	0 01	0.84	0 01	0.88	0.01	0.71	0 00	0.80	0.01	0.64	0.03	0.70	0 02
Post #3	0 58	0.7	0.00	0.78	0.00	0.82	0.02	0.65	0.01	0 74	0.00	0.56	0.02	0.64	0.03
Post #4	0 80	0.94	0.02	1.02	0.02	1.04	0.02	0.89	0 03	0.98	0.02	0.82	0 06	0.88	0 05
Post #5	0 60	0.74	0 02	0 8	0.00	0.84	0.02	-	-	0 77	0.01	0.61	0.05	0.67	0 04
Post #6	0 96	1 08	0.00	1.15	0.01	1.2	0.02	1.04	0 02	1.12	0.00	0.95	0.03	1.02	0 03
Post #7	0 72	0.86	0.02	-	-	0.98	0.04	0 8	0.02	0 88	0.00	0.72	0.04	0.78	0 03
Post #8	0 76	0.9	0.02	-	-	1	0.02	0.84	0.02	0.92	0.00	0.74	0.02	0 81	0.02
Post #9	0 70	0.84	0 02	-	-	0.94	0 02	0.76	0.00	0.84	0 02	0.68	0.02	0.73	0 00
Horizontal Movement (inches)															
Post #1	8/16	8/16	0	8/16	0	8/16	0	8/16	0	8/16	0	-	-	8/16	0
Post #2	10/16	10/16	0	9/16	- 1/16	8/16	- 2/16	6/16	- 4/16	8/16	- 2/16	-	-	8/16	- 2/16
Post #3	10/16	11/16	1/16	9/16	- 1/16	8/16	- 2/16	6/16	- 4/16	8/16	- 2/16	-	-	6/16	- 4/16
Post #4	12/16	12/16	0	11/16	- 1/16	8/16	- 5/16	6/16	- 6/16	6/16	- 6/16	-	-	4/16	- 8/16
Post #5	12/16	12/16	0	12/16	0	8/16	- 4/16	6/16	- 6/16	8/16	- 4/16	-	-	6/16	- 6/16
Post #6	10/16	12/16	2/16	12/16	2/16	8/16	- 2/16	8/16	- 2/16	8/16	- 2/16	-	-	8/16	- 2/16
Post #7	4/16	6/16	3/16	6/16	3/16	3/16	- 1/16	1/16	- 3/16	4/16	1/16	-	-	6/16	3/16
Post #8	4/16	4/16	0	4/16	0	4/16	0	4/16	0	6/16	2/16	-	-	6/16	2/16
Post #9	1 2/16	1 2/16	0	1 2/16	0	1 2/16	0	1 2/16	0	1 2/16	0	-	-	1 2/16	0

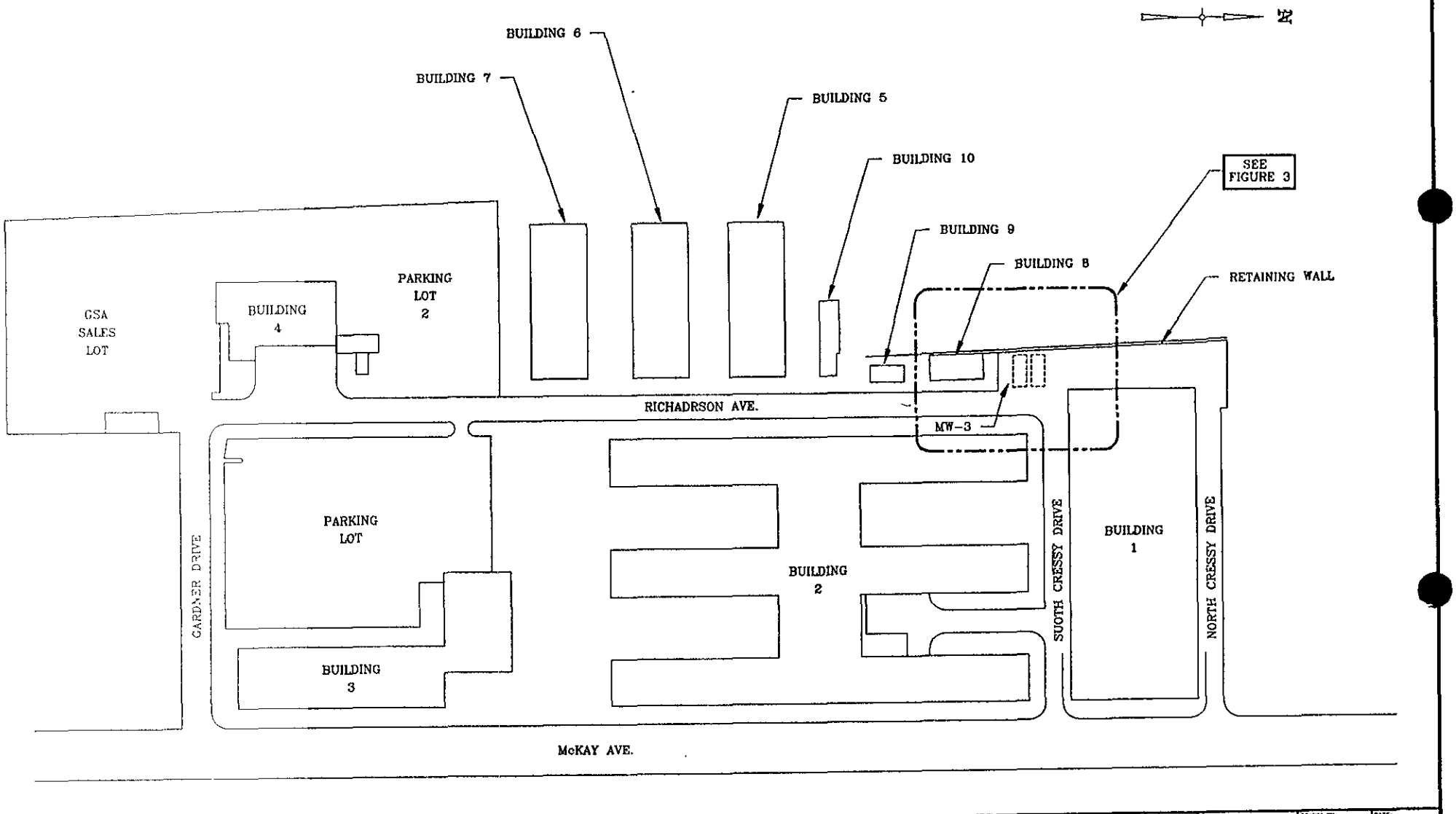


CAL ENVIRONMENTAL INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/01/96
REVISION	CAD FILENAME	SCALE
	1816_F1	NONE

VICINITY MAP FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG# FIG 1

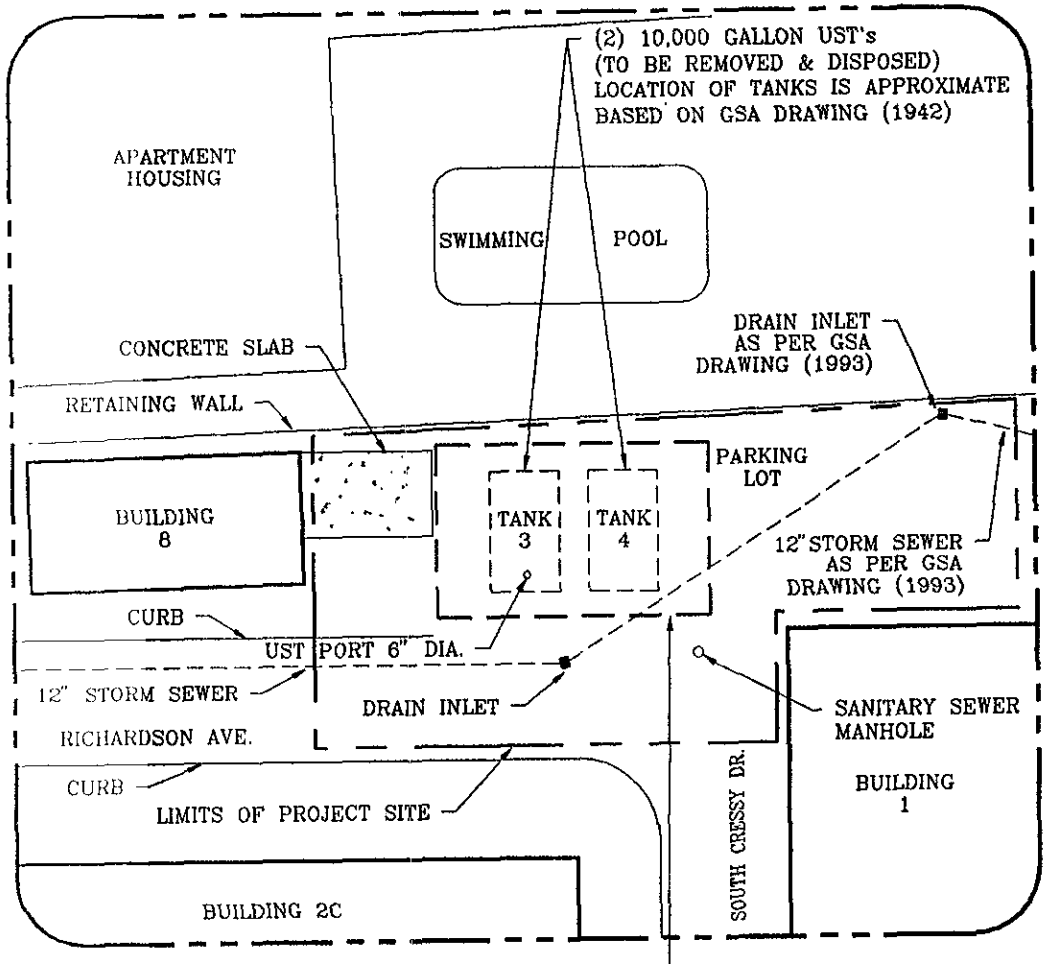


CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA. 95688 707-446-7996

JOB NUMBER:	DRAWN BY:	DATE:
1816	P LENTINO	9/02/96
REVISION:	CAD FILENAME:	SCALE:
	1816_F2	SCALE BAR

SITE PLAN FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 2



40'x 25' SHORING AND EXCAVATION LIMIT.
STORM SEWER WITHIN EXCAVATION LIMIT
WAS SUPPORTED AND WORKING DURING THE PROJECT.
ALL IMPROVEMENTS OUTSIDE OF LIMIT ARE TO REMAIN.

SCALE
0' 5' 10' 15' 20' 25'

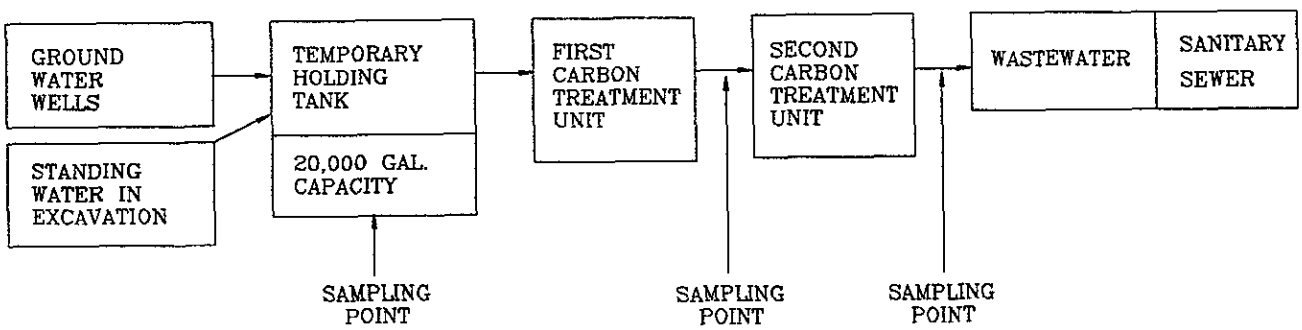
CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/02/96
REVISION	CAD FILENAME	SCALE
	1816_F3	SCALE BAR

SITE MAP FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG# FIG 3

SCHEMATIC FLOW DIAGRAM
EXCAVATION DEWATERING
AND
GROUNDWATER PRE-TREATMENT SYSTEM
UST REMOVAL
GSA ALAMEDA FEDERAL CENTER

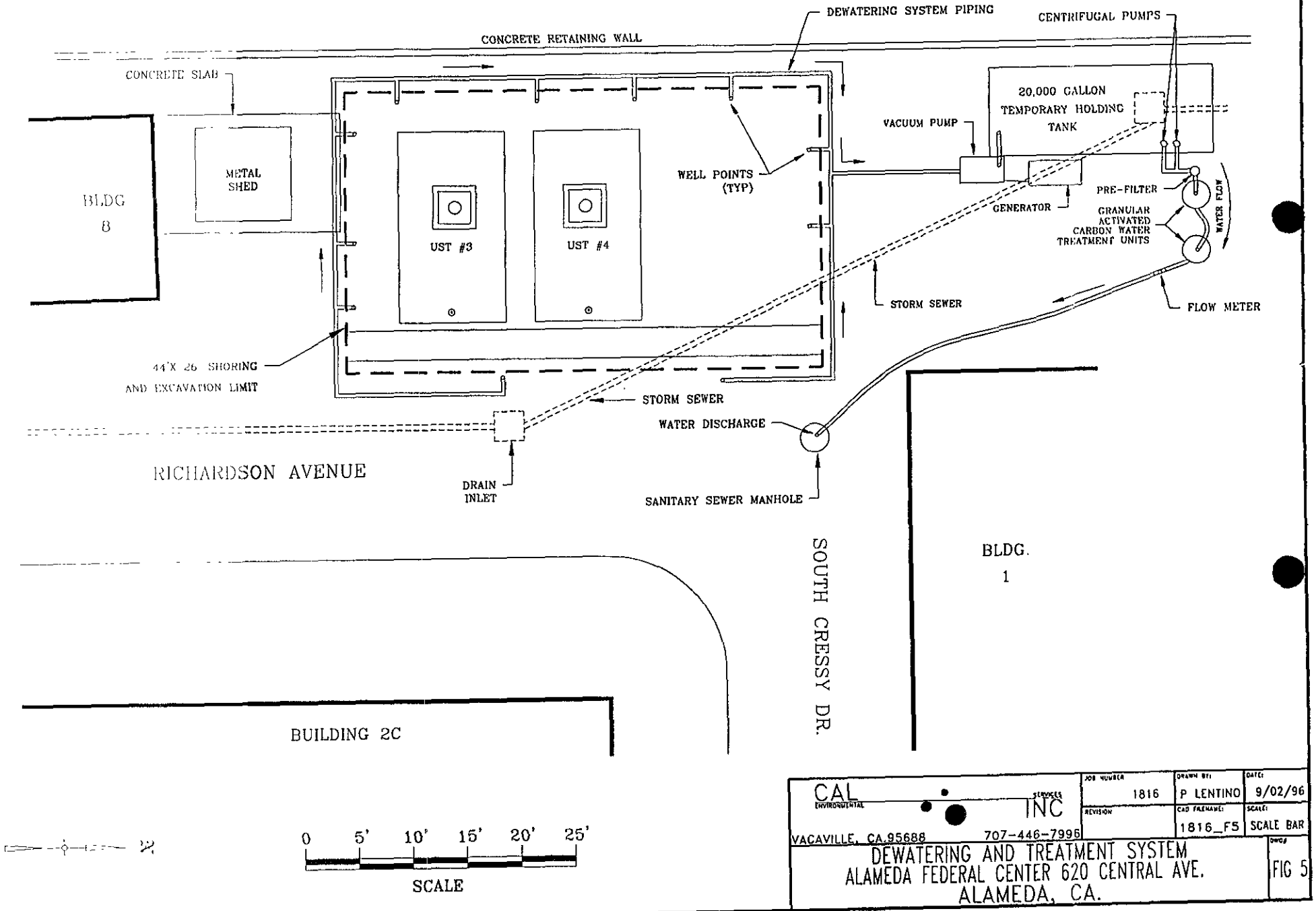


CAL ENVIRONMENTAL SUPPLIES INC
VACAVILLE, CA 95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/21/96
REVISIONS	CAD FILENAME	SCALE
	1816_F4	NONE

SCHEMATIC FLOW DIAGRAM
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 4

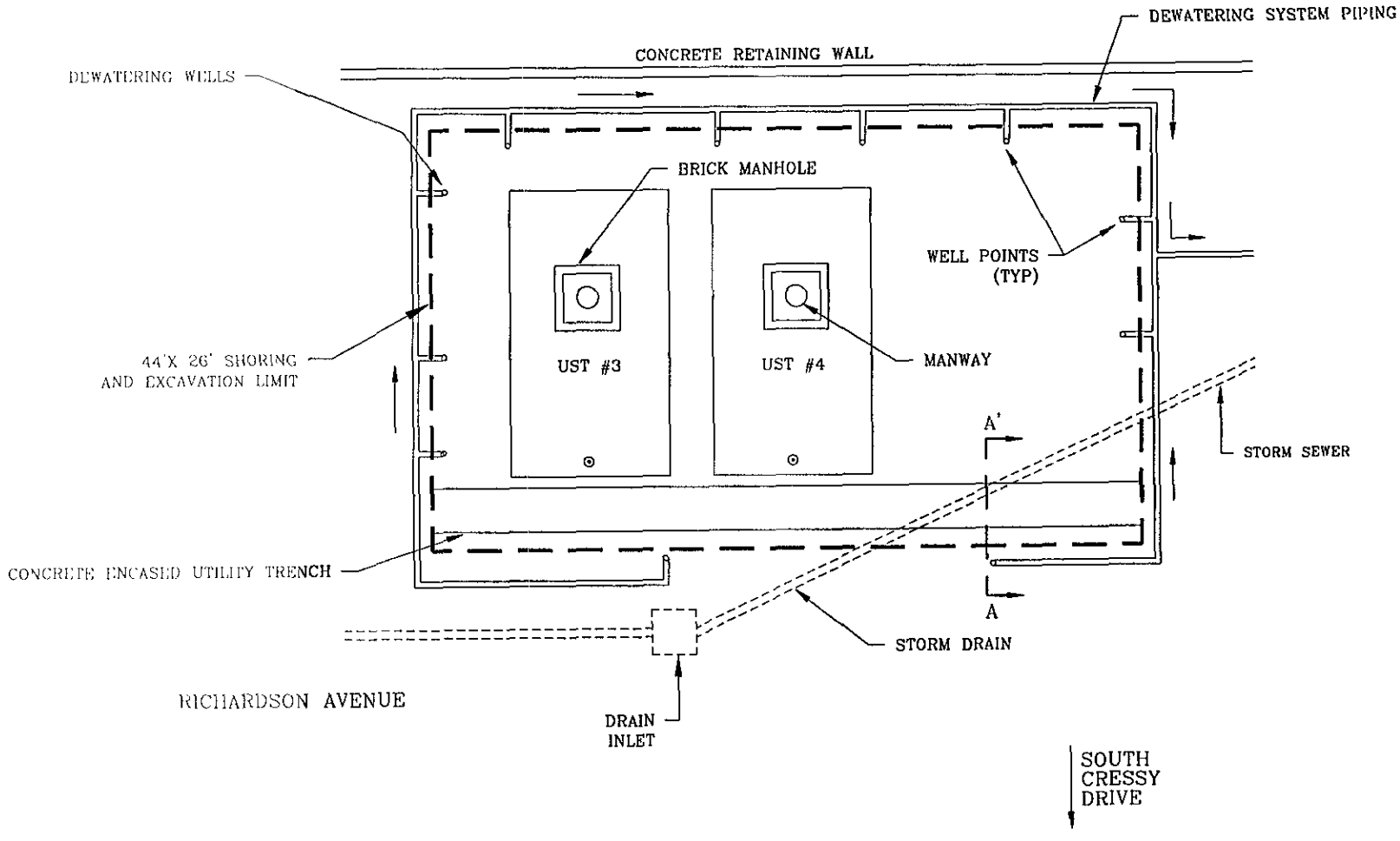


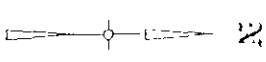
CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA 95688 707-446-7996

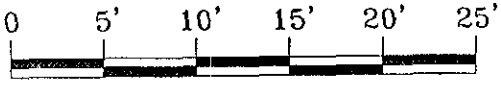
JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/02/96
REVISION	CAD FILENAME	SCALE
	1816_F5	SCALE BAR

DEWATERING AND TREATMENT SYSTEM
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG # FIG 5







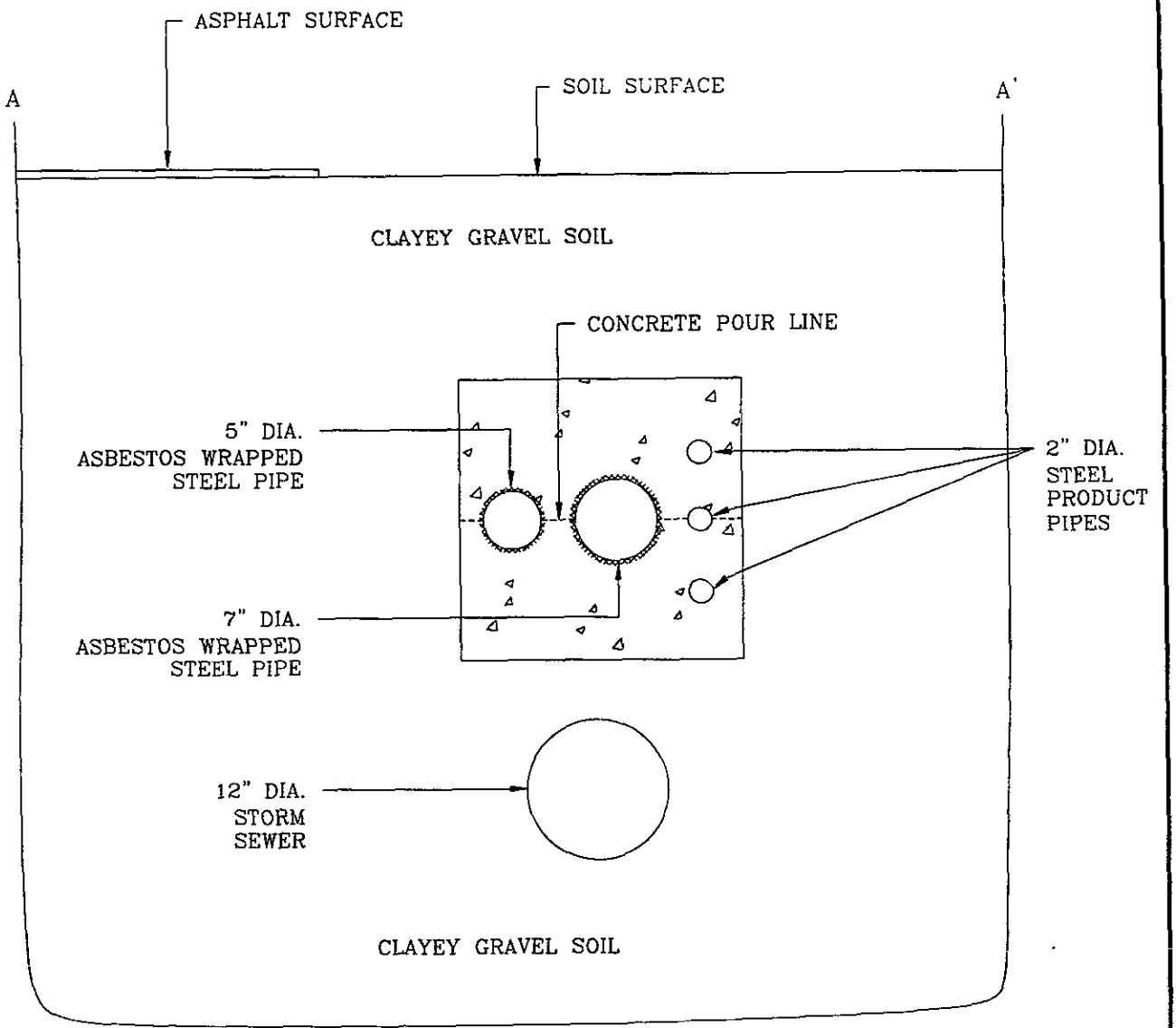
SCALE

CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA.95688 707-446-7996

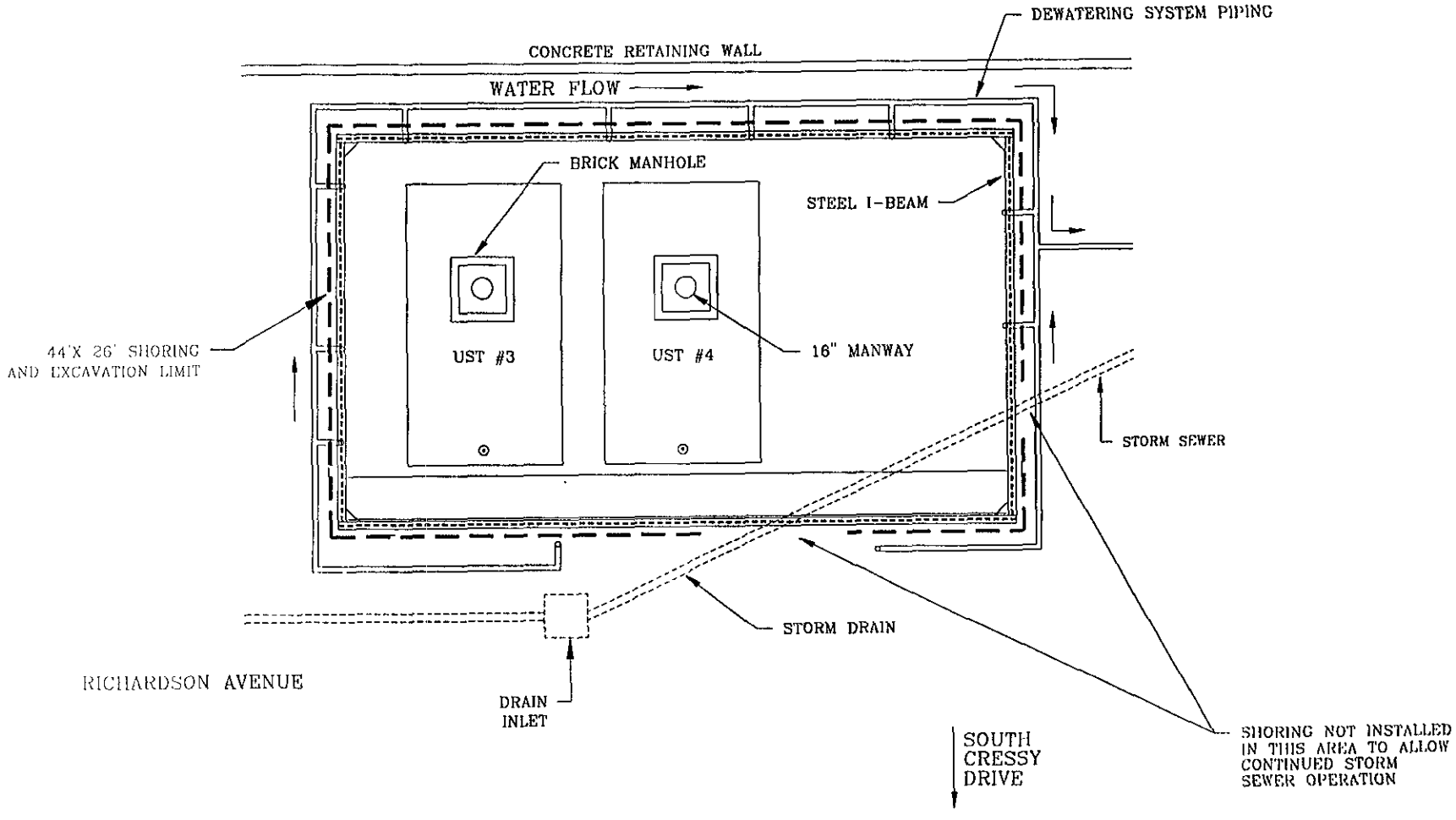
JOB NUMBER	DRAWN BY:	DATE:
1816	P LENTINO	9/02/96
REVISION:	CAD FILENAME:	SCALE:
	1816_F6	SCALE BAR

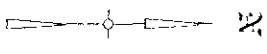
EXCAVATION LIMITS MAP
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

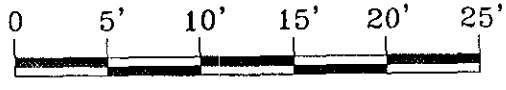
DWG# FIG 6



CAL ENVIRONMENTAL SERVICES INC VACAVILLE, CA 95688 707-446-7996	JOB NUMBER 1816	DRAWN BY P LENTINO	DATE 2/01/97
	REVISION	CAD FILENAME 1816_F7	SCALE NONE
CROSS SECTION A-A' ALAMEDA FEDERAL CENTER 620 CENTRAL AVE. ALAMEDA, CA.			DWG# FIG 7







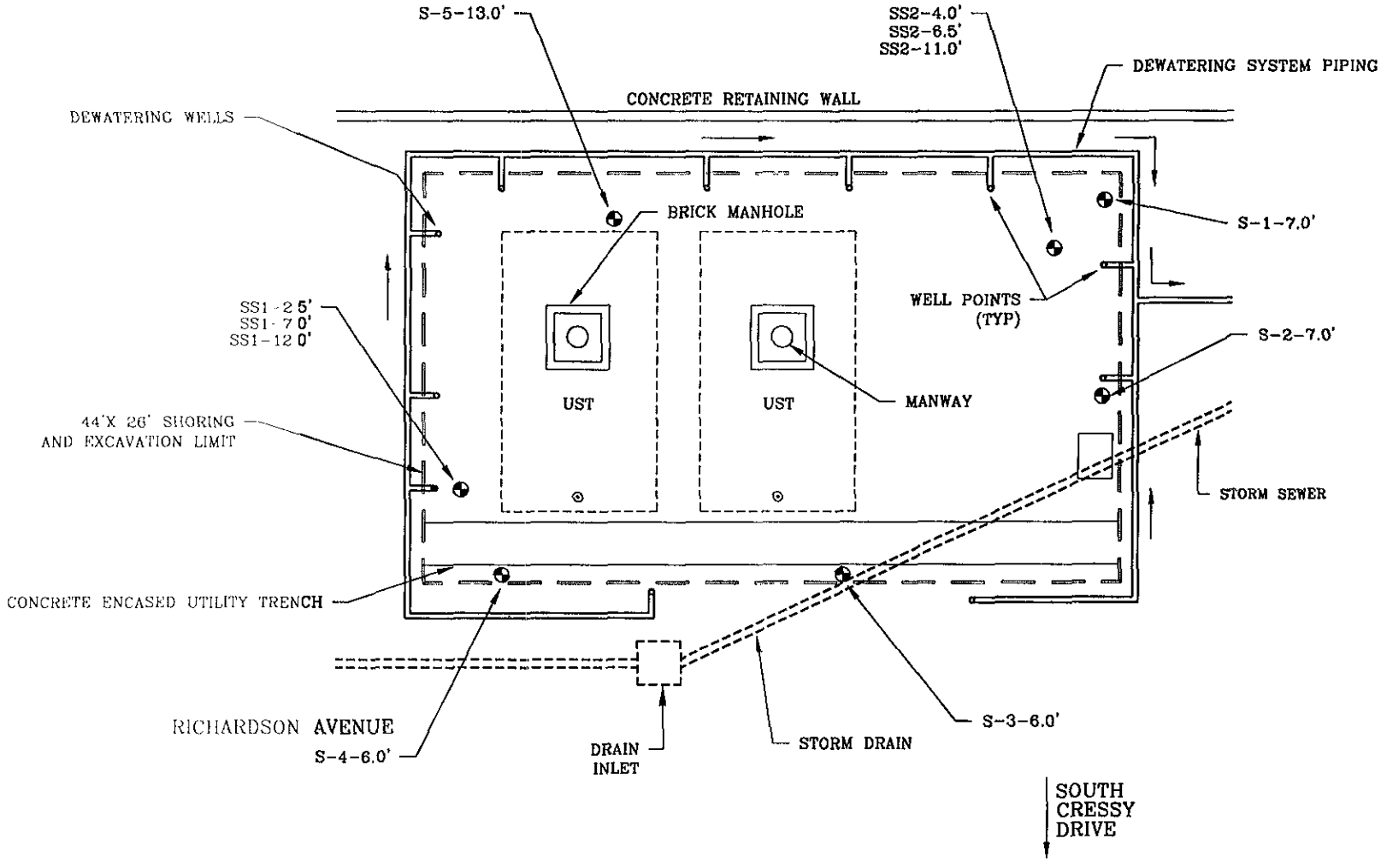
SCALE

CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER	DRAWN BY:	DATE:
1816	P LENTINO	9/02/96
REVISION	CAD FILENAME:	SCALE:
	1816_F8	SCALE BAR

EXCAVATION SUPPORT SYSTEM (SHORING)
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 8



0 5' 10' 15' 20' 25'

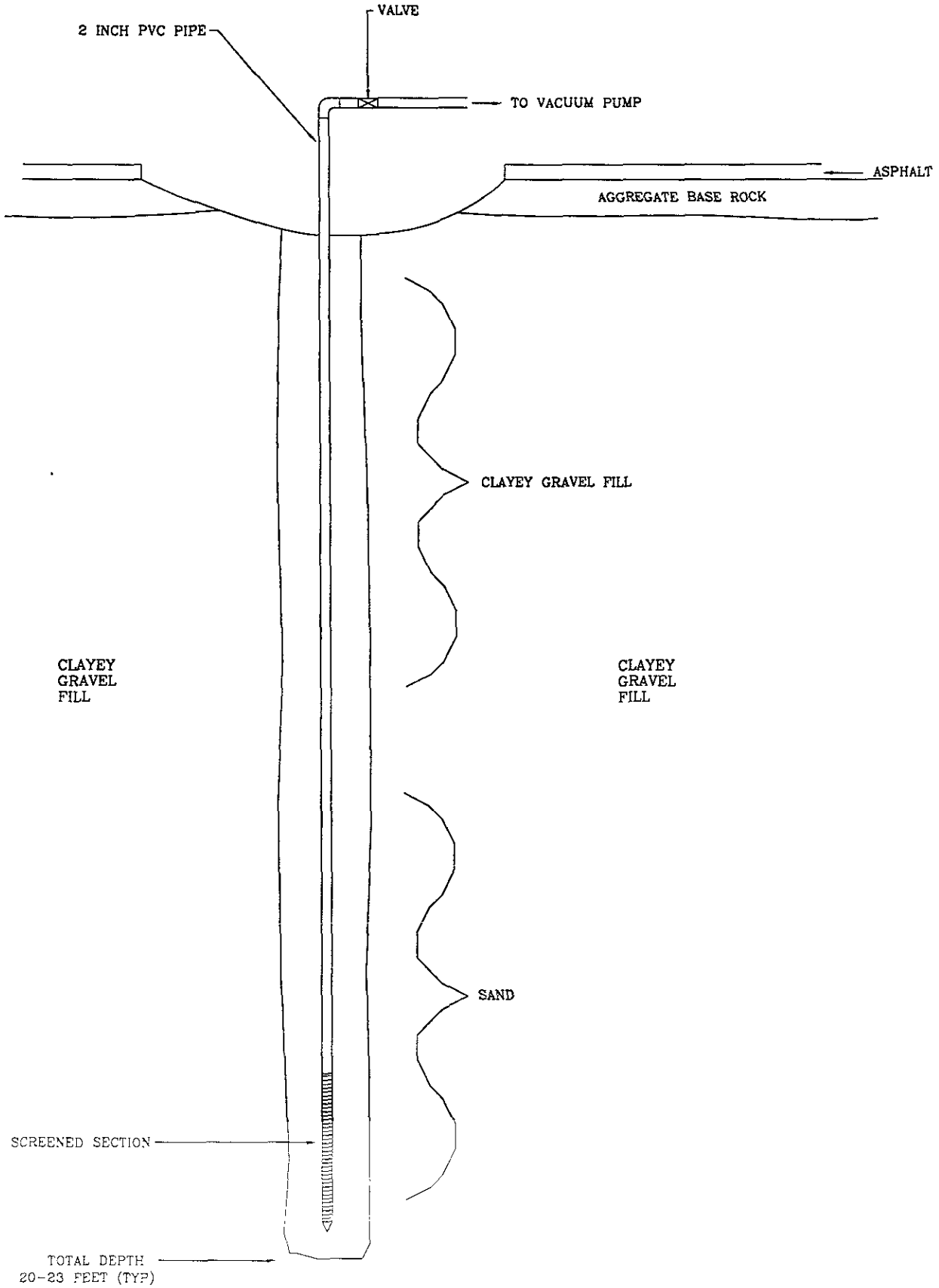
SCALE

CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER:	DRAWN BY:	DATE:
1816	P LENTINO	9/02/96
REVISION:	CAD FILENAME:	SCALE:
	1816_9a	SCALE BAR

SOIL SAMPLE LOCATIONS
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 9

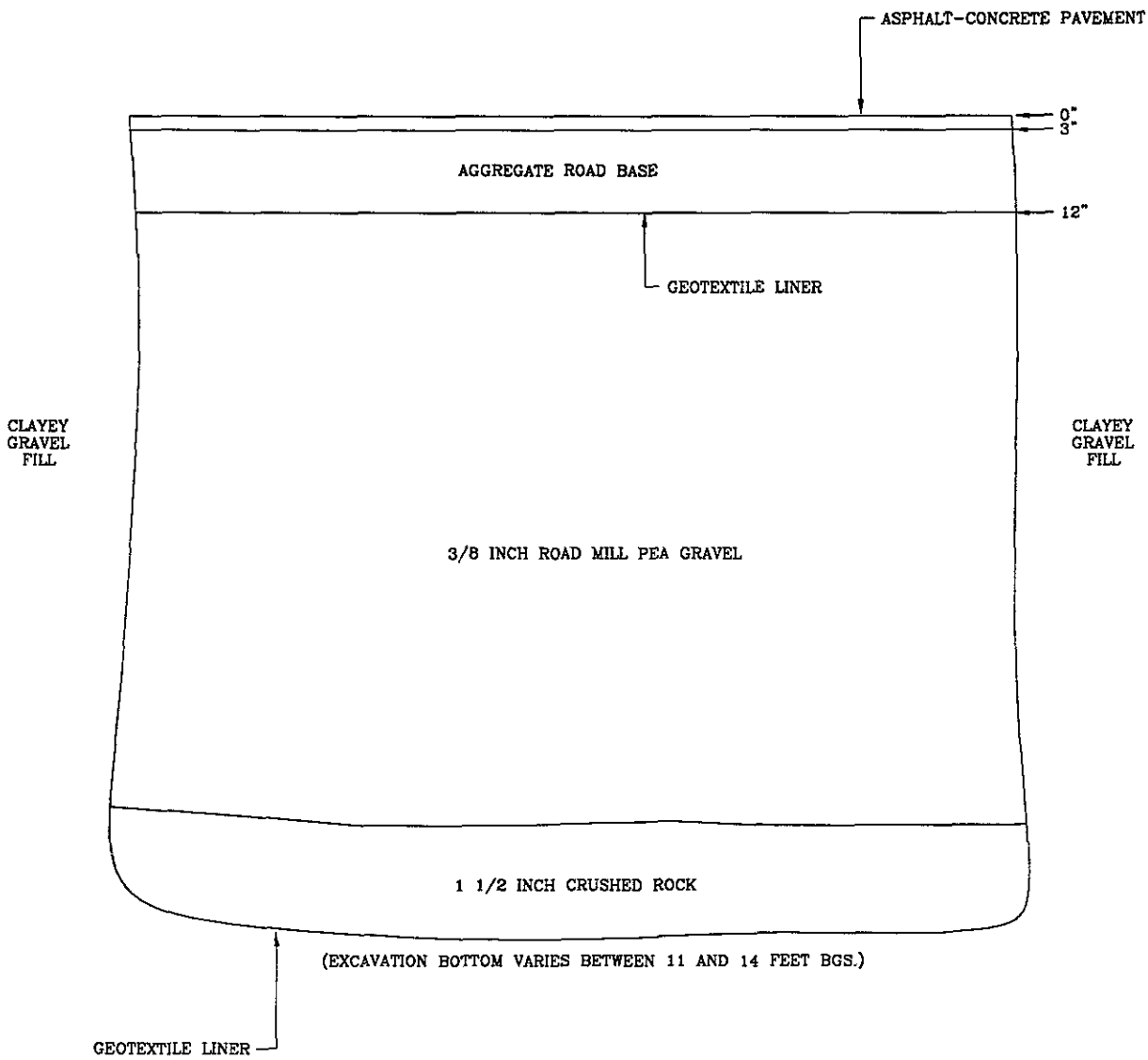


CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA 95688 707-446-7996

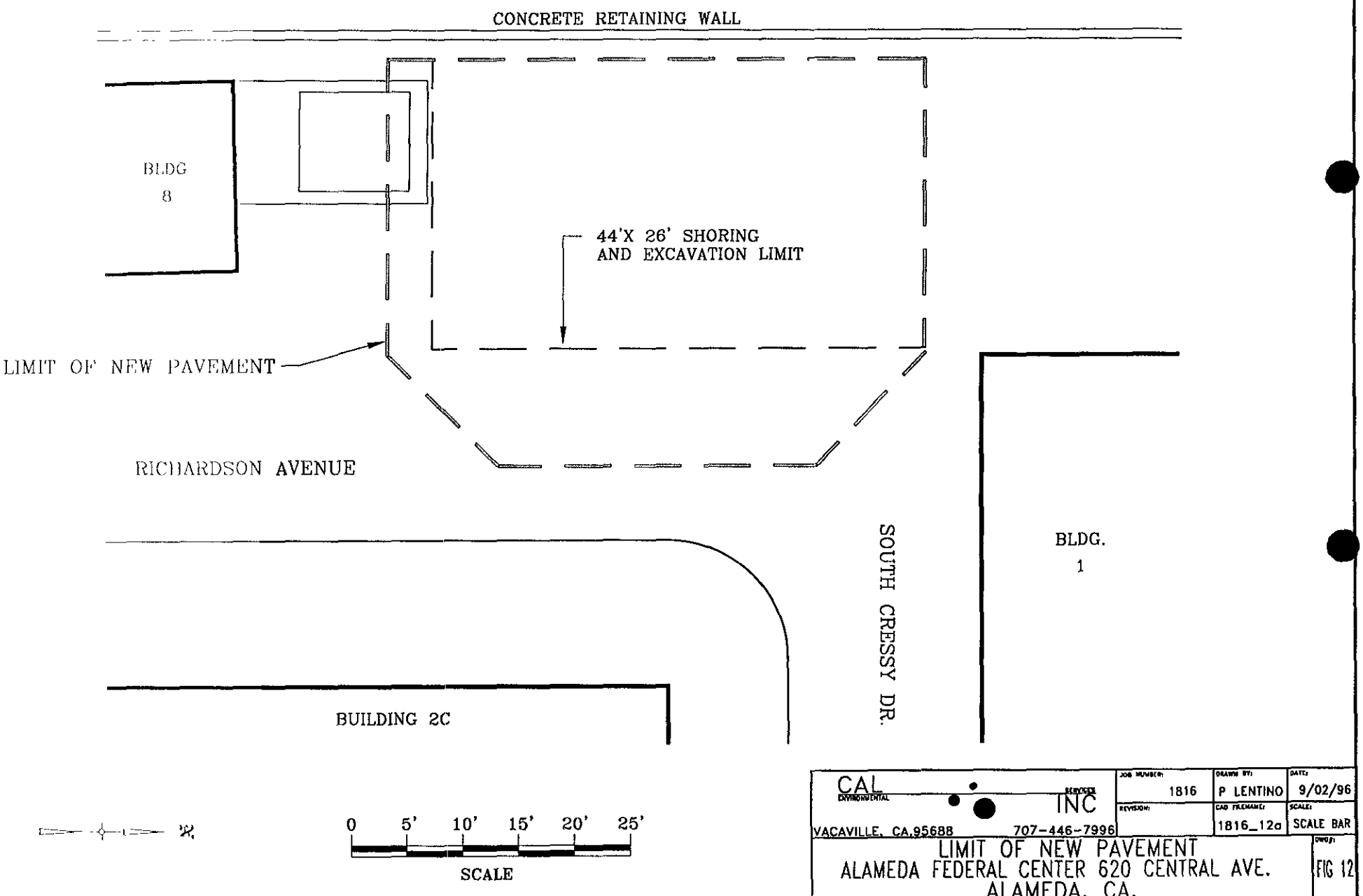
JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	2/17/97
REVISIONS	CAD FILENAME	SCALE
	1816_10a	1"=3'-0"

WELL POINT COMPLETION DIAGRAM
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE. ALAMEDA, CA.

DWG # FIG 10



CAL ENVIRONMENTAL SERVICES INC	JOB NUMBER: 1816	DRAWN BY: P LENTINO	DATE: 2/01/97
VACAVILLE, CA.95688 707-446-7996	REVISION:	CAD FILENAME: 1816_11a	SCALE: NONE
CROSS SECTION OF EXCAVATION AREA ALAMEDA FEDERAL CENTER 620 CENTRAL AVE. ALAMEDA, CA.			DWG# FIG 11



CAL ENVIRONMENTAL INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER:	DRAWN BY:	DATE:
1816	P LENTINO	9/02/96
REVISION:	CAD FILENAME:	SCALE:
	1816_12a	SCALE BAR

LIMIT OF NEW PAVEMENT
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG #: FIG 12

APPENDIX 2

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS

Photo looking southwest of Building 8 and the metal tool shed.
Photo taken prior to beginning work.

Photo looking west of southern portion of excavation area
Photo taken prior to beginning work. The excavation area is outlined in red paint

SITE PHOTOGRAPHS

Photo looking northwest of northern portion of excavation area.
Photo taken prior to beginning work. The excavation area is outlined in red paint.

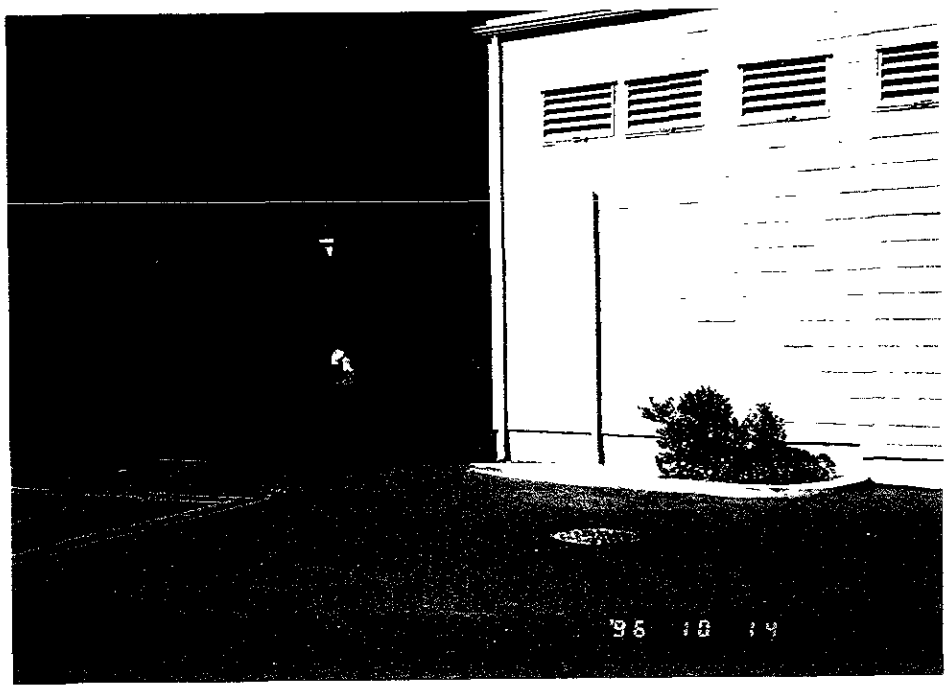


Photo looking northwest of northeastern portion of excavation area and Building 1
Photo taken prior to beginning work. The excavation area is outlined in red paint

SITE PHOTOGRAPHS

Photo looking north of western portion of excavation area and the concrete block retaining wall. Photo taken prior to beginning work. The excavation area is outlined in red paint.

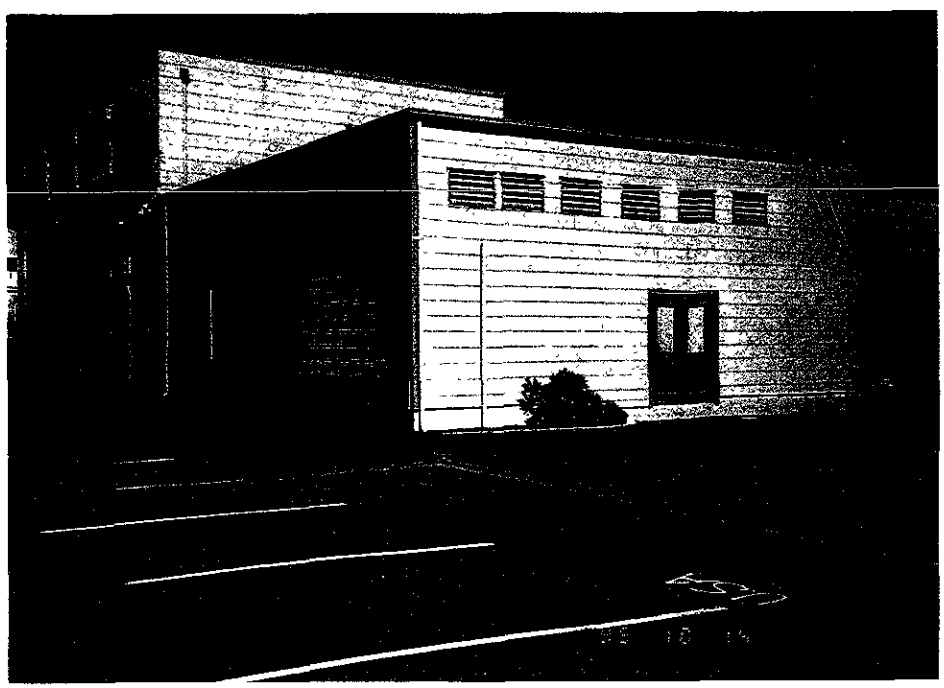


Photo looking northeast of northeastern portion of excavation area and Building 1. Photo taken prior to beginning work. The excavation area is outlined in red paint.

SITE PHOTOGRAPHS

Photo looking east of northeastern portion of excavation area and Building 2C.
Photo taken prior to beginning work. The excavation area is outlined in red paint.

Photo looking southeast of southeastern portion of excavation area and Building 2C
Photo taken prior to beginning work. The excavation area is outlined in red paint

SITE PHOTOGRAPHS

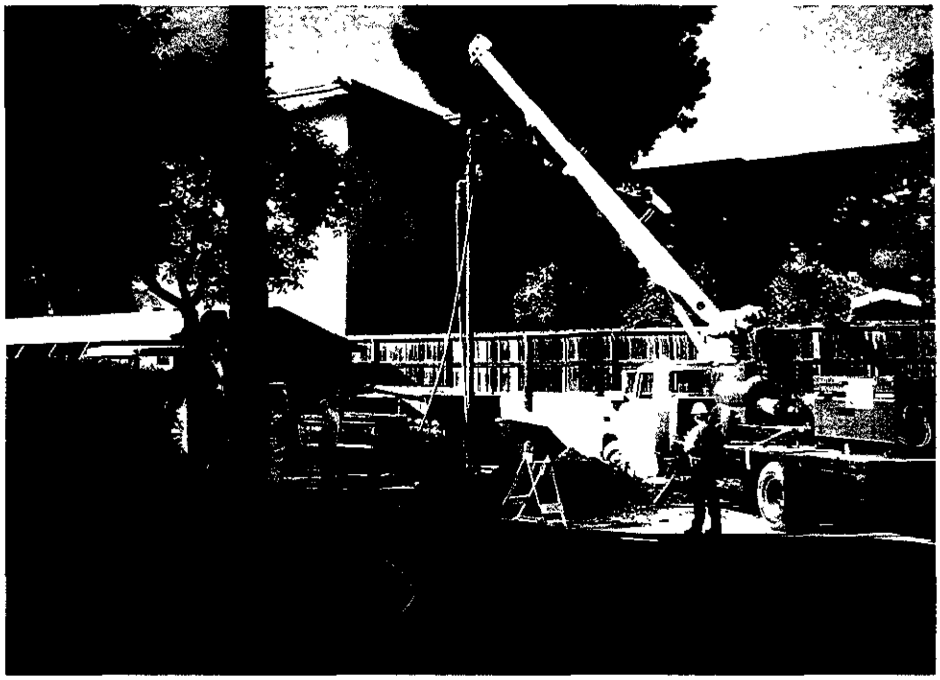


Photo looking southwest of southern portion of excavation area, and the installation of dewatering wells.

Photo looking north of the dewatering system and water treatment equipment the orange vacuum pump the white Baker tank and the blue GAC water treatment units

SITE PHOTOGRAPHS

Photo looking south of the eastern portion of excavation area showing the top of the concrete-encased utility trench. Workers building a containment structure.

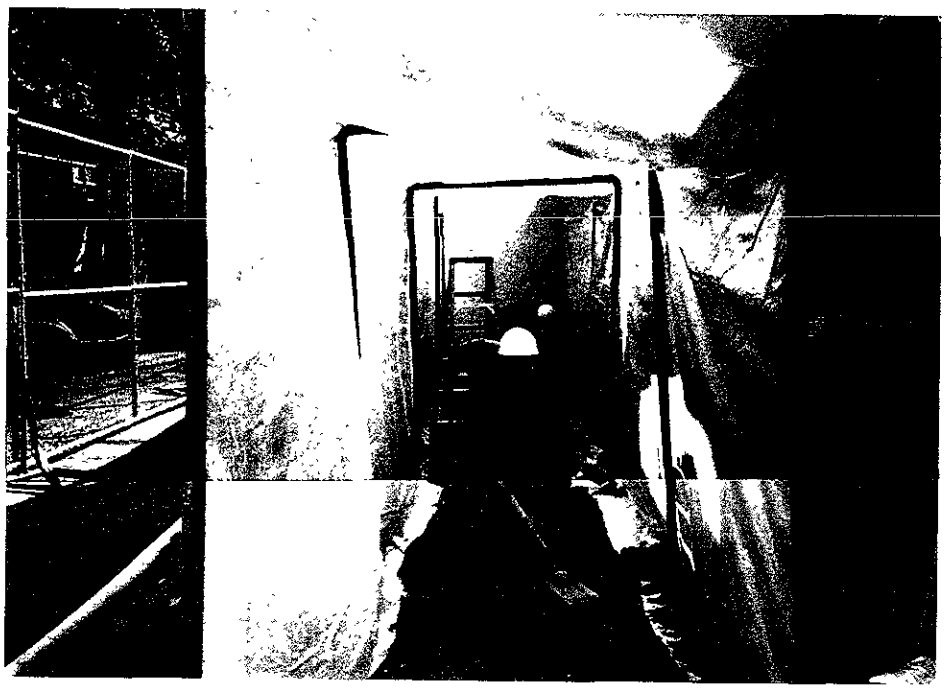


Photo looking south of eastern portion of excavation area showing the top of the concrete-encased utility trench. Workers building a containment structure

SITE PHOTOGRAPHS

Photo of concrete-encased utility trench showing exposed utilities. The two largest pipes are steam pipes, which have had the asbestos removed. The smaller pipes are product pipes.

Photo looking east of concrete-encased utilities The section of concrete has split along a concrete pour line, exposing asbestos-wrapped steam pipes

SITE PHOTOGRAPHS

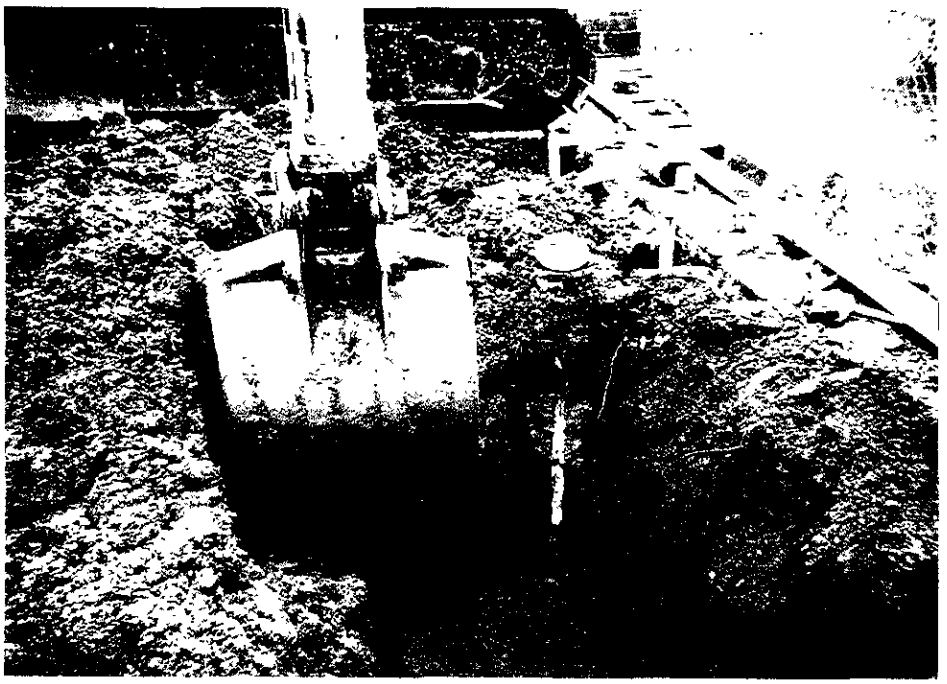


Photo looking east of groundwater monitoring well MW-3 during removal.
Note the well casing, the sand pack, the bentonite seal, the cement annular seal, and the top of the traffic box.

Photo of nearly-completed shoring installation

SITE PHOTOGRAPHS

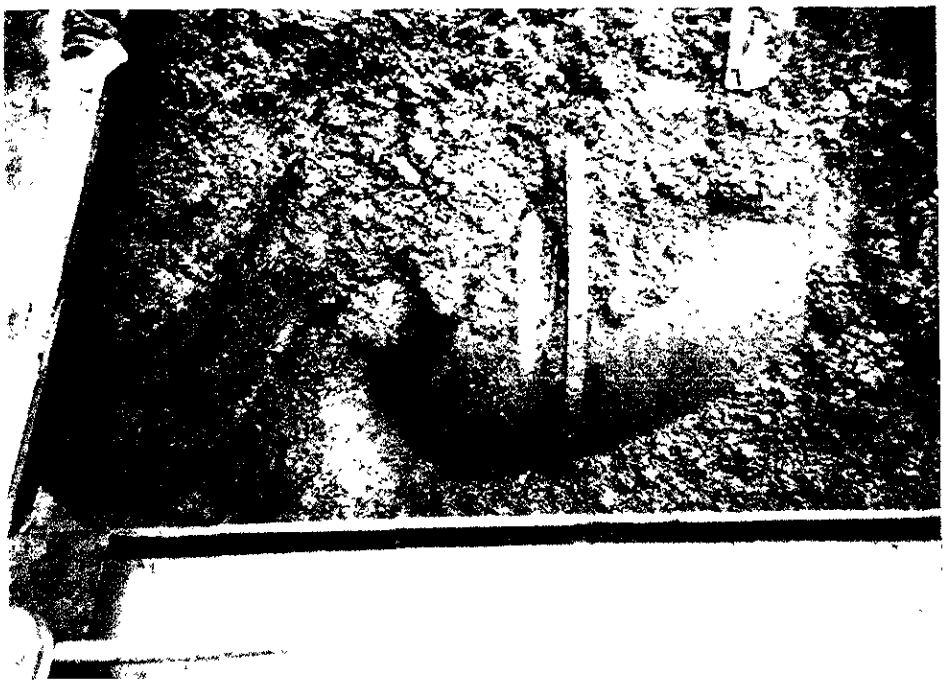


Photo looking north of the edge of UST #3.
Note the yellow, gray, green and black staining of soil.

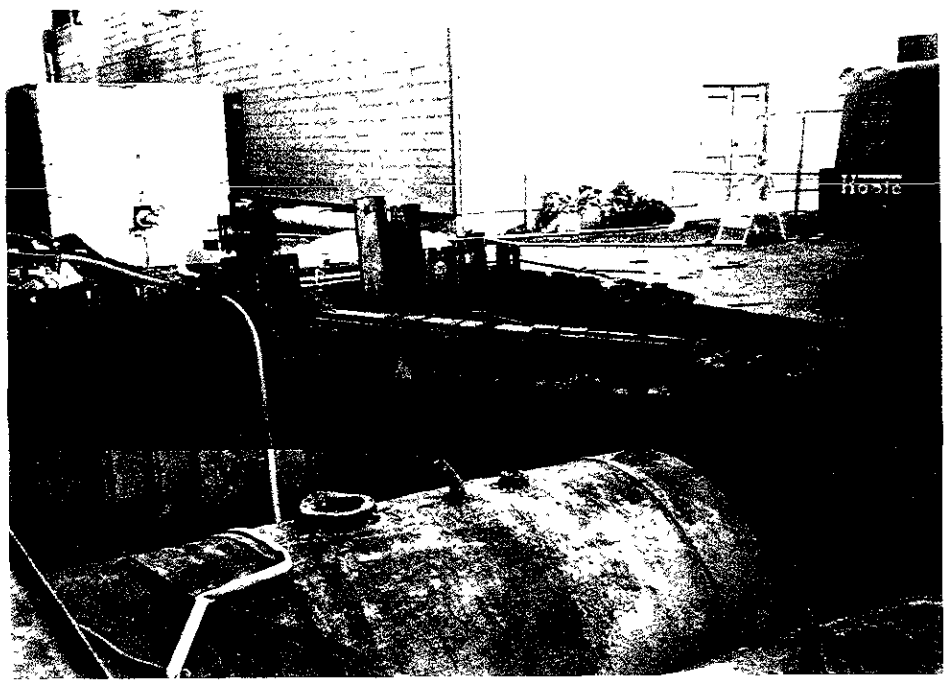


Photo looking northeast of completed shoring installation
Note the storm sewer hung from the shoring and walers. The UST tops are exposed and clean

SITE PHOTOGRAPHS

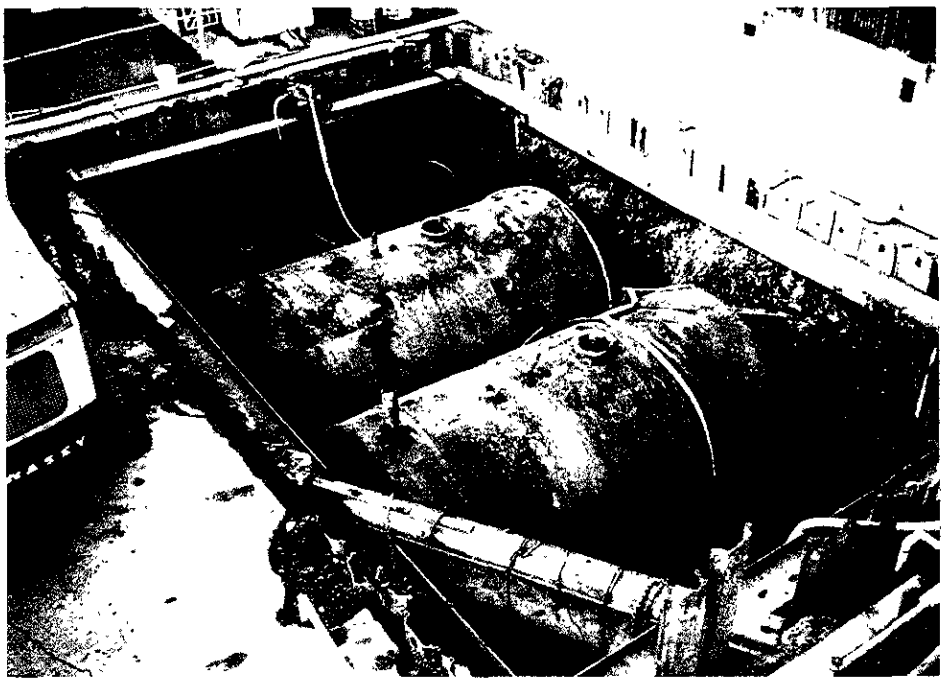


Photo of USTs prior to cutting. Note the presence of water in the excavation.

Photo of USTs being cut using an acetylene torch. A Marine Chemist and the Fire Dept. are observing

SITE PHOTOGRAPHS

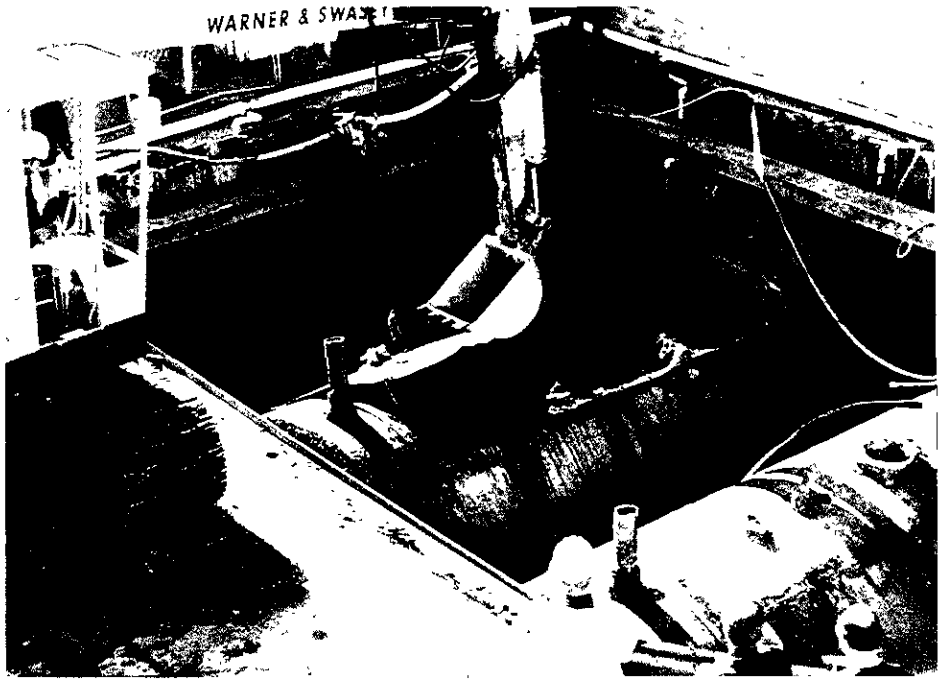


Photo of UST #3. The top is being removed. The UST contents are visible.

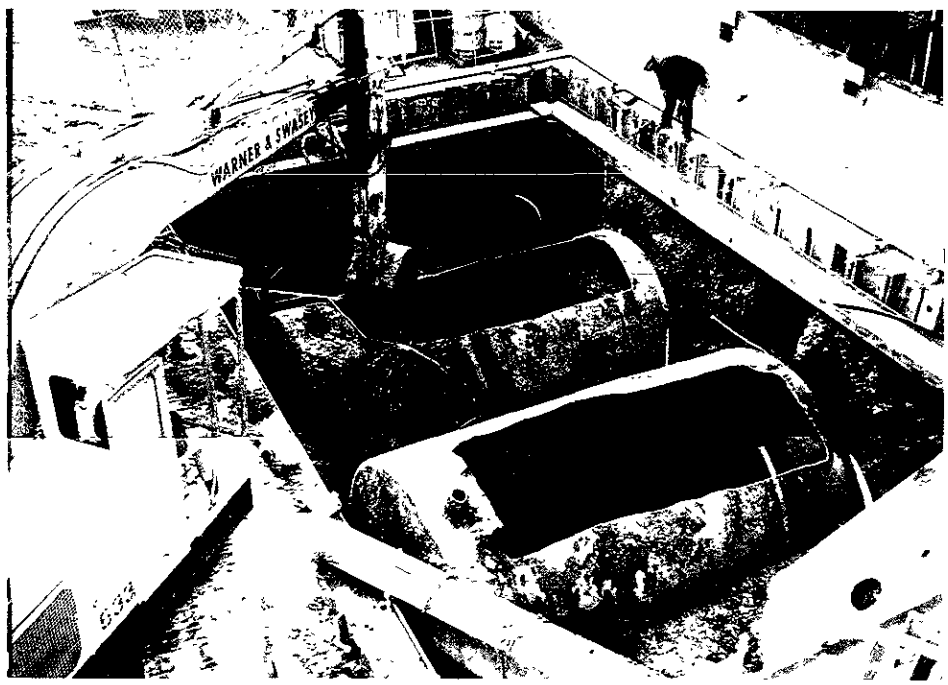


Photo of UST contents removal

SITE PHOTOGRAPHS

Photo looking northwest of UST removal.

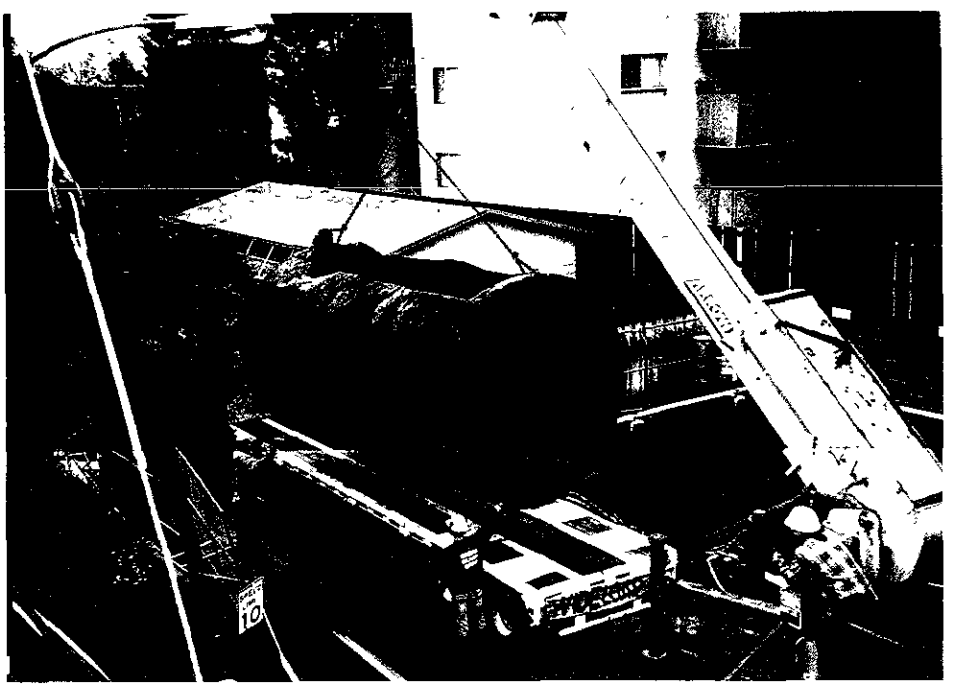


Photo of UST being loaded onto lowboy trailer

SITE PHOTOGRAPHS

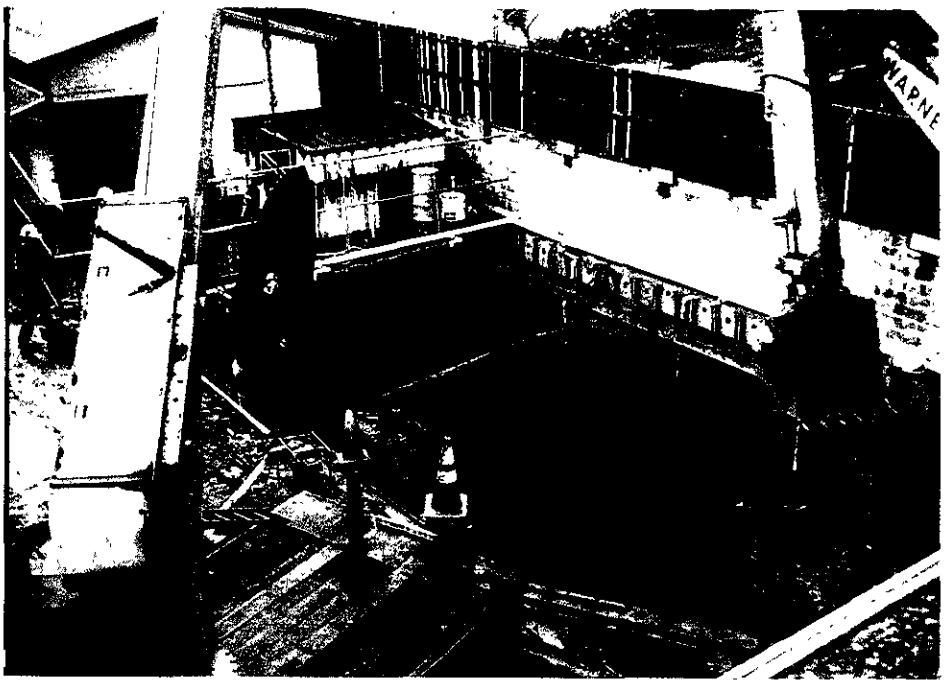


Photo of excavation area. UST #4 has been removed.
Note the presence of a black oily liquid adjacent to UST.

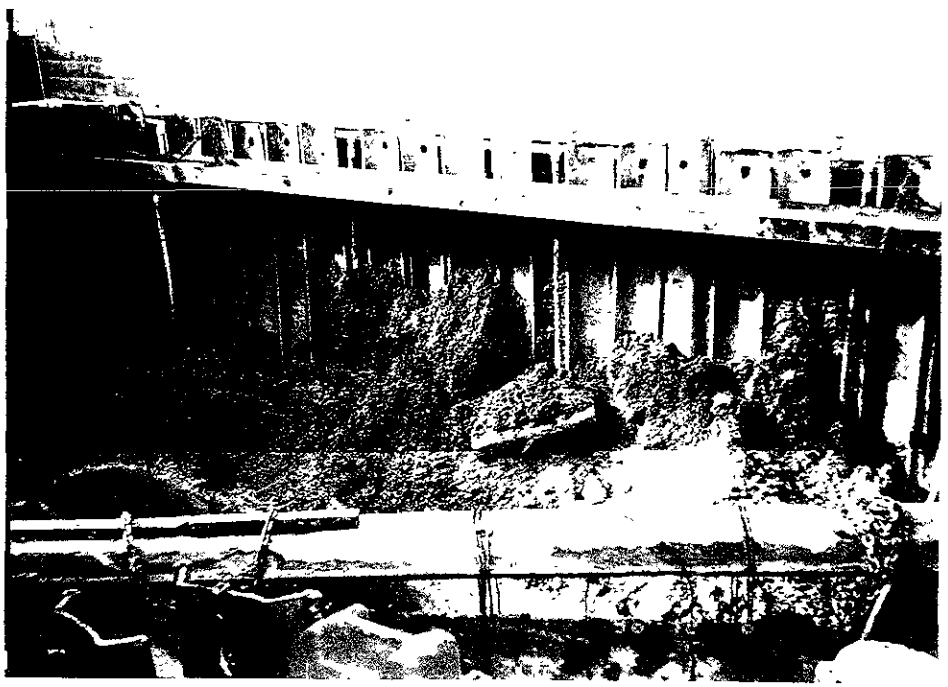


Photo looking west of excavation after UST removal
Note the stained soil horizon from approximately 5 to 8 feet bgs. The debris is a piece of telephone pole

SITE PHOTOGRAPHS

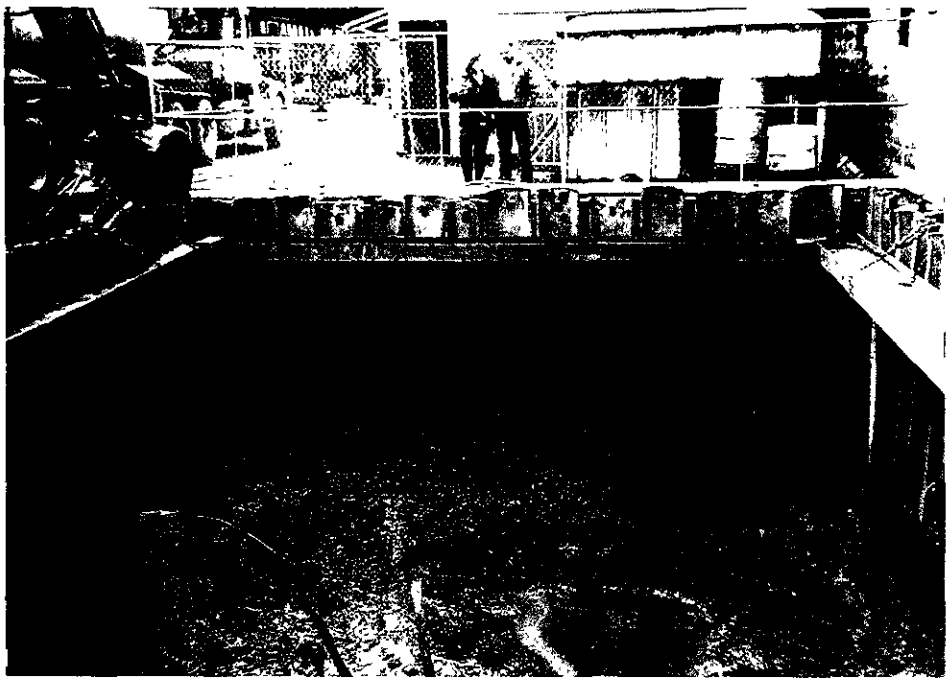


Photo looking south of excavation after UST removal.

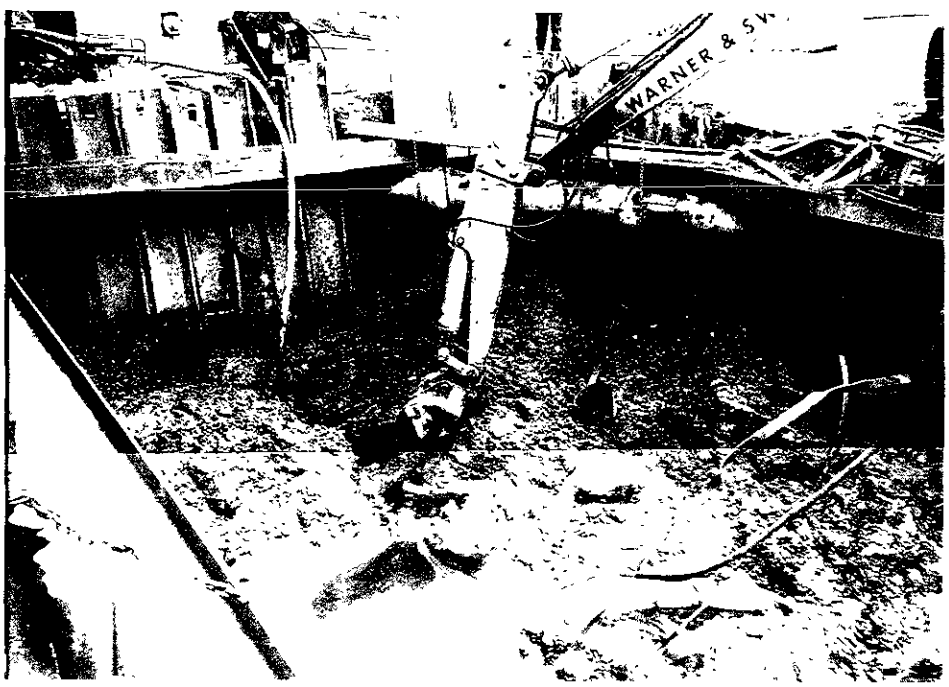


Photo looking northeast of excavation after UST removal

SITE PHOTOGRAPHS

Photo of completed asphalt installation.

Photo looking east of the excavation area. The asphalt has been installed. Note the handicap parking space and sign

SITE PHOTOGRAPHS

Photo looking northwest of completed asphalt.

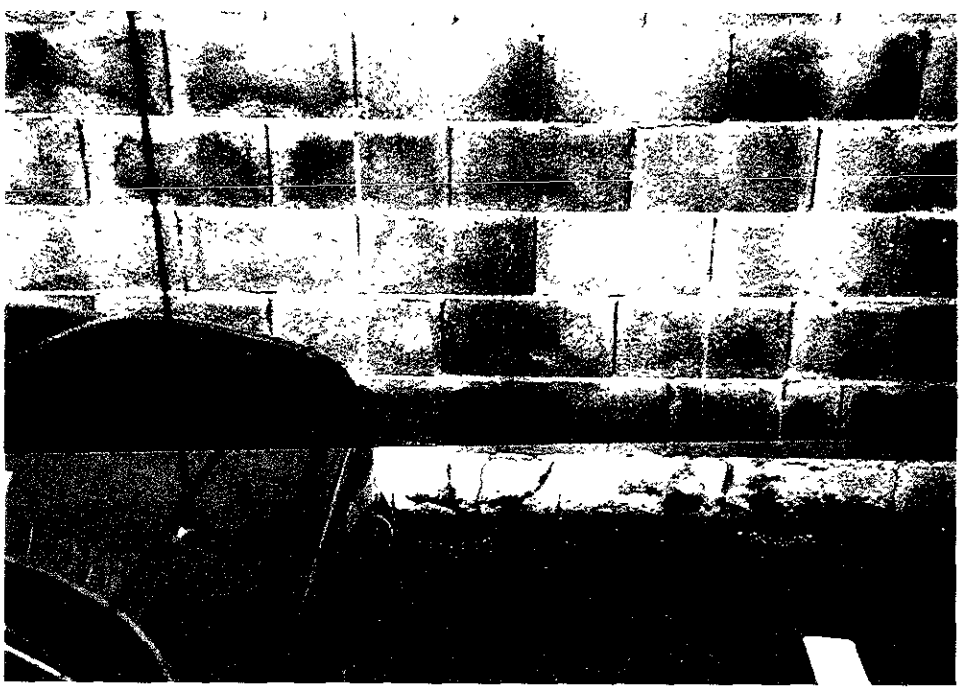


Photo looking west of the concrete block wall. Note the tiny crack in the wall

APPENDIX 3

SUMMARY OF ALL ANALYTICAL DATA

ASBESTOS
SAMPLE ANALYTICAL RESULTS

Westmont, NJ 609-858-4800 | Piscataway, NJ 908-981-0550 | Carle Place, NY 516-997-7251 | Manhattan, NY 212-290-0052 | Melbourne, FL 407-725-5223 | Ann Arbor, MI 313-668-6810 | San Mateo, CA 415-570-5401 | Smyrna, GA 404-333-6066 | Greensboro, NC 910-297-1487 | Houston, TX 713-686-3635

EMSL

CAL Environmental
2040 Peabody Rd
Suite 400
Vacaville, CA 95687

Friday, October 25, 1996

Ref Number: CA968571

POLARIZED LIGHT MICROSCOPY (PLM)

Project: GSA Alameda - #1816

SAMPLE	LOCATION	APPEARANCE	SAMPLE TREATMENT	ASBESTOS %	ASBESTOS TYPE	NONASBESTOS %	NONASBESTOS FIBROUS	NONASBESTOS %	NONASBESTOS NONFIBROUS
GSA-1	GSA Bldg.	Tan Fibrous Homogeneous	Teased	60%	Chrysotile		None Detected	40%	Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples

Nonette Patron
Analyst

Laboratory
Supervisor

Other Approved
Signatory

CHL ENVIRONMENTAL INC

PO Box 6327 Vacaville, CA 95696-6327 Phone 707-447-7996 Fax 707-446-4806

Job #: 1816 Job Name: GSA-Alameda Date: 10/24/96

Address:

C/S/Z:

Contact Person: SKi Turnaround: X 2 hr. ___ 24 hr. ___ 48 hr.

Fax Results: X

Special Instructions:

Sample as composite material unless split sample box is checked.

	SAMPLE #	LOCATION	MATERIAL DESCRIPTION	HOMO #	QA	SPLIT
1	GSA-1	GSA BLDG	ISZ			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Chain of Custody

1. Relinquished By: _____ Name and Company Date: 10/24/96 Time: 1700

Recieved By: Debbie Knight Date: 10/25/96 Time: 11:20 AM

2. Relinquished By: _____ Date: _____ Time: _____

Recieved By: _____ Date: _____ Time: _____

TANK CONTENTS
SAMPLE ANALYTICAL RESULTS

TANK CONTENTS SAMPLE RESULTS
CAL INC
Samples collected 10/31/96

New Sample Results (1996)						
Location	8015M TPH-G (ppm)	8020 B/T/E/X (ppm)	8015M TPH-D (ppm)	5520 Oil & Grease (ppm)	8270 SVOCs (ppb)	6010 Cd/Cr/Ni/Pb/Zn (ppm)
Tank 3	ND	ND	7900	5000	2-methyl-naphthalene 7700 Acenaphthelene 2100 fluorene 3700 phenanthrene 4100 pyrene 3400	ND\24\10\40\42
Tank 4	ND	ND	14	580	ND	ND\19\11\36\50

Previous results from T & T (1994)								
Location	TPH-G	B/T/E/X	TPH-D	418.1	8080	8270 (ppm)	6010 Cd/Cr/Ni/Pb/Zn	8010
Tank 3 Liquid	ND	ND	69000	600000	ND	ND	ND	NR
Tank 3 Solids	ND	ND	4800	12800	ND	ND	ND/22/33/10/47	ND
Tank 4 Soilds	ND	ND\ND\12\64	220		NR	ND	ND/17/21/ND/15	NR

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
418.1	Total Recoverable Hydrocarbons
8080	Pesticides, PCBs
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)
8010	Chlorinated Hydrocarbons
ND	Not detected
NR	Not run (not analyzed)

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: November 1, 1996

Attn: ROB BARRY

Laboratory Number : 22036

Project Number/Name : GSA ALAMED
Facility/Site : ALAMEDA,CA

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 31, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 30, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Arsanch Salimpour
Project Manager

Superior
Analytical Laboratory

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22036

Sample Receipt

Two soil samples were received by
Superior Analytical Laboratory on October 31, 1996.

Cooler temperature was 8°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 5520, 6010, 8015M, 8020 and 8270.

8270/REGULAR

The surrogate recovery was high for sample UST-3
due to the presence of interfering compounds in the sample.

TPH/REGULAR

Surrogate was diluted out for sample UST-3.

Sample UST-3 appears to contain weathered diesel and motor oil.

8015M/8020 results will be submitted on Monday morning.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior
Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 4, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 22036

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
UST-3	10/31/96	10/31/96	11/02/96	11/02/96	CK021.05	01
UST-4	10/31/96	10/31/96	11/02/96	11/02/96	CK021.05	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CK021.05-01	Method Blank	MB		Soil	11/02/96	11/02/96
CK021.05-02	Laboratory Spike	LS		Soil	11/02/96	11/02/96
CK021.05-03	Laboratory Spike Duplicate	LSD		Soil	11/02/96	11/02/96
CK021.05-04	UST-4	MS	22036-02	Soil	11/02/96	11/02/96
CK021.05-05	UST-4	MSD	22036-02	Soil	11/02/96	11/02/96

Superior Analytical Laboratory

:al INC
:ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 4, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds. from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	1.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. mg/kg	RL	22036-02 Conc. mg/kg	RL
Gasoline_Range	ND!!	1	ND	1
Benzene	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005
Ethyl Benzene	0.039	0.005	ND	0.005
Xylenes	0.19P	0.005	ND	0.005
Unknown Hydrocarbons	5	1	NA	
=> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	33K		77	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

	CK021.05-01 Conc. mg/kg	RL
Gasoline_Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
Unknown Hydrocarbons		
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	102	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CK021.05 02 / 03 - Laboratory Control Spikes						
Gasoline_Range		10	9.7/11	97/110	65-135	13
Benzene		0.100	0.079/0.084	79/84	65-135	6
Toluene		0.100	0.087/0.092	87/92	65-135	6
Ethyl Benzene		0.100	0.091/0.095	91/95	65-135	4
Xylenes		0.300	0.30/0.31	100/103	65-135	3
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				88/95	50-150	
For Soil Matrix (mg/kg)						
CK021.05 04 / 05 - Sample Spiked: 22036 - 02						
Gasoline_Range	ND	10	8.1/7.5	81/75	65-135	8
Benzene	ND	0.100	0.076/0.076	76/76	65-135	0
Toluene	ND	0.100	0.081/0.081	81/81	65-135	0
Ethyl Benzene	ND	0.100	0.084/0.084	84/84	65-135	0
Xylenes	ND	0.300	0.28/0.28	93/93	65-135	0
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				82/83	50-150	

Superior Analytical Laboratory

Narrative:

- There is a greater than 25% difference for detected concentration between the two GC columns.
- The surrogate recovery was low due to matrix effects. The analysis was repeated with similar effects.
- Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint. Possibly diesel.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals

Chronology

Laboratory Number 22036

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
UST-3	10/31/96	10/31/96	11/01/96	11/01/96	CK011.44	01
UST-4	10/31/96	10/31/96	11/01/96	11/01/96	CK011.44	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK011.44-01	Method Blank	MB	Soil	11/01/96	11/01/96
CK011.44-02	Laboratory Spike	LS	Soil	11/01/96	11/01/96
CK011.44-03	Laboratory Spike Duplicate	LSD	Soil	11/01/96	11/01/96
CK011.44-04	UST-4	MS 22036-02	Soil	11/01/96	11/01/96
CK011.44-05	UST-4	MSD 22036-02	Soil	11/01/96	11/01/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	1.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. mg/kg	RL	22036-02 Conc. mg/kg	RL
Cadmium (SW-846 6010)	ND	0.25	ND	0.25
Chromium (SW-846 6010)	24	0.5	19	0.5
Lead (SW-846 6010)	10	2.5	11	2.5
Nickel (SW-846 6010)	40	1.0	36	1.0
Zinc (SW-846 6010)	42	1.0	50	1.0

Superior Analytical Laboratory

EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

CK011.44-01

	Conc. mg/kg	RL
Cadmium (SW-846 6010)	ND	0.25
Chromium (SW-846 6010)	ND	0.5
Lead (SW-846 6010)	ND	2.5
Nickel (SW-846 6010)	ND	1.0
Zinc (SW-846 6010)	ND	1.0

Superior Analytical Laboratory

EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) CK011.44 02 / 03 - Laboratory Control Spikes						
Cadmium (SW-846 6010)		50	52.0/52.6	104/105	75-125	1
Chromium (SW-846 6010)		50	52.1/52.5	104/105	75-125	1
Lead (SW-846 6010)		50	52.1/52.7	104/105	75-125	1
Nickel (SW-846 6010)		50	52.4/52.9	105/106	75-125	1
Zinc (SW-846 6010)		50	52.8/53.2	106/106	75-125	0
For Soil Matrix (mg/kg) CK011.44 04 / 05 - Sample Spiked: 22036 - 02						
admium (SW-846 6010)	ND	50	47.2/47.4	94/95	75-125	1
Chromium (SW-846 6010)	19.5	50	66.3/69.6	94/100	75-125	6
Lead (SW-846 6010)	10.9	50	57.4/54.4	93/87	75-125	7
Nickel (SW-846 6010)	35.8	50	81.4/86.3	91/101	75-125	10
Zinc (SW-846 6010)	49.5	50	90.4/86.2R	82/73	75-125	12

? - MS and/or MSD recoveries were out of control limits. LCS / LCSD recoveries were within acceptable limits.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Chronology

Laboratory Number 22036

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
UST-3	10/31/96	10/31/96	10/31/96	11/01/96	CJ312.24	01
UST-4	10/31/96	10/31/96	10/31/96	11/01/96	CJ312.24	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ312.24-16	Method Blank	MB	Soil	10/31/96	11/01/96
CJ312.24-17	Laboratory Spike	LS	Soil	10/31/96	11/01/96
CJ312.24-18	Laboratory Spike Duplicate	LSD	Soil	10/31/96	11/01/96
CJ312.24-20	UST-4	MS 22036-02	Soil	10/31/96	11/01/96
CJ312.24-21	UST-4	MSD 22036-02	Soil	10/31/96	11/01/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	5.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. ug/Kg	RL	22036-02 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	1500	ND	300
aniline	ND	1500	ND	300
phenol	ND	1500	ND	300
2-chlorophenol	ND	1500	ND	300
1,3-dichlorobenzene	ND	1500	ND	300
1,4-dichlorobenzene	ND	1500	ND	300
1,2-dichlorobenzene	ND	1500	ND	300
benzyl alcohol	ND	1500	ND	300
bis-(2-chloroisopropyl)ether	ND	1500	ND	300
2-methylphenol	ND	1500	ND	300
hexachloroethane	ND	1500	ND	300
n-nitroso-di-n-propylamine	ND	1500	ND	300
4-methylphenol	ND	1500	ND	300
nitrobenzene	ND	1500	ND	300
isophorone	ND	1500	ND	300
2-nitrophenol	ND	1500	ND	300
2,4-dimethylphenol	ND	1500	ND	300
bis(2-chloroethoxy)methane	ND	1500	ND	300
2,4-dichlorophenol	ND	1500	ND	300
1,2,4-trichlorobenzene	ND	1500	ND	300
naphthalene	ND	1500	ND	300
benzoic acid	ND	7500	ND	1500
4-chloroaniline	ND	1500	ND	300
hexachlorobutadiene	ND	1500	ND	300
4-chloro-3-methylphenol	ND	1500	ND	300
2-methyl-naphthalene	7700	1500	ND	300
hexaclorocyclopentadiene	ND	7500	ND	1500
2,4,6-trichlorophenol	ND	1500	ND	300
2,4,5-trichlorophenol	ND	1500	ND	300
2-chloronaphthalene	ND	1500	ND	300
2-nitroaniline	ND	1500	ND	300

Superior Analytical Laboratory

RI INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	5.0	-
22036-02	UST-4	Soil	1.0	-

RESULTS OF ANALYSIS

Compound	22036-01 Conc. ug/Kg	RL	22036-02 Conc. ug/Kg	RL
Acenaphthylene	ND	1500	ND	300
Dimethylphthlate	ND	1500	ND	300
2,6-dinitrotoluene	ND	1500	ND	300
Acenaphthene	2100	1500	ND	300
3-nitroaniline	ND	1500	ND	300
2,4-dinitrophenol	ND	7500	ND	1500
Benzofuran	ND	1500	ND	300
4,6-dinitrotoluene	ND	1500	ND	300
4-nitrophenol	ND	1500	ND	300
Fluorene	3700	1500	ND	300
4-chlorophenyl-phenylether	ND	1500	ND	300
Diethylphthlate	ND	1500	ND	300
4-nitroaniline	ND	7500	ND	1500
4,6-dinitro-2-methylphenol	ND	1500	ND	300
n-nitrosodiphenylamine	ND	1500	ND	300
4-bromo-phenyl-phenylether	ND	1500	ND	300
Hexachlorobenzene	ND	1500	ND	300
Pentachlorophenol	ND	7500	ND	1500
Phenanthrene	4100	1500	ND	300
Anthracene	ND	1500	ND	300
Di-n-butylphthlate	ND	1500	ND	300
Fluoranthene	ND	1500	ND	300
Benzidine	ND	7500	ND	1500
Pyrene	3400	1500	ND	300
Butylbenzylphthlate	ND	1500	ND	300
3,3'-dichlorobenzidine	ND	1500	ND	300
Benzo(a)Anthracene	ND	1500	ND	300
Chrysene	ND	1500	ND	300
Bis(2-ethylhexyl)phthalate	ND	1500	ND	300
Di-n-octylphthalate	ND	1500	ND	300
Benzo(b)Fluoranthene	ND	1500	ND	300

Superior
Analytical Laboratory

:al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	5.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. ug/Kg	RL	22036-02 Conc. ug/Kg	RL
Benzo(k)Fluoranthene	ND	1500	ND	300
Benzo(a)Pyrene	ND	1500	ND	300
Indeno(1,2,3)Pyrene	ND	1500	ND	300
dibenzo[a,h]anthracene	ND	1500	ND	300
9H-Carbazole	ND	1500	ND	300
Benzo(g,h,i)Perylene	ND	1500	ND	300
Surrogate Recoveries (%) <<				
2-fluorophenol	84		65	
phenol-d5	91		73	
nitrobenzene-d5	113		70	
2-fluorobiphenyl	146I		74	
2,4,6-tribromophenol	125		72	
terphenyl-d14	111		77	

Superior Analytical Laboratory

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

	CJ312.24-16 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
1,2-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
n-nitroso-di-n-propylamine	ND	300
4-methylphenol	ND	300
nitrobenzene	ND	300
isophorone	ND	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	1500
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	1500
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300
acenaphthylene	ND	300
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
2,4-dinitrophenol	ND	1500

Superior Analytical Laboratory

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

CJ312.24-16

	Conc. ug/Kg	RL
dibenzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	1500
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
pentachlorophenol	ND	1500
phenanthrene	ND	300
anthracene	ND	300
di-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	1500
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
Benzo(b)Fluoranthene	ND	300
Benzo(k)Fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
9H-Carbazole	ND	300
Benzo(g,h,i)Perylene	ND	300

Superior Analytical Laboratory

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

CJ312.24-16
Conc. RL
ug/Kg

> Surrogate Recoveries (%) <<	
2-fluorophenol	71
phenol-d5	75
nitrobenzene-d5	77
2-fluorobiphenyl	74
2,4,6-tribromophenol	68
terphenyl-d14	64

Superior Analytical Laboratory

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/Kg)						
CJ312.24 17 / 18 - Laboratory Control Spikes						
phenol		3300	2579/2636	78/80	26-90	3
2-chlorophenol		3300	2548/2598	77/79	25-102	3
1,4-dichlorobenzene		1650	1461/1500	89/91	28-104	2
n-nitroso-di-n-propylamine		1650	1458/1479	88/90	41-126	2
1,2,4-trichlorobenzene		1650	1443/1478	87/90	38-124	3
4-chloro-3-methylphenol		3300	2667/2693	81/82	26-103	1
Acenaphthene		1650	1513/1549	92/94	31-137	2
2,4-dinitrotoluene		1650	1511/1536	92/93	28-118	1
4-nitrophenol		3300	2505/2507	76/76	11-114	0
pentachlorophenol		3300	2347/2380	71/72	17-109	1
pyrene		1650	1375/1449	83/88	35-142	6
-> Surrogate Recoveries (%) <<						
2-fluorophenol				74/77	25-121	
phenol-d5				78/79	24-113	
nitrobenzene-d5				79/82	23-120	
2-fluorobiphenyl				77/80	30-115	
2,4,6-tribromophenol				77/79	19-122	
terphenyl-d14				70/74	18-137	
For Soil Matrix (ug/Kg)						
CJ312.24 20 / 21 - Sample Spiked: 22036 - 02						
phenol	ND	3300	2524/2790	76/85	26-90	11
2-chlorophenol	ND	3300	2411/2743	73/83	25-102	13
1,4-dichlorobenzene	ND	1650	1369/1530	83/93	28-104	11
n-nitroso-di-n-propylamine	ND	1650	1411/1566	86/95	41-126	10
1,2,4-trichlorobenzene	ND	1650	1383/1560	84/95	38-124	12
4-chloro-3-methylphenol	ND	3300	2694/3009	82/91	26-103	10
Acenaphthene	ND	1650	1592/1739	96/105	31-137	9
2,4-dinitrotoluene	ND	1650	1584/1760	96/107	28-118	11
4-nitrophenol	ND	3300	2689/3024	81/92	11-114	13
pentachlorophenol	ND	3300	2561/2936	78/89	17-109	13

Superior Analytical Laboratory

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
pyrene	ND	1650	1706/1936	103/117	35-142	13
>> Surrogate Recoveries (%) <<						
2-fluorophenol				68/78	25-121	
phenol-d5				75/84	24-113	
nitrobenzene-d5				76/86	23-120	
2-fluorobiphenyl				81/89	30-115	
2,4,6-tribromophenol				85/94	19-122	
terphenyl-d14				89/101	18-137	

I - The surrogate recovery was high due to the presence of interfering compounds in the sample.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

,INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22036

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
UST-3	10/31/96	10/31/96	10/31/96	10/31/96	CJ311.21	01
UST-4	10/31/96	10/31/96	10/31/96	10/31/96	CJ311.21	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ311.21-01	Method Blank	MB	Soil	10/31/96	10/31/96
CJ311.21-02	Laboratory Spike	LS	Soil	10/31/96	10/31/96
CJ311.21-03	Laboratory Spike Duplicate	LSD	Soil	10/31/96	10/31/96
CJ311.21-04	UST-4	MS 22036-02	Soil	10/31/96	10/31/96
CJ311.21-05	UST-4	MSD 22036-02	Soil	10/31/96	11/01/96

Superior Analytical Laboratory

'al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	250.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. mg/kg	RL	22036-02 Conc. mg/kg	RL
Diesel:	7900@	250	14@	1
> Surrogate Recoveries (%) <<				
Tetracosane	NDBB		97	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

	CJ311.21-01 Conc. mg/Kg	RL
Diesel:	ND	1
> Surrogate Recoveries (%) <<		
Tetracosane	112	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/Kg) CJ311.21 02 / 03 - Laboratory Control Spikes						
Diesel:		33	39/40	118/121	50-150	3
> Surrogate Recoveries (%) <<						
Tetracosane				106/106	50-150	
For Soil Matrix (mg/Kg) CJ311.21 04 / 05 - Sample Spiked: 22036 - 02						
Diesel:	14	33	47/44	100/91	50-150	9
> Surrogate Recoveries (%) <<						
Tetracosane				97/96	50-150	

B-Surrogate was diluted out.

- Sample appears to contain weathered diesel and motor oil.

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

:al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22036

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
UST-3	10/31/96	10/31/96	11/01/96	11/01/96	CK011.34	01
UST-4	10/31/96	10/31/96	11/01/96	11/01/96	CK011.34	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CK011.34-01	Method Blank	MB		Soil	11/01/96	11/01/96
CK011.34-02	Laboratory Spike	LS		Soil	11/01/96	11/01/96
CK011.34-03	Laboratory Spike Duplicate	LSD		Soil	11/01/96	11/01/96
CK011.34-04	UST-4	MS	22036-02	Soil	11/01/96	11/01/96
CK011.34-05	UST-4	MSD	22036-02	Soil	11/01/96	11/01/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 1, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22036-01	UST-3	Soil	1.0	-
22036-02	UST-4	Soil	1.0	-

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

Compound	22036-01 Conc. mg/kg	RL	22036-02 Conc. mg/kg	RL
Oil and Grease	5000	50	580	50

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22036
Method Blank(s)

	CK011.34-01	
	Conc.	RL
	mg/kg	
Oil and Grease	ND	50

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22036

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CK011.34 02 / 03 - Laboratory Control Spikes						
Oil and Grease		600	610/630	102/105	60-110	3
For Soil Matrix (mg/kg)						
CK011.34 04 / 05 - Sample Spiked: 22036 - 02						
Oil and Grease	580	600	1200/1200	103/103	60-110	0

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

Nº 0157

CHAIN OF CUSTODY 22036

PROJECT NAME AND DESCRIPTION: GSA Alameda
PROJECT LOCATION: ALAMEDA, CA
SAMPLING CREW: ROB BARRY

Matrix: Water	Soil			Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved			Date: Year	Month	Day	Time	Sample Number: Sample Description
	X			X									96	10	31	14	UST-3
	X			X									96	10	31		UST-4

Analyses: EPA 418.1 SMWW5520	EPA 8010	EPA 8015M TPH-G, TPH-D	EPA 8020	EPA 8080	EPA 8240 ?	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 5	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X		X	X			X	X	X							X			
X		X	X			X	X	X							X			

LABORATORY NAME AND ADDRESS
SAL
825 ARNOLD DR. SUITE 116
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	10/31/96 1630		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab: Ellen Zoltan	Date/Time 10/31/96 1730

Please Deliver Analytical Results to:
Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

24 HR TAT
CAM5 = Cr, Cd, Ni, Zn, Pb

SPECIAL INSTRUCTIONS
Please Initial:
Samples Stored in ice. Noice
Appropriate containers ✓
Samples preserved
VOA's without headspace
Comments:

CAL INC

Nº [illegible]157

CHAIN OF CUSTODY

22036

PROJECT NAME AND DESCRIPTION: GSA Alameda

PROJECT LOCATION: ALAMEDA, CA

SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Matrix	Matrix	Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved			Date: Year	Month	Day	Time	Sample Number / Sample Description
	X			X									96	10	31	14	UST-3
	X			X									96	10	31		UST-4

Analyses

~~EPA 418.1~~ SM/WW 5520	EPA 8010	EPA 8015M TPH-G, TPH-D	EPA 8020	EPA 8080	EPA 8240 ?	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 5	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X		X	X			X	X	X							X			
X		X	X			X	X	X							X			

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DR SUITE 116
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	10/31/96 1630		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received by Lab: [signature]	Date/Time 10/31/96 16:30

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT
CAM5 = Cr, Cd, Ni, Zn, Pb

No ice ✓ 4°C

EXCAVATION SOIL
SAMPLE ANALYTICAL RESULTS

SOIL SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number	TPH-G (ppm)	B/T/E/X (ppm)	TPH-D (ppm)	TPH-Motor Oil (ppm)	8240 VOCs (ppm)	8270 SVOCs (ppb)	6010 Cd/Cr/Ni/Pb/Zn (ppm)	5520 Oil & Grease (ppm)
SS1-2.5'	ND	0.010 Toluene 0.027 Benzene	38	110	ND	ND	4.1 Cd 18 Cr 16 Ni ND Pb 82 Zn	84
SS1-7.0'	ND	0.009 Xylenes	190	220	ND	490 Fluoranthene 560 Pyrene	ND Cd 10 Cr ND Ni ND Pb 170 Zn	80
SS1-12.0'	ND	0.007 Ethyl Benzene	38	52	ND	330 Pyrene	ND Cd ND Cr ND Ni ND Pb 180 Zn 21 Mercury ND (Hg WET)	370
SS2-4.0'	3.3	0.063 Xylenes	ND	ND	ND	ND	ND Cd 9.5 Cr 12 Ni ND Pb 100 Zn	ND
SS2-6.5'	ND	ND	3200	3000	ND	ND	ND Cd 5.8 Cr 7.0 Ni ND Pb 96 Zn	4000
SS2-11.0'	ND	ND	490	510	ND	ND	ND Cd ND Cr ND Ni 15 Pb 140 Zn	530

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
TPH-Motor Oil	Total Petroleum Hydrocarbons as Motor Oil
8240	Volatile Organic Compounds
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)
5520	Oil & Grease
ND	Not detected

Superior Analytical Laboratory

FAX COVER SHEET

Laboratory: (510) 313-0850 Facsimile: (510) 229-0916
835 Arnold Drive Suite 106 Martinez, California 94553

To: Cal INC

From: Superior Analytical Laboratory

Date: 11-18-96

Page 1 of 7

To: ROB BARRY

From: Afsaneh Salimpour

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: November 17, 1996

Attn: ROB BARRY

Laboratory Number : 22013

Project Number/Name : GSA ALAMEDA
Facility/Site : Alameda Federal Center

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 24, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 23, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22013

Sample Receipt

Six soil samples were received by
Superior Analytical Laboratory on October 24, 1996.

Cooler temperature was 6°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for method 7470.

Cal INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on November 18, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-12.0	10/24/96	10/24/96	11/18/96	11/18/96	CK181.12	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK181.12-01	Method Blank	MB	Soil	11/18/96	11/18/96
CK181.12-02	Laboratory Spike	LS	Soil	11/18/96	11/18/96
CK181.12-03	Laboratory Spike Duplicate	LSD	Soil	11/18/96	11/18/96
CK181.12-04	SS1-12.0	MS 22013-03	Soil	11/18/96	11/18/96
CK181.12-05	SS1-12.0	MSD 22013-03	Soil	11/18/96	11/18/96

Cal INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on November 18, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-03	SS1-12.0	Soil	1.0	-

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

Compound	22013-03 Conc. RL mg/L	
Mercury (SW-846 7470)	ND	0.005

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CK181.12-01 Conc. mg/L	RL
Mercury (SW-846 7470)	ND	0.005

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/L)						
CK181.12 02 / 03 - Laboratory Control Spikes						
Mercury (SW-846 7470)		0.1	0.104/0.105	104/105	75-125	1
For Soil Matrix (mg/L)						
CK181.12 04 / 05 - Sample Spiked: 22013 - 03						
Mercury (SW-846 7470)	ND	0.1	0.104/0.104	104/104	75-125	0

Definitions:

ND = **Not Detected**
RL = **Reporting Limit**
NA = Not Analyzed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

MODE = TRANSMISSION START=NOV-19 13:34 END=NOV-19 13:36

NO.	COM	ABBR/NTWK	STATION NAME/ TELEPHONE NO.	PAGES	PRG.NO.	PROGRAM NAME
001	OK		14154795013	008		

-CAL INC. -

**********(FAX-950 V1.35)** - - ***** - - *********

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: October 30, 1996

Attn: ROB BARRY

Laboratory Number : 22013

Project Number/Name : GSA ALAMEDA
Facility/Site : Alameda Federal Center

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 24, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 23, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22013

Sample Receipt

Six soil samples were received by
Superior Analytical Laboratory on October 24, 1996.

Cooler temperature was 6°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 5520, 6010, 7471, 8015M, 8020, 8240 and 8270.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.24	01
SS1-7.0	10/24/96	10/24/96	10/24/96	10/25/96	CJ241.24	02
SS1-12.0	10/24/96	10/24/96	10/24/96	10/25/96	CJ241.24	03
SS2-4.0	10/24/96	10/24/96	10/24/96	10/25/96	CJ241.24	04
SS2-6.5	10/24/96	10/24/96	10/24/96	10/25/96	CJ241.24	05
SS2-11.0	10/24/96	10/24/96	10/24/96	10/25/96	CJ241.24	06

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ241.24-01	Method Blank	MB	Soil	10/24/96	10/24/96
CJ241.24-02	Laboratory Spike	LS	Soil	10/24/96	10/24/96
CJ241.24-03	Laboratory Spike Duplicate	LSD	Soil	10/24/96	10/24/96
CJ241.24-04	SS1-2.5	MS 22013-01	Soil	10/24/96	10/25/96
CJ241.24-05	SS1-2.5	MSD 22013-01	Soil	10/24/96	10/25/96

Superior Analytical Laboratory

al INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. ug/Kg	RL	22013-02 Conc. ug/Kg	RL	22013-03 Conc. ug/Kg	RL	22013-04 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300	ND	300	ND	300	ND	300
aniline	ND	300	ND	300	ND	300	ND	300
phenol	ND	300	ND	300	ND	300	ND	300
2-chlorophenol	ND	300	ND	300	ND	300	ND	300
1,3-dichlorobenzene	ND	300	ND	300	ND	300	ND	300
1,4-dichlorobenzene	ND	300	ND	300	ND	300	ND	300
1 dichlorobenzene	ND	300	ND	300	ND	300	ND	300
benzyl alcohol	ND	300	ND	300	ND	300	ND	300
bis-(2-chloroisopropyl)ether	ND	300	ND	300	ND	300	ND	300
2-methylphenol	ND	300	ND	300	ND	300	ND	300
hexachloroethane	ND	300	ND	300	ND	300	ND	300
n-nitroso-di-n-propylamine	ND	300	ND	300	ND	300	ND	300
4-methylphenol	ND	300	ND	300	ND	300	ND	300
nitrobenzene	ND	300	ND	300	ND	300	ND	300
isophorone	ND	300	ND	300	ND	300	ND	300
2-nitrophenol	ND	300	ND	300	ND	300	ND	300
2,4-dimethylphenol	ND	300	ND	300	ND	300	ND	300
bis(2-chloroethoxy)methane	ND	300	ND	300	ND	300	ND	300
2,4-dichlorophenol	ND	300	ND	300	ND	300	ND	300
1,2,4-trichlorobenzene	ND	300	ND	300	ND	300	ND	300
naphthalene	ND	300	ND	300	ND	300	ND	300
benzoic acid	ND	1500	ND	1500	ND	1500	ND	1500
4-chloroaniline	ND	300	ND	300	ND	300	ND	300
hexachlorobutadiene	ND	300	ND	300	ND	300	ND	300
4-chloro-3-methylphenol	ND	300	ND	300	ND	300	ND	300
2-methyl-naphthalene	ND	300	ND	300	ND	300	ND	300
hexaclorocyclopentadiene	ND	1500	ND	1500	ND	1500	ND	1500
2,4,6-trichlorophenol	ND	300	ND	300	ND	300	ND	300
2,4,5-trichlorophenol	ND	300	ND	300	ND	300	ND	300
2-chloronaphthalene	ND	300	ND	300	ND	300	ND	300
2-nitroaniline	ND	300	ND	300	ND	300	ND	300

Superior Analytical Laboratory

al INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. ug/Kg	RL	22013-02 Conc. ug/Kg	RL	22013-03 Conc. ug/Kg	RL	22013-04 Conc. ug/Kg	RL
acenaphthylene	ND	300	ND	300	ND	300	ND	300
dimethylphthlate	ND	300	ND	300	ND	300	ND	300
2,6-dinitrotoluene	ND	300	ND	300	ND	300	ND	300
Acenaphthene	ND	300	ND	300	ND	300	ND	300
3-nitroaniline	ND	300	ND	300	ND	300	ND	300
2,4-dinitrophenol	ND	1500	ND	1500	ND	1500	ND	1500
dibenzofuran	ND	300	ND	300	ND	300	ND	300
2,4-dinitrotoluene	ND	300	ND	300	ND	300	ND	300
4-nitrophenol	ND	300	ND	300	ND	300	ND	300
fluorene	ND	300	ND	300	ND	300	ND	300
4-chlorophenyl-phenylether	ND	300	ND	300	ND	300	ND	300
diethylphthlate	ND	300	ND	300	ND	300	ND	300
4-nitroaniline	ND	1500	ND	1500	ND	1500	ND	1500
4,6-dinitro-2-methylphenol	ND	300	ND	300	ND	300	ND	300
n-nitrosodiphenylamine	ND	300	ND	300	ND	300	ND	300
4-bromo-phenyl-phenylether	ND	300	ND	300	ND	300	ND	300
hexachlorobenzene	ND	300	ND	300	ND	300	ND	300
pentachlorophenol	ND	1500	ND	1500	ND	1500	ND	1500
phenanthrene	ND	300	ND	300	ND	300	ND	300
anthracene	ND	300	ND	300	ND	300	ND	300
di-n-butylphthlate	ND	300	ND	300	ND	300	ND	300
fluoranthene	ND	300	490	300	ND	300	ND	300
benzidine	ND	1500	ND	1500	ND	1500	ND	1500
pyrene	ND	300	560	300	330	300	ND	300
butylbenzylphthlate	ND	300	ND	300	ND	300	ND	300
3,3'-dichlorobenzidine	ND	300	ND	300	ND	300	ND	300
Benzo(a)Anthracene	ND	300	ND	300	ND	300	ND	300
chrysene	ND	300	ND	300	ND	300	ND	300
bis(2-ethylhexyl)phthalate	ND	300	ND	300	ND	300	ND	300
di-n-octylphthalate	ND	300	ND	300	ND	300	ND	300
Benzo(b)Fluoranthene	ND	300	ND	300	ND	300	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. ug/Kg	RL	22013-02 Conc. ug/Kg	RL	22013-03 Conc. ug/Kg	RL	22013-04 Conc. ug/Kg	RL
Benzo(k)Fluoranthene	ND	300	ND	300	ND	300	ND	300
Benzo(a)Pyrene	ND	300	ND	300	ND	300	ND	300
Indeno(1,2,3)Pyrene	ND	300	ND	300	ND	300	ND	300
dibenzo[a,h]anthracene	ND	300	ND	300	ND	300	ND	300
9H-Carbazole	ND	300	ND	300	ND	300	ND	300
Benzo(g,h,i)Perylene	ND	300	ND	300	ND	300	ND	300
>> Surrogate Recoveries (%) <<								
2-fluorophenol	76		77		72		72	
phenol-d5	80		82		78		77	
nitrobenzene-d5	76		79		75		74	
2-fluorobiphenyl	82		82		78		76	
2,4,6-tribromophenol	83		102		89		81	
terphenyl-d14	96		110		112		116	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05 @	SS2-6.5	Soil	10.0	-
22013-06	SS2-11.0	Soil	1.0	-

RESULTS OF ANALYSIS

Compound	22013-05 Conc. ug/Kg	RL	22013-06 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	3000	ND	300
aniline	ND	3000	ND	300
phenol	ND	3000	ND	300
2-chlorophenol	ND	3000	ND	300
1,3-dichlorobenzene	ND	3000	ND	300
1,4-dichlorobenzene	ND	3000	ND	300
[illegible]-dichlorobenzene	ND	3000	ND	300
benzyl alcohol	ND	3000	ND	300
bis-(2-chloroisopropyl)ether	ND	3000	ND	300
2-methylphenol	ND	3000	ND	300
hexachloroethane	ND	3000	ND	300
n-nitroso-di-n-propylamine	ND	3000	ND	300
4-methylphenol	ND	3000	ND	300
nitrobenzene	ND	3000	ND	300
isophorone	ND	3000	ND	300
2-nitrophenol	ND	3000	ND	300
2,4-dimethylphenol	ND	3000	ND	300
bis(2-chloroethoxy)methane	ND	3000	ND	300
2,4-dichlorophenol	ND	3000	ND	300
1,2,4-trichlorobenzene	ND	3000	ND	300
naphthalene	ND	3000	ND	300
benzoic acid	ND	15000	ND	1500
4-chloroaniline	ND	3000	ND	300
hexachlorobutadiene	ND	3000	ND	300
4-chloro-3-methylphenol	ND	3000	ND	300
2-methyl-naphthalene	ND	3000	ND	300
hexaclorocyclopentadiene	ND	15000	ND	1500
2,4,6-trichlorophenol	ND	3000	ND	300
2,4,5-trichlorophenol	ND	3000	ND	300
2-chloronaphthalene	ND	3000	ND	300
2-nitroaniline	ND	3000	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05 @	SS2-6.5	Soil	10.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. ug/Kg	RL	22013-06 Conc. ug/Kg	RL
acenaphthylene	ND	3000	ND	300
dimethylphthlate	ND	3000	ND	300
2,6-dinitrotoluene	ND	3000	ND	300
Acenaphthene	ND	3000	ND	300
3-nitroaniline	ND	3000	ND	300
2,4-dinitrophenol	ND	15000	ND	1500
dibenzofuran	ND	3000	ND	300
2,4-dinitrotoluene	ND	3000	ND	300
4-nitrophenol	ND	3000	ND	300
fluorene	ND	3000	ND	300
4-chlorophenyl-phenylether	ND	3000	ND	300
diethylphthlate	ND	3000	ND	300
4-nitroaniline	ND	15000	ND	1500
4,6-dinitro-2-methylphenol	ND	3000	ND	300
n-nitrosodiphenylamine	ND	3000	ND	300
4-bromo-phenyl-phenylether	ND	3000	ND	300
hexachlorobenzene	ND	3000	ND	300
pentachlorophenol	ND	15000	ND	1500
phenanthrene	ND	3000	ND	300
anthracene	ND	3000	ND	300
di-n-butylphthlate	ND	3000	ND	300
fluoranthene	ND	3000	ND	300
benzidine	ND	15000	ND	1500
pyrene	ND	3000	ND	300
butylbenzylphthlate	ND	3000	ND	300
3.3'-dichlorobenzidine	ND	3000	ND	300
Benzo(a)Anthracene	ND	3000	ND	300
chrysene	ND	3000	ND	300
bis(2-ethylhexyl)phthalate	ND	3000	ND	300
di-n-octylphthalate	ND	3000	ND	300
Benzo(b)Fluoranthene	ND	3000	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05 @	SS2-6.5	Soil	10.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. ug/Kg	RL	22013-06 Conc. ug/Kg	RL
Benzo(k)Fluoranthene	ND	3000	ND	300
Benzo(a)Pyrene	ND	3000	ND	300
Indeno(1,2,3)Pyrene	ND	3000	ND	300
dibenzo[a,h]anthracene	ND	3000	ND	300
9H-Carbazole	ND	3000	ND	300
Benzo(g,h,i)Perylene	ND	3000	ND	300
> Surrogate Recoveries (%) <<				
2-fluorophenol	78		70	
phenol-d5	88		76	
nitrobenzene-d5	82		72	
2-fluorobiphenyl	83		77	
2,4,6-tribromophenol	70		88	
terphenyl-d14	119		93	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

CJ241.24-01

	Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
1,2-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
n-nitroso-di-n-propylamine	ND	300
-methylphenol	ND	300
nitrobenzene	ND	300
isophorone	ND	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	1500
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	1500
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300
acenaphthylene	ND	300
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
2,4-dinitrophenol	ND	1500

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ241.24-01 Conc. ug/Kg	RL
dibenzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	1500
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
pentachlorophenol	ND	1500
[illegible]anthrene	ND	300
a[illegible]hracene	ND	300
di-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	1500
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
Benzo(b)Fluoranthene	ND	300
Benzo(k)Fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
9H-Carbazole	ND	300
Benzo(g,h,i)Perylene	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

CJ241.24-01
Conc. RL
ug/Kg

> Surrogate Recoveries (%) <	
2-fluorophenol	60
phenol-d5	59
nitrobenzene-d5	57
2-fluorobiphenyl	59
2,4,6-tribromophenol	39
terphenyl-d14	60

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/Kg)						
CJ241.24 02 / 03 - Laboratory Control Spikes						
phenol		3300	2123/2105	64/64	26-90	0
2-chlorophenol		3300	2386/2374	72/72	25-102	0
1,4-dichlorobenzene		1650	1143/1127	69/68	28-104	1
n-nitroso-di-n-propylamine		1650	1396/1366	85/83	41-126	2
1,2,4-trichlorobenzene		1650	1189/1183	72/72	38-124	0
4-chloro-3-methylphenol		3300	2676/2621	81/79	26-103	3
Acenaphthene		1650	1282/1322	78/80	31-137	3
2,4-dinitrotoluene		1650	1326/1269	80/77	28-118	4
4-nitrophenol		3300	2009/1888	61/57	11-114	7
pentachlorophenol		3300	2043/1896	62/57	17-109	8
pyrene		1650	1395/1599	85/97	35-142	13
> Surrogate Recoveries (%) <<						
2-fluorophenol				68/67	25-121	
phenol-d5				74/73	24-113	
nitrobenzene-d5				73/72	23-120	
2-fluorobiphenyl				76/76	30-115	
2,4,6-tribromophenol				77/79	19-122	
terphenyl-d14				83/90	18-137	
For Soil Matrix (ug/Kg)						
CJ241.24 04 / 05 - Sample Spiked: 22013 - 01						
phenol	ND	3300	2298/2373	70/72	26-90	3
2-chlorophenol	ND	3300	2663/2744	81/83	25-102	2
1,4-dichlorobenzene	ND	1650	1291/1298	78/79	28-104	1
n-nitroso-di-n-propylamine	ND	1650	1477/1498	90/91	41-126	1
1,2,4-trichlorobenzene	ND	1650	1338/1329	81/81	38-124	0
4-chloro-3-methylphenol	ND	3300	2891/2996	88/91	26-103	3
Acenaphthene	ND	1650	1422/1428	86/87	31-137	1
2,4-dinitrotoluene	ND	1650	1541/1647	93/100	28-118	7
4-nitrophenol	ND	3300	3806I/4020I	115/122	11-114	6
pentachlorophenol	ND	3300	3169/2970	96/90	17-109	6

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
pyrene	ND	1650	1637/1631	99/99	35-142	0
> Surrogate Recoveries (%) <<						
2-fluorophenol				77/76	25-121	
phenol-d5				81/84	24-113	
nitrobenzene-d5				78/80	23-120	
2-fluorobiphenyl				84/82	30-115	
2,4,6-tribromophenol				99/97	19-122	
terphenyl-d14				95/98	18-137	

- Reporting limits raised due to matrix interference.

- The surrogate recovery was high due to the presence of interfering compounds in the sample.

efinitions:

D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.09	01
SS1-7.0	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.09	02
SS1-12.0	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.09	03
SS2-4.0	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.09	04
SS2-6.5	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.09	05
SS2-11.0	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.09	06

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CJ241.09-01	Method Blank	MB		Soil	10/24/96	10/24/96
CJ241.09-02	Laboratory Spike	LS		Soil	10/24/96	10/24/96
CJ241.09-03	Laboratory Spike Duplicate	LSD		Soil	10/24/96	10/24/96
CJ241.09-04	SS2-14.0	MS	22013-04	Soil	10/24/96	10/24/96
CJ241.09-05	SS2-14.0	MSD	22013-04	Soil	10/24/96	10/24/96
CJ241.09-06	Method Blank	MB		Soil	10/25/96	10/25/96

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. ug/kg	RL	22013-02 Conc. ug/kg	RL	22013-03 Conc. ug/kg	RL	22013-04 Conc. ug/kg	RL
Chloromethane	ND	50	ND	50	ND	50	ND	50
Bromomethane	ND	50	ND	50	ND	50	ND	50
Vinyl Chloride	ND	50	ND	50	ND	50	ND	50
Chloroethane	ND	50	ND	50	ND	50	ND	50
Dichloromethane	ND	50	ND	50	ND	50	ND	50
Acetone	ND	200	ND	200	ND	200	ND	200
[illegible]on Disulfide	ND	15	ND	15	ND	15	ND	15
[illegible]chlorofluoromethane	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethene	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethane	ND	15	ND	15	ND	15	ND	15
t-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
Chloroform	ND	15	ND	15	ND	15	ND	15
1,2-Dichloroethane	ND	5	ND	5	ND	5	ND	5
2-Butanone	ND	100	ND	100	ND	100	ND	100
1,1,1-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Carbon tetrachloride	ND	15	ND	15	ND	15	ND	15
Vinyl Acetate	ND	50	ND	50	ND	50	ND	50
Bromodichloromethane	ND	15	ND	15	ND	15	ND	15
1,2-Dichloropropane	ND	15	ND	15	ND	15	ND	15
c-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
c-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Trichloroethene	ND	15	ND	15	ND	15	ND	15
Dibromochloromethane	ND	15	ND	15	ND	15	ND	15
1,1,2-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Benzene	ND	5	ND	5	ND	5	ND	5
t-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Bromoform	ND	15	ND	15	ND	15	ND	15
4-methyl-2-Pentanone	ND	50	ND	50	ND	50	ND	50
2-Hexanone	ND	50	ND	50	ND	50	ND	50
Tetrachloroethene	ND	15	ND	15	ND	15	ND	15
1,1,2,2-Tetrachloroethane	ND	15	ND	15	ND	15	ND	15

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. ug/kg	RL	22013-02 Conc. ug/kg	RL	22013-03 Conc. ug/kg	RL	22013-04 Conc. ug/kg	RL
Toluene	ND	15	ND	15	ND	15	ND	15
Chlorobenzene	ND	15	ND	15	ND	15	ND	15
Ethyl Benzene	ND	15	ND	15	ND	15	ND	15
Styrene	ND	15	ND	15	ND	15	ND	15
Xylenes	ND	15	ND	15	ND	15	ND	15
1,3-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
1,4-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
1,2-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
> Surrogate Recoveries (%) <								
1,2-Dichloroethane-d4	98		100		100		97	
Toluene-d8	88		88		85		94	
Bromofluorobenzene	98		103		105		102	

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	1.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. ug/kg	RL	22013-06 Conc. ug/kg	RL
Chloromethane	ND	50	ND	50
Bromomethane	ND	50	ND	50
Vinyl Chloride	ND	50	ND	50
Chloroethane	ND	50	ND	50
Dichloromethane	ND	50	ND	50
Acetone	ND	200	ND	200
Carbon Disulfide	ND	15	ND	15
Trichlorofluoromethane	ND	15	ND	15
1,1-Dichloroethene	ND	15	ND	15
1,1-Dichloroethane	ND	15	ND	15
t-1,2-Dichloroethene	ND	15	ND	15
Chloroform	ND	15	ND	15
1,2-Dichloroethane	ND	5	ND	5
2-Butanone	ND	100	ND	100
1,1,1-Trichloroethane	ND	15	ND	15
Carbon tetrachloride	ND	15	ND	15
Vinyl Acetate	ND	50	ND	50
Bromodichloromethane	ND	15	ND	15
1,2-Dichloropropane	ND	15	ND	15
c-1,2-Dichloroethene	ND	15	ND	15
c-1,3-Dichloropropene	ND	15	ND	15
Trichloroethene	ND	15	ND	15
Dibromochloromethane	ND	15	ND	15
1,1,2-Trichloroethane	ND	15	ND	15
Benzene	ND	5	ND	5
t-1,3-Dichloropropene	ND	15	ND	15
Bromoform	ND	15	ND	15
4-methyl-2-Pentanone	ND	50	ND	50
2-Hexanone	ND	50	ND	50
Tetrachloroethene	ND	15	ND	15
1,1,2,2-Tetrachloroethane	ND	15	ND	15

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	1.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. ug/kg	RL	22013-06 Conc. ug/kg	RL
Toluene	ND	15	ND	15
Chlorobenzene	ND	15	ND	15
Ethyl Benzene	ND	15	ND	15
Styrene	ND	15	ND	15
Xylenes	ND	15	ND	15
1,3-Dichlorobenzene	ND	15	ND	15
1,4-Dichlorobenzene	ND	15	ND	15
1,2-Dichlorobenzene	ND	15	ND	15
> Surrogate Recoveries (%) <				
1,2-Dichloroethane-d4	101		102	
Toluene-d8	82		89	
Bromofluorobenzene	109		104	

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ241.09-01		CJ241.09-06	
	Conc. ug/kg	RL	Conc. ug/kg	RL
Chloromethane	ND	50	ND	50
Bromomethane	ND	50	ND	50
Vinyl Chloride	ND	50	ND	50
Chloroethane	ND	50	ND	50
Dichloromethane	ND	50	ND	50
Acetone	ND	200	ND	200
Carbon Disulfide	ND	15	ND	15
Trichlorofluoromethane	ND	15	ND	15
1,1-Dichloroethene	ND	15	ND	15
1,1-Dichloroethane	ND	15	ND	15
t-1,2-Dichloroethene	ND	15	ND	15
Chloroform	ND	15	ND	15
[illegible]-Dichloroethane	ND	5	ND	5
2-Butanone	ND	100	ND	100
1,1,1-Trichloroethane	ND	15	ND	15
Carbon tetrachloride	ND	15	ND	15
Vinyl Acetate	ND	50	ND	50
Bromodichloromethane	ND	15	ND	15
1,2-Dichloropropane	ND	15	ND	15
c-1,2-Dichloroethene	ND	15	ND	15
c-1,3-Dichloropropene	ND	15	ND	15
Trichloroethene	ND	15	ND	15
Dibromochloromethane	ND	15	ND	15
1,1,2-Trichloroethane	ND	15	ND	15
Benzene	ND	5	ND	5
t-1,3-Dichloropropene	ND	15	ND	15
Bromoform	ND	15	ND	15
4-methyl-2-Pentanone	ND	50	ND	50
2-Hexanone	ND	50	ND	50
Tetrachloroethene	ND	15	ND	15
1,1,2,2-Tetrachloroethane	ND	15	ND	15
Toluene	ND	15	ND	15
Chlorobenzene	ND	15	ND	15
Ethyl Benzene	ND	15	ND	15
Styrene	ND	15	ND	15
Xylenes	ND	15	ND	15
1,3-Dichlorobenzene	ND	15	ND	15

Superior Analytical Laboratory

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ241.09-01		CJ241.09-06	
	Conc. ug/kg	RL	Conc. ug/kg	RL
1,4-Dichlorobenzene	ND	15	ND	15
1,2-Dichlorobenzene	ND	15	ND	15
> Surrogate Recoveries (%) <<				
1,2-Dichloroethane-d4	98		97	
Toluene-d8	86		86	
Bromofluorobenzene	104		106	

Superior Analytical Laboratory

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/kg)						
CJ241.09 02 / 03 - Laboratory Control Spikes						
1,1-Dichloroethene		200	180/180	90/90	59-172	0
Trichloroethene		200	190/200	95/100	62-137	5
Benzene		200	200/200	100/100	66-142	0
Toluene		200	190/200	95/100	59-139	5
Chlorobenzene		200	200/220	100/110	60-133	10
Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				98/96	88-117	
Toluene-d8				90/89	75-136	
Bromofluorobenzene				102/100	52-129	
For Soil Matrix (ug/kg)						
CJ241.09 04 / 05 - Sample Spiked: 22013 - 04						
1,1-Dichloroethene	ND	200	190/190	95/95	59-172	0
Trichloroethene	ND	200	200/200	100/100	62-137	0
Benzene	ND	200	200/200	100/100	66-142	0
Toluene	ND	200	200/200	100/100	59-139	0
Chlorobenzene	ND	200	230/220	115/110	60-133	4
Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				106/102	88-117	
Toluene-d8				89/88	75-136	
Bromofluorobenzene				105/103	52-129	

finitions:

= Not Detected
= Reporting Limit
= Not Analysed
D = Relative Percent Difference
/L = parts per billion (ppb)
/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	01
SS1-7.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	02
SS1-12.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	03
SS2-4.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	04
SS2-6.5	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	05
SS2-11.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ282.34	06

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ282.34-01	Method Blank	MB	Soil	10/28/96	10/28/96
CJ282.34-02	Laboratory Spike	LS	Soil	10/28/96	10/28/96
CJ282.34-03	Laboratory Spike Duplicate	LSD	Soil	10/28/96	10/28/96
CJ282.34-04	SS2-14.0	MS 22013-04	Soil	10/28/96	10/28/96
CJ282.34-05	SS2-14.0	MSD 22013-04	Soil	10/28/96	10/28/96

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. mg/kg	RL	22013-02 Conc. mg/kg	RL	22013-03 Conc. mg/kg	RL	22013-04 Conc. mg/kg	RL
Oil and Grease	84	50	80	50	370	50	ND	50

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	1.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. mg/kg	RL	22013-06 Conc. mg/kg	RL
Oil and Grease	4000	50	530	50

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ282.34-01	
	Conc.	RL
	mg/kg	
Oil and Grease	ND	50

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/kg)				
		CJ282.34 02 / 03 - Laboratory Control Spikes				
Oil and Grease		600	620/610	103/102	60-110	1
		For Soil Matrix (mg/kg)				
		CJ282.34 04 / 05 - Sample Spiked: 22013 - 04				
Oil and Grease	ND	600	500/500	83/83	60-110	0

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/28/96	10/28/96	CJ281.42	01
SS1-7.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ281.42	02
SS1-12.0	10/24/96	10/24/96	10/28/96	10/29/96	CJ281.42	03
SS2-4.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ281.42	04
SS2-6.5	10/24/96	10/24/96	10/28/96	10/28/96	CJ281.42	05
SS2-11.0	10/24/96	10/24/96	10/28/96	10/28/96	CJ281.42	06

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ281.42-01	Method Blank	MB	Soil	10/28/96	10/28/96
CJ281.42-02	Laboratory Spike	LS	Soil	10/28/96	10/28/96
CJ281.42-03	Laboratory Spike Duplicate	LSD	Soil	10/28/96	10/28/96
CJ281.42-04	#2 SOIL PILE	MS 21995-02	Soil	10/28/96	10/28/96
CJ281.42-05	#2 SOIL PILE	MSD 21995-02	Soil	10/28/96	10/28/96

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	10.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. mg/kg	22013-01 RL	22013-02 Conc. mg/kg	22013-02 RL	22013-03 Conc. mg/kg	22013-03 RL	22013-04 Conc. mg/kg	22013-04 RL
Diesel:	38	1	190	10	38	1	ND	1
Motor Oil	110	20	220	200	52	20	ND	20
> Surrogate Recoveries (%) <<								
Tetracosane	96		165I		105		90	

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Project GSA ALAMEDA
Reported on October 30, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	250.0	-
22013-06	SS2-11.0	Soil	20.0	-

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

Compound	22013-05 Conc. mg/kg	RL	22013-06 Conc. mg/kg	RL
Diesel:	3200	250	490	20
Motor Oil	3000	2500	510	400
> Surrogate Recoveries (%) <<				
Tetracosane	BB		179I	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ281.42-01 Conc. mg/Kg	RL
Diesel:	ND	1
Motor Oil	ND	20
> Surrogate Recoveries (%) <<		
Tetracosane	133	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/Kg)				
		CJ281.42 02 / 03 - Laboratory Control Spikes				
Diesel:		33	37.6/46.9	114/142	50-150	22
>> Surrogate Recoveries (%) <<						
Tetracosane				135/139	50-150	
		For Soil Matrix (mg/Kg)				
		CJ281.42 04 / 05 - Sample Spiked: 21995 - 02				
Diesel:	8.9	33	33.7/37.5	75/87	50-150	15
>> Surrogate Recoveries (%) <<						
Tetracosane				107/111	50-150	

I - The surrogate recovery was high due to the presence of interfering compounds in the sample.

3B-Surrogate was diluted out.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project GSA ALAMEDA
Reported on October 30, 1996
Revised on October 30, 1996

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	01
SS1-7.0	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	02
SS1-12.0	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	03
SS2-4.0	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	04
SS2-6.5	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	05
SS2-11.0	10/24/96	10/24/96	10/29/96	10/29/96	CJ291.12 CJ281.44	06

Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CJ291.12-01	Method Blank	MB		Soil	10/29/96	10/29/96
CJ291.12-02	Laboratory Spike	LS		Soil	10/29/96	10/29/96
CJ291.12-03	Laboratory Spike Duplicate	LSD		Soil	10/29/96	10/29/96
CJ291.12-04	SS1-2.5	MS	22013-01	Soil	10/29/96	10/29/96
CJ291.12-05	SS1-2.5	MSD	22013-01	Soil	10/29/96	10/29/96
CJ281.44-01	Method Blank	MB		Soil	10/28/96	10/29/96
CJ281.44-02	Laboratory Spike	LS		Soil	10/28/96	10/29/96
CJ281.44-03	Laboratory Spike Duplicate	LSD		Soil	10/28/96	10/29/96
CJ281.44-04	SS1-2.5	MS	22013-01	Soil	10/28/96	10/29/96
CJ281.44-05	SS1-2.5	MSD	22013-01	Soil	10/28/96	10/29/96

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Project GSA ALAMEDA
Reported on October 30, 1996
Revised on October 30, 1996

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	25.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. mg/kg	RL	22013-02 Conc. mg/kg	RL	22013-03 Conc. mg/kg	RL	22013-04 Conc. mg/kg	RL
Mercury (SW-846 7471)	0.20	0.05	0.34	0.05	21	1.25	0.22	0.05
Antimony (SW-846 6010)	ND	25	ND	25	ND	25	ND	25
Arsenic (SW-846 6010)	ND	25	ND	25	ND	25	ND	25
Barium (SW-846 6010)	72	3.8	21	3.8	26	3.8	41	3.8
Beryllium (SW-846 6010)	ND	1.3	ND	1.3	ND	1.3	ND	1.3
Cadmium (SW-846 6010)	4.1	1.3	ND	1.3	ND	1.3	ND	1.3
Chromium (SW-846 6010)	18	2.5	10	2.5	ND	2.5	9.5	2.5
Cobalt (SW-846 6010)	9.3	2.5	8.8	2.5	7.7	2.5	7.1	2.5
Copper (SW-846 6010)	21	5.0	9.9	5.0	7.2	5.0	13	5.0
Lead (SW-846 6010)	ND	13	ND	13	ND	13	ND	13
Molybdenum (SW-846 6010)	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Nickel (SW-846 6010)	16	5.0	ND	5.0	ND	5.0	12	5.0
Silver (SW-846 6010)	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Selenium (SW-846 6010)	ND	25	ND	25	ND	25	ND	25
Thallium (SW-846 6010)	ND	50	ND	50	ND	50	ND	50
Vanadium (SW-846 6010)	28	7.5	18	7.5	13	7.5	20	7.5
Zinc (SW-846 6010)	82	5.0	170	5.0	180	5.0	100	5.0

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Project GSA ALAMEDA
Reported on October 30, 1996
Revised on October 30, 1996

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	1.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. mg/kg	RL	22013-06 Conc. mg/kg	RL
Mercury (SW-846 7471)	0.12	0.05	0.62	0.05
Antimony (SW-846 6010)	ND	25	ND	25
Arsenic (SW-846 6010)	ND	25	ND	25
Barium (SW-846 6010)	36	3.8	23	3.8
Beryllium (SW-846 6010)	ND	1.3	ND	1.3
Cadmium (SW-846 6010)	ND	1.3	ND	1.3
Chromium (SW-846 6010)	5.8	2.5	ND	2.5
Cobalt (SW-846 6010)	6.2	2.5	6.4	2.5
Copper (SW-846 6010)	8.7	5.0	13	5.0
Lead (SW-846 6010)	ND	13	15	13
Molybdenum (SW-846 6010)	ND	5.0	ND	5.0
Nickel (SW-846 6010)	7.0	5.0	ND	5.0
Silver (SW-846 6010)	ND	5.0	ND	5.0
Selenium (SW-846 6010)	ND	25	ND	25
Thallium (SW-846 6010)	ND	50	ND	50
Vanadium (SW-846 6010)	16	7.5	19	7.5
Zinc (SW-846 6010)	96	5.0	140	5.0

Superior Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ291.12-01		CJ281.44-01	
	Conc. mg/kg	RL	Conc. mg/kg	RL
Mercury (SW-846 7471)	ND	0.05		
Antimony (SW-846 6010)			ND	5.0
Arsenic (SW-846 6010)			ND	5.0
Barium (SW-846 6010)			ND	0.75
Beryllium (SW-846 6010)			ND	0.25
Cadmium (SW-846 6010)			ND	0.25
Chromium (SW-846 6010)			ND	0.5
Cobalt (SW-846 6010)			ND	0.5
Copper (SW-846 6010)			ND	1.0
[illegible] (SW-846 6010)			ND	2.5
Molybdenum (SW-846 6010)			ND	1.0
Nickel (SW-846 6010)			ND	1.0
Silver (SW-846 6010)			ND	1.0
Selenium (SW-846 6010)			ND	5.0
Thallium (SW-846 6010)			ND	10
Vanadium (SW-846 6010)			ND	1.5
Zinc (SW-846 6010)			ND	1.0

Superior Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CJ291.12 02 / 03 - Laboratory Control Spikes						
Mercury (SW-846 7471)		1.0	0.915/0.990	92/99	75-125	7
For Soil Matrix (mg/kg)						
CJ281.44 02 / 03 - Laboratory Control Spikes						
Antimony (SW-846 6010)		50	47.8/48.8	96/98	75-125	2
Arsenic (SW-846 6010)		50	48.8/49.3	98/99	75-125	1
Barium (SW-846 6010)		50	46.5/46.9	93/94	75-125	1
Beryllium (SW-846 6010)		50	44.7/45.6	89/91	75-125	2
Cadmium (SW-846 6010)		50	49.8/50.8	100/102	75-125	2
Chromium (SW-846 6010)		50	49.8/50.6	100/101	75-125	1
Cobalt (SW-846 6010)		50	49.8/50.8	100/102	75-125	2
Copper (SW-846 6010)		50	48.5/49.0	97/98	75-125	1
Lead (SW-846 6010)		50	49.7/50.3	99/101	75-125	2
Molybdenum (SW-846 6010)		50	48.9/50.1	98/100	75-125	2
Nickel (SW-846 6010)		50	50.0/50.8	100/102	75-125	2
Silver (SW-846 6010)		50	45.7/46.2	91/92	75-125	1
Selenium (SW-846 6010)		50	46.9/48.5	94/97	75-125	3
Thallium (SW-846 6010)		50	49.8/50.5	100/101	75-125	1
Vanadium (SW-846 6010)		50	48.2/48.9	96/98	75-125	2
Zinc (SW-846 6010)		50	50.3/51.3	101/103	75-125	2
For Soil Matrix (mg/kg)						
CJ291.12 04 / 05 - Sample Spiked: 22013 - 01						
Mercury (SW-846 7471)	0.195	1.0	1.115/1.155	92/96	75-125	4

Superior Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) CJ281.44 04 / 05 - Sample Spiked: 22013 - 01						
Antimony (SW-846 6010)	ND	50	33.7R/36.4R	67/73	75-125	9
Arsenic (SW-846 6010)	ND	50	59.7/55.7	119/111	75-125	7
Barium (SW-846 6010)	71.8	50	108.8R/107.6	74/72	75-125	3
Beryllium (SW-846 6010)	ND	50	51.2/50.4	102/101	75-125	1
Cadmium (SW-846 6010)	4.08	50	59.6/59.2	111/110	75-125	1
Chromium (SW-846 6010)	18.1	50	72.4/69.6	109/103	75-125	6
Cobalt (SW-846 6010)	9.30	50	63.7/63.5	109/108	75-125	1
Copper (SW-846 6010)	21.1	50	69.3/66.9	96/92	75-125	4
Lead (SW-846 6010)	10.2	50	66.7/67.2	113/114	75-125	1
Molybdenum (SW-846 6010)	ND	50	52.6/52.0	105/104	75-125	1
Nickel (SW-846 6010)	15.8	50	73.7/74.2	116/117	75-125	1
Silver (SW-846 6010)	ND	50	52.0/51.6	104/103	75-125	1
Selenium (SW-846 6010)	ND	50	42.0/42.8	84/86	75-125	2
Thallium (SW-846 6010)	ND	50	53.8/56.0	108/112	75-125	4
Vanadium (SW-846 6010)	27.8	50	74.1/72.7	93/90	75-125	3
Zinc (SW-846 6010)	81.8	50	122.8/126.4	82/89	75-125	8

- Sample reporting level raised due to matrix interference.
- MS and/or MSD recoveries were out of control limits. LCS / LCSD recoveries were within acceptable limits.

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-2.5	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.05	01
SS1-7.0	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.05	02
SS1-12.0	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.05	03
SS2-4.0	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.05	04
SS2-6.5	10/24/96	10/24/96	10/25/96	10/25/96	CJ241.05	05
SS2-11.0	10/24/96	10/24/96	10/24/96	10/24/96	CJ241.05	06

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CJ241.05-07	Method Blank	MB		Soil	10/24/96	10/24/96
CJ241.05-09	Laboratory Spike	LS		Soil	10/25/96	10/25/96
CJ241.05-10	SS1-2.5	MS	22013-01	Soil	10/25/96	10/25/96
CJ241.05-11	SS1-2.5	MSD	22013-01	Soil	10/25/96	10/25/96
CJ241.05-01	Method Blank	MB		Soil	10/24/96	10/24/96
CJ241.05-02	Laboratory Spike	LS		Soil	10/24/96	10/24/96
CJ241.05-03	Laboratory Spike Duplicate	LSD		Soil	10/24/96	10/24/96
CJ241.05-05	SS1-2.5	MS	22013-01	Soil	10/25/96	10/25/96
CJ241.05-06	SS1-2.5	MSD	22013-01	Soil	10/25/96	10/25/96

Superior Analytical Laboratory

al INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-01	SS1-2.5	Soil	1.0	-
22013-02	SS1-7.0	Soil	1.0	-
22013-03	SS1-12.0	Soil	1.0	-
22013-04	SS2-4.0	Soil	1.0	-

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

Compound	22013-01 Conc. mg/kg	22013-01 RL	22013-02 Conc. mg/kg	22013-02 RL	22013-03 Conc. mg/kg	22013-03 RL	22013-04 Conc. mg/kg	22013-04 RL
Gasoline_Range	ND	1	ND	1	ND	1	3.3!!	1
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	0.010	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	0.007	0.005	ND	0.005
Xylenes	0.027	0.005	0.009	0.005	ND	0.005	0.063P	0.005
> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	85		92		92		73	

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 30, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-05	SS2-6.5	Soil	1.0	-
22013-06	SS2-11.0	Soil	1.0	-

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

Compound	22013-05 Conc. mg/kg	RL	22013-06 Conc. mg/kg	RL
Gasoline_Range	ND	1	ND	1
Benzene	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005
> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	80		88	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CJ241.05-07		CJ241.05-01	
	Conc.	RL	Conc.	RL
	mg/kg		mg/Kg	
Gasoline_Range			ND	1
Benzene	ND	0.005		
Toluene	ND	0.005		
Ethyl Benzene	ND	0.005		
Xylenes	ND	0.005		
-> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	88		88	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CJ241.05 09 / - Laboratory Control Spikes						
Benzene		0.100	.089	89	65-125	
Toluene		0.100	.089	89	65-125	
Ethyl Benzene		0.100	.088	88	65-125	
Xylenes		0.300	.300	100	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				87	50-150	
For Soil Matrix (mg/kg)						
CJ241.05 02 / 03 - Laboratory Control Spikes						
Gasoline_Range		10	9.3/9.5	93/95	65-135	2
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				124/120	50-150	
For Soil Matrix (mg/kg)						
CJ241.05 10 / 11 - Sample Spiked: 22013 - 01						
Benzene	ND	0.100	.078/.091	78/91	65-125	15
Toluene	ND	0.100	.087/.097	87/97	65-125	11
Ethyl Benzene	ND	0.100	.080/.095	80/95	65-125	17
Xylenes	ND	0.300	.27/.33	90/110	65-125	20
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				82/91	50-150	

Superior Analytical Laboratory

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) CJ241.05 05 / 06 - Sample Spiked: 22013 - 01						
Gasoline_Range	ND	10	10/9.6	100/96	65-135	4
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				162I/135	50-150	

!- Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.
- There is a greater than 25% difference for detected concentration between the two GC columns.
- The surrogate recovery was high due to the presence of interfering compounds in the sample.

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL

No. 5162

INC

22013

CHAIN OF CUSTODY

Please Initial: ✓ 6°C
Samples Stored in ice. ✓
Appropriate containers ✓
Samples preserved
VOA's without headspace
Comments:

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ALAMEDA FEDERAL CENTER
SAMPLING CREW: ROB BARRY

Matrix: Water	Soil			Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved			Date: Year	Month	Day	Time	Sample Number: Sample Description
	X			X									96	10	24		SOIL SS1-2.5
	X			X													SS1-7.0
	X			X													SS1-12.0
	X			X													SS2-4.0
	X			X													SS2-6.5
	X			X													SS2-11.0

Analyses: EPA 418.1	EPA 8010 SW/MM 5520	EPA 8015M	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 17	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance	24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
	X	X			X	X	X	X						X			

LABORATORY NAME AND ADDRESS
SAL
825 ARNOLD DR.
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	10/24/96	Mario Stewart	10-24/96 2:54
Relinquished By: Mario Stewart	10/24/96 1640	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received At Lab: Kelly Dalton	10/24/96 1640

Please Deliver Analytical Results to:
Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS
24 HR TAT ON 8240, TPH-G, 8270 ONLY
5 OR 7 DAY TAT ON OTHERS OK

CAL INC

No. 5162

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ~~ALAMEDA FEDERAL CENTER~~
SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number: Sample Description	Analyses: EPA 418.1	EPA 601/8 WHM 5520	EPA 8015M	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 17	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
	X	X							96	10	24		SOIL SS1-2.5		X	X			X	X	X	X							X			
	X	X											SS1-7.0																			
	X	X											SS1-12.0																			
	X	X											SS2-4.0																			
	X	X											SS2-6.5																			
	X	X							↓	↓	↓		SS2-11.0		↓	↓			↓	↓	↓	↓							↓			

LABORATORY NAME AND ADDRESS

SAL
~~525 Arneto Dr.~~
~~Martinez, CA~~

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	10/24/96	Maria Stewart	10-24-96 2:54
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab:	Date/Time

Please Deliver Analytical Results to:

Project Manager: ~~Rob Barry~~
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 Facsimile

SPECIAL INSTRUCTIONS

24 HR TAT ON 8240, TPH-G, 8270 ONLY
5 OR 7 DAY TAT ON OTHERS OK

CAL INC

No. 5159

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: ALAMEDA FED. CTR.

PROJECT LOCATION: ALAMEDA

SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCL~~ H2SO4	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number / Sample Description
X				2	1	1			16	12	6		GW-3
X				2	1	1							TW-1-3
	X		X										TW-2-3
	X		X										S-1-7'
	X		X										S-2-7'
	X		X										S-3-6'
	X		X										S-4-6'
	X	X											~~S-5-7'~~ S-5-13'

Analyses: EPA 418.1	EPA 8010 5520	EPA 8015M Diesel	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 5	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
	X	X	X												X			
	X	X	X												X			
	X	X	X												X			
	X	X			X	X	X	X							X			
	X	X			X	X	X	X							X			
	X	X			X	X	X	X							X			
	X	X			X	X	X	X							X			
	X	X			X	X	X	X							X			

LABORATORY NAME AND ADDRESS

CAL
1125 Atlantic Dr
Livermore, CA 94520

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Rob Barry	12/6/96 1330		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab:	Date/Time

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT

EXCAVATION SIDEWALLS AND BOTTOM SAMPLE ANALYTICAL RESULTS

EXCAVATION BOTTOM SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number Location	TPH-G (ppm)	B/T/E/X (ppm)	TPH-D (ppm)	8240 VOCs (ppb)	8270 SVOCs (ppb)	6010 Cd/Cr/Ni/Pb/ Zn (ppm)	5520 Oil & Grease (ppm)
S-1-7.0' NW Corner	ND	0.17 Ethyl Benzene 0.14 Xylenes 18 Unknowns	6000	ND	4700 Acenaphthene 4800 Pyrene	ND Cd ND Cr 1.6 Ni 3.2 Pb 83 Zn	6300
S-2-7.0' North Sidewall	ND	0.059 Ethyl Benzene 0.052 Xylenes 9.5 Unknowns	4500	ND	ND	ND Cd ND Cr 1.4 Ni 4.2 Pb 67 Zn	5000
S-3-6.0' East Sidewall	ND	0.009 Ethyl Benzene 0.15 Xylenes 1.9 Unknowns	1100	6.2 Benzene 25 Xylenes	ND	ND Cd 14 Cr 12 Ni 6.2 Pb 72 Zn	2900
S-4-6.0' SE Corner	ND	0.019 Ethyl Benzene 0.016 Xylenes 4.1 Unknowns	3800	ND	ND	0.64 Cd ND Cr 1.2 Ni 8.8 Pb 250 Zn	2100
S-5-13.0' Southwest Excavation Bottom	ND	ND	37	ND	ND	ND Cd 3.5 Cr 5.8 Ni 5.2 Pb 54 Zn	ND

TPH-G	Total Petroleum Hydrocarbons as gasoline
B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
TPH-Motor Oil	Total Petroleum Hydrocarbons as Motor Oil
8240	Volatile Organic Compounds
8270	Semi-Volatile Organic Compounds
6010	California Assessment Metals (Cadmium, Chromium, Nickel, Lead, Zinc)
5520	Oil & Grease
ND	Not detected

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: December 12, 1996

Attn: ROB BARRY

Laboratory Number : 22157

Project Number/Name : ALAMEDA
Facility/Site : ALAMEDA

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on December 6, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after January 5, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

CASE NARRATIVE

Cal INC
Project Number/Name: ALAMEDA FED. CTR.
Laboratory Number: 22157

Sample Receipt

Five soil samples and
Three water samples were received by
Superior Analytical Laboratory on December 6, 1996.

Cooler temperature was 4.9°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 5520, 6010, 8015M, 8020, 8240 and 8270.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

:INC
:tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 12, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
S-1-7'	12/06/96	12/06/96	12/11/96	12/12/96	CL111.24	04
S-2-7'	12/06/96	12/06/96	12/11/96	12/12/96	CL111.24	05
S-3-6'	12/06/96	12/06/96	12/11/96	12/12/96	CL111.24	06
S-4-6'	12/06/96	12/06/96	12/11/96	12/12/96	CL111.24	07
S-5-13'	12/06/96	12/06/96	12/11/96	12/12/96	CL111.24	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL111.24-01	Method Blank	MB	Soil	12/12/96	12/12/96
CL111.24-02	Laboratory Spike	LS	Soil	12/12/96	12/12/96
CL111.24-03	Laboratory Spike Duplicate	LSD	Soil	12/12/96	12/12/96
CL111.24-04	S-5-13'	MS 22157-08	Soil	12/12/96	12/12/96
CL111.24-05	S-5-13'	MSD 22157-08	Soil	12/12/96	12/12/96

Superior Analytical Laboratory

.l INC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 12, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	10.0	-
22157-05	S-2-7'	Soil	10.0	-
22157-06	S-3-6'	Soil	10.0	-
22157-07	S-4-6'	Soil	10.0	-

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

Compound	22157-04 Conc. ug/Kg	RL	22157-05 Conc. ug/Kg	RL	22157-06 Conc. ug/Kg	RL	22157-07 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	3000	ND	3000	ND	3000	ND	3000
aniline	ND	3000	ND	3000	ND	3000	ND	3000
phenol	ND	3000	ND	3000	ND	3000	ND	3000
2-chlorophenol	ND	3000	ND	3000	ND	3000	ND	3000
1,3-dichlorobenzene	ND	3000	ND	3000	ND	3000	ND	3000
1,4-dichlorobenzene	ND	3000	ND	3000	ND	3000	ND	3000
1,2-dichlorobenzene	ND	3000	ND	3000	ND	3000	ND	3000
benzyl alcohol	ND	3000	ND	3000	ND	3000	ND	3000
bis-(2-chloroisopropyl)ether	ND	3000	ND	3000	ND	3000	ND	3000
2-methylphenol	ND	3000	ND	3000	ND	3000	ND	3000
hexachloroethane	ND	3000	ND	3000	ND	3000	ND	3000
n-nitroso-di-n-propylamine	ND	3000	ND	3000	ND	3000	ND	3000
4-methylphenol	ND	3000	ND	3000	ND	3000	ND	3000
nitrobenzene	ND	3000	ND	3000	ND	3000	ND	3000
isophorone	ND	3000	ND	3000	ND	3000	ND	3000
2-nitrophenol	ND	3000	ND	3000	ND	3000	ND	3000
2,4-dimethylphenol	ND	3000	ND	3000	ND	3000	ND	3000
bis(2-chloroethoxy)methane	ND	3000	ND	3000	ND	3000	ND	3000
2,4-dichlorophenol	ND	3000	ND	3000	ND	3000	ND	3000
1,2,4-trichlorobenzene	ND	3000	ND	3000	ND	3000	ND	3000
naphthalene	ND	3000	ND	3000	ND	3000	ND	3000
benzoic acid	ND	15000	ND	15000	ND	15000	ND	15000
4-chloroaniline	ND	3000	ND	3000	ND	3000	ND	3000
hexachlorobutadiene	ND	3000	ND	3000	ND	3000	ND	3000
4-chloro-3-methylphenol	ND	3000	ND	3000	ND	3000	ND	3000
2-methyl-naphthalene	ND	3000	ND	3000	ND	3000	ND	3000
hexaclorocyclopentadiene	ND	15000	ND	15000	ND	15000	ND	15000
2,4,6-trichlorophenol	ND	3000	ND	3000	ND	3000	ND	3000
2,4,5-trichlorophenol	ND	3000	ND	3000	ND	3000	ND	3000
2-chloronaphthalene	ND	3000	ND	3000	ND	3000	ND	3000
2-nitroaniline	ND	3000	ND	3000	ND	3000	ND	3000

Superior Analytical Laboratory

.l INC
.tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 12, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	10.0	-
22157-05	S-2-7'	Soil	10.0	-
22157-06	S-3-6'	Soil	10.0	-
22157-07	S-4-6'	Soil	10.0	-

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

Compound	22157-04 Conc. ug/Kg	RL	22157-05 Conc. ug/Kg	RL	22157-06 Conc. ug/Kg	RL	22157-07 Conc. ug/Kg	RL
acenaphthylene	ND	3000	ND	3000	ND	3000	ND	3000
dimethylphthlate	ND	3000	ND	3000	ND	3000	ND	3000
2,6-dinitrotoluene	ND	3000	ND	3000	ND	3000	ND	3000
Acenaphthene	4700	3000	ND	3000	ND	3000	ND	3000
3-nitroaniline	ND	3000	ND	3000	ND	3000	ND	3000
2,4-dinitrophenol	ND	15000	ND	15000	ND	15000	ND	15000
Dibenzofuran	ND	3000	ND	3000	ND	3000	ND	3000
2,4-dinitrotoluene	ND	3000	ND	3000	ND	3000	ND	3000
4-nitrophenol	ND	3000	ND	3000	ND	3000	ND	3000
fluorene	ND	3000	ND	3000	ND	3000	ND	3000
4-chlorophenyl-phenylether	ND	3000	ND	3000	ND	3000	ND	3000
diethylphthlate	ND	3000	ND	3000	ND	3000	ND	3000
4-nitroaniline	ND	15000	ND	15000	ND	15000	ND	15000
4,6-dinitro-2-methylphenol	ND	3000	ND	3000	ND	3000	ND	3000
n-nitrosodiphenylamine	ND	3000	ND	3000	ND	3000	ND	3000
4-bromo-phenyl-phenylether	ND	3000	ND	3000	ND	3000	ND	3000
hexachlorobenzene	ND	3000	ND	3000	ND	3000	ND	3000
pentachlorophenol	ND	15000	ND	15000	ND	15000	ND	15000
phenanthrene	ND	3000	ND	3000	ND	3000	ND	3000
anthracene	ND	3000	ND	3000	ND	3000	ND	3000
di-n-butylphthlate	ND	3000	ND	3000	ND	3000	ND	3000
fluoranthene	ND	3000	ND	3000	ND	3000	ND	3000
benzidine	ND	15000	ND	15000	ND	15000	ND	15000
pyrene	4800	3000	ND	3000	ND	3000	ND	3000
butylbenzylphthlate	ND	3000	ND	3000	ND	3000	ND	3000
3.3'-dichlorobenzidine	ND	3000	ND	3000	ND	3000	ND	3000
Benzo(a)Anthracene	ND	3000	ND	3000	ND	3000	ND	3000
chrysene	ND	3000	ND	3000	ND	3000	ND	3000
bis(2-ethylhexyl)phthalate	ND	3000	ND	3000	ND	3000	ND	3000
di-n-octylphthalate	ND	3000	ND	3000	ND	3000	ND	3000
Benzo(b)Fluoranthene	ND	3000	ND	3000	ND	3000	ND	3000

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Project ALAMEDA FED. CTR.
Reported on December 12, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	10.0	-
22157-05	S-2-7'	Soil	10.0	-
22157-06	S-3-6'	Soil	10.0	-
22157-07	S-4-6'	Soil	10.0	-

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

Compound	22157-04 Conc. ug/Kg	RL	22157-05 Conc. ug/Kg	RL	22157-06 Conc. ug/Kg	RL	22157-07 Conc. ug/Kg	RL
Benzo(k)Fluoranthene	ND	3000	ND	3000	ND	3000	ND	3000
Benzo(a)Pyrene	ND	3000	ND	3000	ND	3000	ND	3000
Indeno(1,2,3)Pyrene	ND	3000	ND	3000	ND	3000	ND	3000
dibenzo[a,h]anthracene	ND	3000	ND	3000	ND	3000	ND	3000
9H-Carbazole	ND	3000	ND	3000	ND	3000	ND	3000
Benzo(g,h,i)Perylene	ND	3000	ND	3000	ND	3000	ND	3000
> Surrogate Recoveries (%) <<								
2-fluorophenol	103		105		110		106	
phenol-d5	120I		115		116		113	
nitrobenzene-d5	140I		124		119		125	
2-fluorobiphenyl	131I		118		124		123	
2,4,6-tribromophenol	101		94		95		91	
terphenyl-d14	188I		184I		180I		173I	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
n-nitroso-di-n-propylamine	ND	300
4-methylphenol	ND	300
nitrobenzene	ND	300
isophorone	ND	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	1500
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	1500
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. ug/Kg	RL
acenaphthylene	ND	300
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
[illegible]-dinitrophenol	ND	1500
[illegible]benzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	1500
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
pentachlorophenol	ND	1500
phenanthrene	ND	300
anthracene	ND	300
di-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	1500
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
Benzo(b)Fluoranthene	ND	300

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Reported on December 12, 1996

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc.	RL ug/Kg
Benzo(k)Fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
9H-Carbazole	ND	300
Benzo(g,h,i)Perylene	ND	300
> Surrogate Recoveries (%) <<		
2-fluorophenol	63	
phenol-d5	83	
nitrobenzene-d5	72	
2-fluorobiphenyl	85	
2,4,6-tribromophenol	89	
terphenyl-d14	106	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL111.24-01 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
1,2-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
itroso-di-n-propylamine	ND	300
nethylphenol	ND	300
nitrobenzene	ND	300
isophorone	ND	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	1500
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	1500
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300
acenaphthylene	ND	300
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
2,4-dinitrophenol	ND	1500

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL111.24-01 Conc. ug/Kg	RL
dibenzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	1500
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
[illegible]tachlorophenol	ND	1500
[illegible]nanthrene	ND	300
anthracene	ND	300
di-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	1500
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
Benzo(b)Fluoranthene	ND	300
Benzo(k)Fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
9H-Carbazole	ND	300
Benzo(g,h,i)Perylene	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL111.24-01 Conc.	RL
	ug/Kg	
> Surrogate Recoveries (%) <<		
2-fluorophenol	57	
phenol-d5	58	
nitrobenzene-d5	59	
2-fluorobiphenyl	59	
2,4,6-tribromophenol	47	
terphenyl-d14	60	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/Kg)						
CL111.24 02 / 03 - Laboratory Control Spikes						
phenol		3300	2100/2098	64/64	26-90	0
2-chlorophenol		3300	2185/2188	66/66	25-102	0
1,4-dichlorobenzene		1650	1115/1139	68/69	28-104	1
n-nitroso-di-n-propylamine		1650	1208/1235	73/75	41-126	3
1,2,4-trichlorobenzene		1650	1091/1124	66/68	38-124	3
4-chloro-3-methylphenol		3300	2158/2220	65/67	26-103	3
Acenaphthene		1650	944/966	57/59	31-137	3
2,4-dinitrotoluene		1650	1062/1061	64/64	28-118	0
4-nitrophenol		3300	1929/1980	58/60	11-114	3
pentachlorophenol		3300	1890/1911	57/58	17-109	2
pyrene		1650	1190/1171	72/71	35-142	1
>> Surrogate Recoveries (%) <<						
2-fluorophenol				70/71	25-121	
phenol-d5				73/74	24-113	
nitrobenzene-d5				74/76	23-120	
2-fluorobiphenyl				70/72	30-115	
2,4,6-tribromophenol				67/68	19-122	
terphenyl-d14				75/75	18-137	
For Soil Matrix (ug/Kg)						
CL111.24 04 / 05 - Sample Spiked: 22157 - 08						
phenol	ND	3300	2621/2611	79/79	26-90	0
2-chlorophenol	ND	3300	2687/2672	81/81	25-102	0
1,4-dichlorobenzene	ND	1650	1309/1310	79/79	28-104	0
n-nitroso-di-n-propylamine	ND	1650	1431/1376	87/83	41-126	5
1,2,4-trichlorobenzene	ND	1650	1404/1381	85/84	38-124	1
4-chloro-3-methylphenol	ND	3300	2896/2762	88/84	26-103	5
Acenaphthene	ND	1650	1316/1319	80/80	31-137	0
2,4-dinitrotoluene	ND	1650	1381/1122	84/68	28-118	21
4-nitrophenol	ND	3300	2267/1925	69/58	11-114	17
pentachlorophenol	ND	3300	2704/2478	82/75	17-109	9

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
pyrene	ND	1650	2376/2497I	144/151	35-142	5
>> Surrogate Recoveries (%) <<						
2-fluorophenol				78/79	25-121	
phenol-d5				87/88	24-113	
nitrobenzene-d5				87/89	23-120	
2-fluorobiphenyl				91/94	30-115	
2,4,6-tribromophenol				93/94	19-122	
terphenyl-d14				136/151I	18-137	

I - The surrogate recovery was high due to the presence of interfering compounds in the sample.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
S-1-7'	12/06/96	12/06/96	12/09/96	12/09/96	CL081.05	04
S-2-7'	12/06/96	12/06/96	12/09/96	12/09/96	CL081.05	05
S-3-6'	12/06/96	12/06/96	12/09/96	12/09/96	CL081.05	06
S-4-6'	12/06/96	12/06/96	12/09/96	12/09/96	CL081.05	07
S-5-13'	12/06/96	12/06/96	12/08/96	12/08/96	CL081.05	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL081.05-01	Method Blank	MB	Soil	12/08/96	12/08/96
CL081.05-02	Laboratory Spike	LS	Soil	12/08/96	12/08/96
CL081.05-03	Laboratory Spike Duplicate	LSD	Soil	12/08/96	12/08/96
CL081.05-04	S-5-13'	MS 22157-08	Soil	12/08/96	12/08/96
CL081.05-05	S-5-13'	MSD 22157-08	Soil	12/08/96	12/08/96

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Reported on December 9, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	5.0	-
22157-05	S-2-7'	Soil	5.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-

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

Compound	22157-04 Conc. mg/kg	RL	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL
Gasoline_Range	ND!!	5	ND!!	5	ND!!	1	ND!!	1
Benzene	ND	0.025	ND	0.025	ND	0.005	ND	0.005
Toluene	NDP	0.025	ND	0.025	ND	0.005	ND	0.005
Ethyl Benzene	0.17	0.025	0.059	0.025	0.009P	0.005	0.019	0.005
Xylenes	0.14P	0.025	0.052	0.025	0.15P	0.005	0.016P	0.005
Unknown Hydrocarbons	18	5	9.5	5	1.9	1	4.1	1
> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	126		110		105		88	

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Reported on December 9, 1996

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. mg/kg	RL
Gasoline_Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Etnyl Benzene	ND	0.005
Xylenes	ND	0.005
Unknown Hydrocarbons	NA	
> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	116	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL081.05-01 Conc. mg/kg	 RL
Gasoline_Range	ND	1
Benzene	ND	0.005
Toluene	ND	0.005
Ethyl Benzene	ND	0.005
Xylenes	ND	0.005
Unknown Hydrocarbons		
> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	128	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CL081.05 02 / 03 - Laboratory Control Spikes						
Gasoline_Range		10	9.5/9.9	95/99	65-135	4
Benzene		0.100	0.093/0.095	93/95	65-135	2
Toluene		0.100	0.092/0.095	92/95	65-135	3
Ethyl Benzene		0.100	0.094/0.097	94/97	65-135	3
Xylenes		0.300	0.28/0.29	93/97	65-135	4
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				123/124	50-150	
For Soil Matrix (mg/kg)						
CL081.05 04 / 05 - Sample Spiked: 22157 - 08						
Gasoline_Range	ND	10	8.5/8.3	85/83	65-135	2
Benzene	ND	0.100	0.084/0.090	84/90	65-135	7
Toluene	ND	0.100	0.085/0.091	85/91	65-135	7
Ethyl Benzene	ND	0.100	0.084/0.091	84/91	65-135	8
Xylenes	ND	0.300	0.24/0.26	80/87	65-135	8
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				119/124	50-150	

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arrative:

!- Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.
- There is a greater than 25% difference for detected concentration between the two GC columns.

efinitions:

D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	01
TW-1-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	02
TW-2-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	03
S-1-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	04
S-2-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	05
S-3-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	06
S-4-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	07
S-5-13'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL071.34-01	Method Blank	MB	Water	12/07/96	12/07/96
CL071.34-02	Laboratory Spike	LS	Water	12/07/96	12/07/96
CL071.34-03	Laboratory Spike Duplicate	LSD	Water	12/07/96	12/07/96
CL072.34-01	Method Blank	MB	Soil	12/07/96	12/07/96
CL072.34-02	Laboratory Spike	LS	Soil	12/07/96	12/07/96
CL072.34-03	Laboratory Spike Duplicate	LSD	Soil	12/07/96	12/07/96
CL072.34-04	S-5-13'	MS 22157-08	Soil	12/07/96	12/07/96
CL072.34-05	S-5-13'	MSD 22157-08	Soil	12/07/96	12/07/96

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	1.0	-
22157-03	TW-2-3	Water	1.0	-
22157-04	S-1-7'	Soil	1.0	-

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

Compound	22157-01 Conc. ug/L	RL	22157-02 Conc. ug/L	RL	22157-03 Conc. ug/L	RL	22157-04 Conc. mg/kg	RL
Oil and Grease	ND	5000	190000	5000	110000	5000	6300	85

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-05	S-2-7'	Soil	1.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL	22157-08 Conc. mg/kg	RL
Oil and Grease	5000	85	2900	85	2100	85	ND	85

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Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL071.34-01		CL072.34-01	
	Conc.	RL	Conc.	RL
	ug/L		mg/kg	
Oil and Grease	ND	5000	ND	50

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Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Water Matrix (ug/L)				
	CL071.34	02 / 03 - Laboratory Control Spikes				
Oil and Grease		30000	29300/28100	98/94	50-110	4
		For Soil Matrix (mg/kg)				
	CL072.34	02 / 03 - Laboratory Control Spikes				
Oil and Grease		600	488/556	81/93	60-110	14
		For Soil Matrix (mg/kg)				
	CL072.34	04 / 05 - Sample Spiked: 22157 - 08				
Oil and Grease	ND	600	576/610	96/102	60-110	6

efinitions:

D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 6, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	01
TW-1-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	02
TW-2-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL061.05-06	Method Blank	MB	Water	12/06/96	12/06/96
CL061.05-02	Laboratory Spike	LS	Water	12/06/96	12/06/96
CL061.05-03	Laboratory Spike Duplicate	LSD	Water	12/06/96	12/06/96
CL061.05-04	UAL-1205-W	MS 22147-01	Water	12/06/96	12/06/96
CL061.05-05	UAL-1205-W	MSD 22147-01	Water	12/06/96	12/06/96

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Project ALAMEDA FED. CTR.
Reported on December 6, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	1.0	-
22157-03	TW-2-3	Water	1.0	-

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

Compound	22157-01 Conc. ug/L	RL	22157-02 Conc. ug/L	RL	22157-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	ND	0.5	3.3	0.5	0.7	0.5
1,3-Dichlorobenzene	ND	0.5	0.7P	0.5	ND	0.5
[illegible]-Dichlorobenzene	ND	0.5	2.3P	0.5	1.6P	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5	1.1	0.5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	81		89		ND	

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Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL061.05-06 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	74	

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Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CL061.05 02 / 03 - Laboratory Control Spikes						
Benzene		20	17/19	85/95	65-135	11
Toluene		20	17/19	85/95	65-135	11
Ethyl Benzene		20	18/19	90/95	65-135	5
Xylenes		60	55/58	92/97	65-135	5
Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				88/98	50-150	
For Water Matrix (ug/L) CL061.05 04 / 05 - Sample Spiked: 22147 - 01						
Benzene	ND	20	17/18	85/90	65-135	6
Toluene	ND	20	17/18	85/90	65-135	6
Ethyl Benzene	ND	20	17/19	85/95	65-135	11
Xylenes	0.9	60	55/57	90/94	65-135	4
Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				91/96	50-150	

- There is a greater than 25% difference for detected concentration between the two GC columns.

efinitions:
) = Not Detected
. = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	01
TW-1-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	02
TW-2-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	03
S-1-7'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	04
S-2-7'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	05
S-3-6'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	06
S-4-6'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	07
S-5-13'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL061.42-01	Method Blank	MB	Soil	12/06/96	12/06/96
CL061.42-02	Laboratory Spike	LS	Soil	12/06/96	12/06/96
CL061.42-03	Laboratory Spike Duplicate	LSD	Soil	12/06/96	12/06/96
CL061.42-04	114G-72B	MS 22158-04	Soil	12/06/96	12/06/96
CL061.42-05	114G-72B	MSD 22158-04	Soil	12/06/96	12/06/96
CL063.02-01	Method Blank	MB	Water	12/06/96	12/06/96
CL063.02-02	Laboratory Spike	LS	Water	12/06/96	12/06/96
CL063.02-03	Laboratory Spike Duplicate	LSD	Water	12/06/96	12/06/96

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	20.0	-
22157-03	TW-2-3	Water	20.0	-
22157-04	S-1-7'	Soil	50.0	-

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

Compound	22157-01 Conc.	RL	22157-02 Conc.	RL	22157-03 Conc.	RL	22157-04 Conc.	RL
	ug/L		ug/L		ug/L		mg/kg	
Diesel:	90W	50	51000W	1000	37000W	1000	6000W	50
> Surrogate Recoveries (%) <<								
Tetracosane	94		NDBB		NDBB		143	

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Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-05	S-2-7'	Soil	50.0	-
22157-06	S-3-6'	Soil	10.0	-
22157-07	S-4-6'	Soil	50.0	-
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL	22157-08 Conc. mg/kg	RL
Diesel:	4500W	50	1100W	10	3800W	50	37W	1
>> Surrogate Recoveries (%) <<								
Tetracosane	139		124		141		94	

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Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL061.42-01		CL063.02-01	
	Conc.	RL	Conc.	RL
	mg/Kg		ug/L	
Diesel:	ND	1	ND	50
Surrogate Recoveries (%) <<				
Tetracosane	103		115	

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Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/Kg)				
	CL061.42	02 / 03 - Laboratory Control Spikes				
Diesel:		33	37/38	112/115	50-150	3
> Surrogate Recoveries (%) <<						
Tetracosane				104/104	50-150	
		For Water Matrix (ug/L)				
	CL063.02	02 / 03 - Laboratory Control Spikes				
Diesel:		1000	1230/1130	123/113	50-150	8
> Surrogate Recoveries (%) <<						
Tetracosane				125/120	50-150	
		For Soil Matrix (mg/Kg)				
	CL061.42	04 / 05 - Sample Spiked: 22158 - 04				
Diesel:	2	33	35/36	100/103	50-150	3
> Surrogate Recoveries (%) <<						
Tetracosane				104/106	50-150	

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:rrative:

3 - Surrogate was diluted out.

- The pattern of the chromatogram resembles a weathered, aged, or degraded diesel petroleum hydrocarbon and motor oil.

efinitions:

D	=	Not Detected
L	=	Reporting Limit
A	=	Not Analysed
PD	=	Relative Percent Difference
g/L	=	parts per billion (ppb)
g/L	=	parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
S-1-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL071.44	04
S-2-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL071.44	05
S-3-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL071.44	06
S-4-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL071.44	07
S-5-13'	12/06/96	12/06/96	12/07/96	12/07/96	CL071.44	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL071.44-01	Method Blank	MB	Soil	12/07/96	12/07/96
CL071.44-02	Laboratory Spike	LS	Soil	12/07/96	12/07/96
CL071.44-03	Laboratory Spike Duplicate	LSD	Soil	12/07/96	12/07/96
CL071.44-04	S-5-13'	MS 22157-08	Soil	12/07/96	12/07/96
CL071.44-05	S-5-13'	MSD 22157-08	Soil	12/07/96	12/07/96

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	1.0	-
22157-05	S-2-7'	Soil	1.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-

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

Compound	22157-04 Conc. mg/kg	RL	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL
Cadmium (SW-846 6010)	ND	0.25	ND	0.25	ND	0.25	0.64	0.25
Chromium (SW-846 6010)	ND	0.5	ND	0.5	14	0.5	ND	0.5
Lead (SW-846 6010)	3.2	2.5	4.2	2.5	6.2	2.5	8.8	2.5
Nickel (SW-846 6010)	1.6	1.0	1.4	1.0	12	1.0	1.2	1.0
Zinc (SW-846 6010)	83	1.0	67	1.0	72	1.0	250	1.0

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Project ALAMEDA FED. CTR.
Reported on December 7, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. mg/kg	RL
Cadmium (SW-846 6010)	ND	0.25
Chromium (SW-846 6010)	3.5	0.5
Lead (SW-846 6010)	5.2	2.5
Nickel (SW-846 6010)	5.8	1.0
Zinc (SW-846 6010)	54	1.0

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL071.44-01 Conc. mg/kg	RL
Cadmium (SW-846 6010)	ND	0.25
Chromium (SW-846 6010)	ND	0.5
Lead (SW-846 6010)	ND	2.5
Nickel (SW-846 6010)	ND	1.0
Zinc (SW-846 6010)	ND	1.0

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg)						
CL071.44 02 / 03 - Laboratory Control Spikes						
Cadmium (SW-846 6010)		50	50.8/50.1	102/100	75-125	2
Chromium (SW-846 6010)		50	51.2/50.5	102/101	75-125	1
Lead (SW-846 6010)		50	52.8/52.0	106/104	75-125	2
Nickel (SW-846 6010)		50	51.7/50.9	103/102	75-125	1
Zinc (SW-846 6010)		50	50.8/50.1	102/100	75-125	2
For Soil Matrix (mg/kg)						
CL071.44 04 / 05 - Sample Spiked: 22157 - 08						
Cadmium (SW-846 6010)	ND	50	44.0/45.0	88/90	75-125	2
Chromium (SW-846 6010)	3.49	50	49.8/51.3	93/96	75-125	3
Lead (SW-846 6010)	5.19	50	52.4/56.4	94/102	75-125	8
Nickel (SW-846 6010)	5.76	50	50.3/52.6	89/94	75-125	5
Zinc (SW-846 6010)	54.5	50	97.0/101	85/93	75-125	9

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
S-1-7'	12/06/96	12/06/96	12/09/96	12/09/96	CL091.09	04
S-2-7'	12/06/96	12/06/96	12/09/96	12/09/96	CL091.09	05
S-3-6'	12/06/96	12/06/96	12/09/96	12/09/96	CL091.09	06
S-4-6'	12/06/96	12/06/96	12/09/96	12/09/96	CL091.09	07
S-5-13'	12/06/96	12/06/96	12/09/96	12/09/96	CL091.09	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL091.09-01	Method Blank	MB	Soil	12/09/96	12/09/96
CL091.09-02	Laboratory Spike	LS	Soil	12/09/96	12/09/96
CL091.09-03	S-5-13'	MS 22157-08	Soil	12/09/96	12/09/96
CL091.09-04	S-5-13'	MSD 22157-08	Soil	12/09/96	12/09/96

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	1.0	-
22157-05	S-2-7'	Soil	1.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-

RESULTS OF ANALYSIS

Compound	22157-04 Conc. ug/kg	RL	22157-05 Conc. ug/kg	RL	22157-06 Conc. ug/kg	RL	22157-07 Conc. ug/kg	RL
Chloromethane	ND	50	ND	50	ND	50	ND	50
Bromomethane	ND	50	ND	50	ND	50	ND	50
Vinyl Chloride	ND	50	ND	50	ND	50	ND	50
Chloroethane	ND	50	ND	50	ND	50	ND	50
Dichloromethane	ND	50	ND	50	ND	50	ND	50
Acetone	ND	200	ND	200	ND	200	ND	200
Carbon Disulfide	ND	15	ND	15	ND	15	ND	15
Trichlorofluoromethane	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethene	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethane	ND	15	ND	15	ND	15	ND	15
t-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
Chloroform	ND	15	ND	15	ND	15	ND	15
1,2-Dichloroethane	ND	5	ND	5	ND	5	ND	5
2-Butanone	ND	100	ND	100	ND	100	ND	100
1,1,1-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Carbon tetrachloride	ND	15	ND	15	ND	15	ND	15
Vinyl Acetate	ND	50	ND	50	ND	50	ND	50
Bromodichloromethane	ND	15	ND	15	ND	15	ND	15
1,2-Dichloropropane	ND	15	ND	15	ND	15	ND	15
c-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
c-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Trichloroethene	ND	15	ND	15	ND	15	ND	15
Dibromochloromethane	ND	15	ND	15	ND	15	ND	15
1,1,2-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Benzene	ND	5	ND	5	6.2	5	ND	5
t-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Bromoform	ND	15	ND	15	ND	15	ND	15
4-methyl-2-Pentanone	ND	50	ND	50	ND	50	ND	50
2-Hexanone	ND	50	ND	50	ND	50	ND	50
Tetrachloroethene	ND	15	ND	15	ND	15	ND	15
1,1,2,2-Tetrachloroethane	ND	15	ND	15	ND	15	ND	15

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-04	S-1-7'	Soil	1.0	-
22157-05	S-2-7'	Soil	1.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-

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

ompound	22157-04 Conc. ug/kg	RL	22157-05 Conc. ug/kg	RL	22157-06 Conc. ug/kg	RL	22157-07 Conc. ug/kg	RL
oluene	ND	15	ND	15	ND	15	ND	15
hlorobenzene	ND	15	ND	15	ND	15	ND	15
thyl Benzene	ND	15	ND	15	ND	15	ND	15
tyrene	ND	15	ND	15	ND	15	ND	15
ylenes	ND	15	ND	15	25	15	ND	15
,3-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
,-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
Surrogate Recoveries (%) <<								
,2-Dichloroethane-d4	99		107		104		106	
oluene-d8	92		89		83		88	
romofluorobenzene	102		98		88		96	

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Project ALAMEDA FED. CTR.
Reported on December 9, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. ug/kg	RL
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Dichloromethane	ND	50
Acetone	ND	200
[illegible]bon Disulfide	ND	15
[illegible]ichlorofluoromethane	ND	15
1,1-Dichloroethene	ND	15
1,1-Dichloroethane	ND	15
t-1,2-Dichloroethene	ND	15
Chloroform	ND	15
1,2-Dichloroethane	ND	5
2-Butanone	ND	100
1,1,1-Trichloroethane	ND	15
Carbon tetrachloride	ND	15
Vinyl Acetate	ND	50
Bromodichloromethane	ND	15
1,2-Dichloropropane	ND	15
c-1,2-Dichloroethene	ND	15
c-1,3-Dichloropropene	ND	15
Trichloroethene	ND	15
Dibromochloromethane	ND	15
1,1,2-Trichloroethane	ND	15
Benzene	ND	5
t-1,3-Dichloropropene	ND	15
Bromoform	ND	15
4-methyl-2-Pentanone	ND	50
2-Hexanone	ND	50
Tetrachloroethene	ND	15
1,1,2,2-Tetrachloroethane	ND	15

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-08 Conc. ug/kg	RL
Toluene	ND	15
Chlorobenzene	ND	15
Ethyl Benzene	ND	15
Styrene	ND	15
Xylenes	ND	15
1,3-Dichlorobenzene	ND	15
[illegible]-Dichlorobenzene	ND	15
[illegible],2-Dichlorobenzene	ND	15
> Surrogate Recoveries (%) <<		
1,2-Dichloroethane-d4	106	
Toluene-d8	87	
Bromofluorobenzene	105	

Superior Analytical Laboratory

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL091.09-01 Conc. ug/kg	RL
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Dichloromethane	ND	50
Acetone	ND	200
Carbon Disulfide	ND	15
Trichlorofluoromethane	ND	15
1,1-Dichloroethene	ND	15
1,1-Dichloroethane	ND	15
t-1,2-Dichloroethene	ND	15
Chloroform	ND	15
1,2-Dichloroethane	ND	5
2-Butanone	ND	100
1,1,1-Trichloroethane	ND	15
Carbon tetrachloride	ND	15
Vinyl Acetate	ND	50
Bromodichloromethane	ND	15
1,2-Dichloropropane	ND	15
c-1,2-Dichloroethene	ND	15
c-1,3-Dichloropropene	ND	15
Trichloroethene	ND	15
Dibromochloromethane	ND	15
1,1,2-Trichloroethane	ND	15
Benzene	ND	5
t-1,3-Dichloropropene	ND	15
Bromoform	ND	15
4-methyl-2-Pentanone	ND	50
2-Hexanone	ND	50
Tetrachloroethene	ND	15
1,1,2,2-Tetrachloroethane	ND	15
Toluene	ND	15
Chlorobenzene	ND	15
Ethyl Benzene	ND	15
Styrene	ND	15
Xylenes	ND	15
1,3-Dichlorobenzene	ND	15

Superior Analytical Laboratory

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL091.09-01 Conc. ug/kg	RL
1,4-Dichlorobenzene	ND	15
1,2-Dichlorobenzene	ND	15
> Surrogate Recoveries (%) <<		
1,2-Dichloroethane-d4	100	
Toluene-d8	83	
Bromofluorobenzene	101	

Superior Analytical Laboratory

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/kg)						
CL091.09 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		200	160	80	59-172	
Trichloroethene		200	190	95	62-137	
Benzene		200	180	90	66-142	
Toluene		200	170	85	59-139	
Chlorobenzene		200	190	95	60-133	
> Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				102	88-117	
Toluene-d8				84	75-136	
Bromofluorobenzene				103	52-129	
For Soil Matrix (ug/kg)						
CL091.09 03 / 04 - Sample Spiked: 22157 - 08						
1,1-Dichloroethene	ND	200	150/160	75/80	59-172	6
Trichloroethene	ND	200	180/180	90/90	62-137	0
Benzene	ND	200	180/180	90/90	66-142	0
Toluene	ND	200	180/180	90/90	59-139	0
Chlorobenzene	ND	200	190/200	95/100	60-133	5
> Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				106/107	88-117	
Toluene-d8				89/89	75-136	
Bromofluorobenzene				104/103	52-129	

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

Nº [illegible]159

CHAIN OF CUSTODY

22157

PROJECT NAME AND DESCRIPTION: ALAMEDA FED. CTR.

PROJECT LOCATION: ALAMEDA

SAMPLING CREW: ROB BARRY

Water	Soil	Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCL~~ H_2SO_4	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Year	Month	Day	Time	Sample Number / Sample Description
X				2	1	1			96	12	6		GW-3
X				2	1	1			↓	↓	↓		TW-1-3
X				2	1	1							TW-2-3
	X		X										S-1-7'
	X		X										S-2-7'
	X		X										S-3-6'
	X		X										S-4-6'
	X	X											~~S-1~~ S-5-13'

Analyses

Sample	EPA 418.1	~~EPA 8010~~ 5520	EPA 8015M DIESEL	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals CAM 5	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
GW-3		X	X	X												X			
TW-1-3		X	X	X												X			
TW-2-3		X	X	X												X			
S-1-7'		X	X			X	X	X	X							X			
S-2-7'		↓	↓			↓	↓	↓	↓							X			
S-3-6'																X			
S-4-6'																X			
S-5-13'																X			

LABORATORY NAME AND ADDRESS

SAL
425 ARNOLD DR
MARTINEZ, CA 94520

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/6/96 1330	[signature] CAL	12/6/96 [illegible]
[signature]	12/6/96 300		
Airbill Number:	Date/Time	Received By Lab: [signature]	12/6/96 15[illegible]

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT

Samples [illegible] on ice [illegible]
Appropriate containers ✓ 4.0°C
Samples preserved ✓
VOA's without headspace ✓
Comments:

WATER
SAMPLE ANALYTICAL RESULTS

GROUNDWATER SAMPLE RESULTS
GSA Alameda
UST Removal Project

Sample Number	Collection Date	8020 B/T/E/X (ppb)	8015M TPH-Diesel (ppb)	5520 Oil & Grease (ppb)
GW-1	10-25-96	1.1 Toluene 1.0 Xylenes	320 D	5100
GW-2	11-15-96	0.5 Xylenes	240 D	ND
GW-3	12-6-96	ND	90 D	ND
TW-1-1	10-25-96	0.6 Toluene 1.5 Xylenes	140 D	ND
TW-1-2	11-15-96	ND	60 MO	ND
TW-1-3	12-6-96	3.3 Xylenes 0.7 1,3-dichlorobenzene 2.3 1,4-dichlorobenzene	51000 D	190000
TW-2-1	10-25-96	0.6 Xylenes	80 D	ND
TW-2-2	11-15-96	ND	70 MO	ND
TW-2-3	12-6-96	0.7 Xylenes 1.6 1,4-dichlorobenzene 1.1 1,2-dichloroenzene	37000 D	110000

B/T/E/X	Benzene/Toluene/Ethyl Benzene/Xylene
TPH-D	Total Petroleum Hydrocarbons as diesel
5520	Oil & Grease
ND	Not detected
D	Chromatographic pattern resembles diesel
MO	Chromatographic pattern resembles motor oil

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: November 17, 1996

Attn: ROB BARRY

Laboratory Number : 22013

Project Number/Name : GSA ALAMEDA
Facility/Site : Alameda Federal Center

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 24, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 23, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Superior
Analytical Laboratory

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22013

Sample Receipt

Six soil samples were received by
Superior Analytical Laboratory on October 24, 1996.

Cooler temperature was 6°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for method 7470.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

:al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 18, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Chronology

Laboratory Number 22013

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SS1-12.0	10/24/96	10/24/96	11/18/96	11/18/96	CK181.12	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK181.12-01	Method Blank	MB	Soil	11/18/96	11/18/96
CK181.12-02	Laboratory Spike	LS	Soil	11/18/96	11/18/96
CK181.12-03	Laboratory Spike Duplicate	LSD	Soil	11/18/96	11/18/96
CK181.12-04	SS1-12.0	MS 22013-03	Soil	11/18/96	11/18/96
CK181.12-05	SS1-12.0	MSD 22013-03	Soil	11/18/96	11/18/96

Superior Analytical Laboratory

Cal INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on November 18, 1996

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22013-03	SS1-12.0	Soil	1.0	-

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

Compound	22013-03 Conc. mg/L	RL
Mercury (SW-846 7470)	ND	0.005

Superior Analytical Laboratory

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Quality Assurance and Control Data

Laboratory Number: 22013
Method Blank(s)

	CK181.12-01 Conc.	RL
	mg/L	
Mercury (SW-846 7470)	ND	0.005

Superior Analytical Laboratory

EPA SW-846 Method 6010 and/or 7000 Series Metals
Extracted by STLC Method

Quality Assurance and Control Data

Laboratory Number: 22013

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/L)				
		CK181.12 02 / 03 - Laboratory Control Spikes				
Mercury (SW-846 7470)		0.1	0.104/0.105	104/105	75-125	1
		For Soil Matrix (mg/L)				
		CK181.12 04 / 05 - Sample Spiked: 22013 - 03				
Mercury (SW-846 7470)	ND	0.1	0.104/0.104	104/104	75-125	0

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL

No. 158

INC

CHAIN OF CUSTODY

22068 22013-1

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA

PROJECT LOCATION: ALAMEDA FEDERAL CENTER

SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCL~~ H_2SO_4	1 Liter Plastic - HNO_3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number / Sample Description	Analyses: EPA ~~418.1~~ 5520 O&G	EPA 8010	EPA 8015M TPH Diesel	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X				2	1	1			96	11	15	14	GW-2	X		X	X															
				2	1	1							TW-1-2																			
				2	1	1							TW-2-2																			

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DRIVE
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	11/15/96 1400	Dennis Cleary GSL	11/15/96 14:00
Dennis Cleary	11/15/96 3:00		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab:	Date/Time

Please Initial: SL

Samples Stored in ice: ✓ 6.2°C

Appropriate containers: ✓

Samples preserved: ✓

VOA without headspace: ✓

Comments:

Please Deliver Analytical Results to:
ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT

AS WE DISCUSSED, ALSO RUN SAMPLE #22013-3 FOR STLC(Hg) - 72 HR TAT!

Superior Analytical Laboratory

NOV 21 1996

Date: November 17, 1996

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Attn: ROB BARRY

Laboratory Number : 22068

Project Number/Name : GSA ALAMEDA
Facility/Site : AMALEDA FEDERAL CENTER

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on November 15, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after December 15, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22068

Sample Receipt

Three water samples were received by
Superior Analytical Laboratory on November 15, 1996.

Cooler temperature was 6.2°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods , 5520, 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior
Analytical Laboratory

:al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK151.02-01	Method Blank	MB	Water	11/15/96	11/15/96
CK151.02-02	Laboratory Spike	LS	Water	11/15/96	11/15/96
CK151.02-03	Laboratory Spike Duplicate	LSD	Water	11/15/96	11/15/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

Compound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
Diesel:	240W	50	ND	50	ND	50
Unknown Hydrocarbons	NA		60**	50	70**	50
> Surrogate Recoveries (%) <<						
Tetracosane	118		122		122	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.02-01 Conc. ug/L	RL
Diesel:	ND	50
Unknown Hydrocarbons	ND	50
>> Surrogate Recoveries (%) <<		
Tetracosane	107	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.02 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	810/930	81/93	50-150	14
>> Surrogate Recoveries (%) <<						
Tetracosane				105/108	50-150	

V - The pattern of the chromatogram resembles a weathered, aged, or degraded petroleum hydrocarbon.

-* - Heavier hydrocarbons were found in the range of diesel, but do not resemble a diesel fingerprint. Possible motor oil.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK151.34-01	Method Blank	MB	Water	11/15/96	11/15/96
CK151.34-02	Laboratory Spike	LS	Water	11/15/96	11/15/96
CK151.34-03	Laboratory Spike Duplicate	LSD	Water	11/15/96	11/15/96

Superior Analytical Laboratory

:al INC
:ttn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

Compound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
Oil and Grease	ND	5000	ND	5000	ND	5000

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.34-01	
	Conc.	RL
	ug/L	
Oil and Grease	ND	5000

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.34 02 / 03 - Laboratory Control Spikes						
Oil and Grease		30000	30500/30100	102/100	50-110	2

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

INC
tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 17, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-2	11/15/96	11/15/96	11/16/96	11/16/96	CK151.37	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.37	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.37	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK151.37-01	Method Blank	MB	Water	11/15/96	11/15/96
CK151.37-05	Method Blank	MB	Water	11/16/96	11/16/96
CK151.37-02	Laboratory Spike	LS	Water	11/15/96	11/15/96
CK151.37-03	MW-8B	MS 22061-01	Water	11/15/96	11/15/96
CK151.37-04	MW-8B	MSD 22061-01	Water	11/15/96	11/15/96

Superior Analytical Laboratory

al INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 17, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

Compound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	0.5	0.5	ND	0.5	ND	0.5
1,3-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
1,4-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	94		88		96	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.37-01		CK151.37-05	
	Conc. ug/L	RL	Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	ND	0.5	ND	0.5
1,3-Dichlorobenzene	ND	0.5	ND	0.5
1,4-Dichlorobenzene	ND	0.5	ND	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5
> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	89		98	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.37 02 / - Laboratory Control Spikes						
Benzene		20	17	85	65-135	
Toluene		20	18	90	65-135	
Ethyl Benzene		20	19	95	65-135	
Xylenes		60	57	95	65-135	
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94	50-150	
For Water Matrix (ug/L)						
CK151.37 03 / 04 - Sample Spiked: 22061 - 01						
Benzene	ND	20	19/20	95/100	65-135	5
Toluene	ND	20	21/21	105/105	65-135	0
Ethyl Benzene	ND	20	20/22	100/110	65-135	10
Xylenes	ND	60	58/58	97/97	65-135	0
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102/108	50-150	

finitions:
= Not Detected
= Reporting Limit
= Not Analysed
) = Relative Percent Difference
/L = parts per billion (ppb)
/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC Nº 5158

CHAIN OF CUSTODY

22068

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA

PROJECT LOCATION: ALAMEDA FEDERAL CENTER

SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCL~~ H_2SO_4	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Year	Month	Day	Time	Sample Number / Sample Description	EPA ~~418.1~~ 5520 O&G	EPA 8010	EPA 8015M TPH Diesel	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance	24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X				2	1	1			96	11	15	14	GW-2	X		X	X														
↓				2	1	1			↓	↓	↓	↓	TW-1-2	↓		↓	↓														
↓				2	1	1			↓	↓	↓	↓	TW-2-2	↓		↓	↓														

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DRIVE
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
[signature] Barry	11/15/96 1400	[signature] SAL	11/15/96 14:00
[signature]	11/15/96 3:30		
Airbill Number:		Received By Lab: [signature]	11/15/96 [illegible]

Please Initial: [initials]
Samples Stored in ice. ✓ 6.2°C
Appropriate containers ✓
Samples preserved
VOA's without headspace
Comments:

Please Deliver Analytical Results to:
Attn: ROB BARRY
CAL INC.
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT

AS WE DISCUSSED, ALSO RUN SAMPLE #22013-3 FOR STLC(Hg) - 72 HR TAT!

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: October 29, 1996

Attn: ROB BARRY

Laboratory Number : 22022

Project Number/Name : GSA ALA
Facility/Site : ALAMEDA

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 25, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 24, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22022

Sample Receipt

Three water samples were received by
Superior Analytical Laboratory on October 25, 1996.

Cooler temperature was 5.2°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 5520, 8015M and 8020.

ustomer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

ai INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 28, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	01
TW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	02
TW-2	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ251.46-01	Method Blank	MB	Water	10/25/96	10/25/96
CJ251.46-02	Laboratory Spike	LS	Water	10/25/96	10/25/96
CJ251.46-03	Laboratory Spike Duplicate	LSD	Water	10/25/96	10/25/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 28, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01 @	GW-1	Water	1.0	-
22022-02 @	TW-1	Water	1.0	-
22022-03 @	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	RL	22022-02 Conc. ug/L	RL	22022-03 Conc. ug/L	RL
Diesel:	320W	50	140W	50	80W	50
> Surrogate Recoveries (%) <<						
Tetracosane	102		103		107	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number:.22022
Method Blank(s)

	CJ251.46-01	
	Conc.	RL
	ug/L	
Diesel:	ND	50
Surrogate Recoveries (%) <<		
Tetracosane	111	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CJ251.46 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	1000/1100	100/110	50-150	10
> Surrogate Recoveries (%) <<						
Tetracosane				113/110	50-150	

- Sample contians a mixture of weathered diesel and heavier hydrocarbons. Possible tor oil.

- The pattern of the chromatogram resembles a weathered, aged, or degraded petroleum hydrocarbon.
- Hydrocarbons were found in the range of diesel, but do not resemble a diesel fingerprint.

finitions:
= Not Detected
= Reporting Limit
= Not Analysed
= Relative Percent Difference
L = parts per billion (ppb)
L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on October 26, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	01
TW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	02
TW-2	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ252.37-01	Method Blank	MB	Water	10/25/96	10/25/96
CJ252.37-02	Laboratory Spike	LS	Water	10/25/96	10/25/96
CJ252.37-03	Laboratory Spike Duplicate	LSD	Water	10/25/96	10/25/96
CJ252.37-04	GW-1	MS 22022-01	Water	10/25/96	10/25/96
CJ252.37-05	GW-1	MSD 22022-01	Water	10/25/96	10/25/96

Superior Analytical Laboratory

ai INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 26, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01	GW-1	Water	1.0	-
22022-02	TW-1	Water	1.0	-
22022-03	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	RL	22022-02 Conc. ug/L	RL	22022-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	1.1	0.5	0.6	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	1.0	0.5	1.5	0.5	0.6	0.5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	92		99		95	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22022
Method Blank(s)

	CJ252.37-01 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
-> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	92	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CJ252.37 02 / 03 - Laboratory Control Spikes						
Benzene		20	17/16	85/80	65-125	6
Toluene		20	17/16	85/80	65-125	6
Ethyl Benzene		20	17/16	85/80	65-125	6
Xylenes		60	52/50	87/83	65-125	5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94/95	50-150	
For Water Matrix (ug/L) CJ252.37 04 / 05 - Sample Spiked: 22022 - 01						
Benzene	ND	20	16/17	80/85	65-125	6
Toluene	1.1	20	17/17	80/80	65-125	0
Ethyl Benzene	ND	20	16/16	80/80	65-125	0
Xylenes	1.0	60	50/51	82/83	65-125	1
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94/91	50-150	

finitions:

= Not Detected
= Reporting Limit
= Not Analysed
= Relative Percent Difference
L = parts per billion (ppb)
L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 27, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	01
TW-1	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	02
TW-2	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ281.34-01	Method Blank	MB	Water	10/28/96	10/28/96
CJ281.34-02	Laboratory Spike	LS	Water	10/28/96	10/28/96
CJ281.34-03	Laboratory Spike Duplicate	LSD	Water	10/28/96	10/28/96

Superior Analytical Laboratory

ai INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on October 27, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01	GW-1	Water	1.0	-
22022-02	TW-1	Water	1.0	-
22022-03	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	22022-01 RL	22022-02 Conc. ug/L	22022-02 RL	22022-03 Conc. ug/L	22022-03 RL
Oil and Grease	5100	5000	ND	5000	ND	5000

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22022
Method Blank(s)

	CJ281.34-01	
	Conc.	RL
	ug/L	
Oil and Grease	ND	5000

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CJ281.34 02 / 03 - Laboratory Control Spikes						
Oil and Grease		30000	30000/33000	100/110	50-110	10

finitions:

= Not Detected
= Reporting Limit
= Not Analysed
D = Relative Percent Difference
/L = parts per billion (ppb)
/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

No. 5156

22022

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA

PROJECT LOCATION: ALAMEDA

SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number / Sample Description
X				3			1	1	96	10	25	1430	~~GW-1~~ GW-1
X				3			1	1				1440	TW-1
X				3			1	1	↓	↓	↓	1480	TW-2

Analyses: EPA 418.1	EPA 601/8010 SWMH 5520	EPA 8015M (TPH Diesel)	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
	X	X	X												X			
	X	X	X												X			
	X	X	X												X			

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DR.
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	10/25 1600		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number: HAND DELIVERED	Date/Time	Received By Lab: Atsaneh Salimi	Date/Time 10/25/96 1600

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 Facsimile

24 HR. TAT

SPECIAL INSTRUCTIONS

Please Initial:
Samples Stored in ice
Appropriate containers
Samples preserved
VOA's
Comments

5.2 °C ✓

CAL INC

No. 5156

22022

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA

PROJECT LOCATION: ALAMEDA

SAMPLING CREW: ROB BARRY

Matrix				Number of Containers and Preservative Information									Date				Sample Number	Analyses																			
Water	Soil			Glass Jar	2-inch Brass Tube	3 VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved			Year	Month	Day	Time	Sample Description	EPA 418.1	EPA 8010	EPA 8015M (TPH Diesel)	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X						3				1			96	10	25	1430	~~GW-1~~ GW-1		X	X	X									X				
X						3				1			↓	↓	↓	1440	TW-1		X	X	X									X				
X						3				1						1450	TW-2		X	X	X									X				

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DR.
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By: Robert Barry	Date/Time 10/25 1600	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number: HAND DELIVERED	Date/Time	Received By Lab: Ehsan K. Salimi	Date/Time 10/25/16 16:00

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR. TAT

5.2°C

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: October 11, 1996

Attn: ROB BARRY

Laboratory Number : 21960

Project Number/Name : GSA ALAMEDA
Facility/Site : ALAMEDA FEDERAL CENTER

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 10, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 9, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 21960

Sample Receipt

One water sample was received by
Superior Analytical Laboratory on October 10, 1996.

Cooler temperature was NOICE°C

No abnormalities were noted with sample recieving.

Sample Analysis

The sample was analysed for methods 6010 and 7470.

stomer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

'al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 11, 1996

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Chronology

Laboratory Number 21960

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
MW-3	10/10/96	10/10/96	10/11/96	10/11/96	CJ111.12 CJ111.44	01

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ111.12-01	Method Blank	MB	Water	10/11/96	10/11/96
CJ111.12-02	Laboratory Spike	LS	Water	10/11/96	10/11/96
CJ111.12-03	Laboratory Spike Duplicate	LSD	Water	10/11/96	10/11/96
CJ111.12-04	MW-3	MS 21960-01	Water	10/11/96	10/11/96
CJ111.12-05	MW-3	MSD 21960-01	Water	10/11/96	10/11/96
CJ111.44-01	Method Blank	MB	Water	10/11/96	10/11/96
CJ111.44-02	Laboratory Spike	LS	Water	10/11/96	10/11/96
CJ111.44-03	Laboratory Spike Duplicate	LSD	Water	10/11/96	10/11/96
CJ111.44-04	MW-3	MS 21960-01	Water	10/11/96	10/11/96
CJ111.44-05	MW-3	MSD 21960-01	Water	10/11/96	10/11/96

Superior Analytical Laboratory

Cal INC
Attn: ROB BARRY

Project GSA ALAMEDA
Reported on October 11, 1996

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21960-01	MW-3	Water	1.0	-

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

Compound	21960-01 Conc. mg/L	RL
Mercury (SW-846 7470)	ND	0.001
Antimony (SW-846 6010)	ND	0.1
Arsenic (SW-846 6010)	0.16	0.1
[illegible]um (SW-846 6010)	0.025	0.015
[illegible]eryllium (SW-846 6010)	ND	0.005
Cadmium (SW-846 6010)	ND	0.005
Chromium (SW-846 6010)	ND	0.01
Cobalt (SW-846 6010)	ND	0.01
Copper (SW-846 6010)	ND	0.02
Lead (SW-846 6010)	ND	0.05
Molybdenum (SW-846 6010)	ND	0.02
Nickel (SW-846 6010)	ND	0.02
Silver (SW-846 6010)	ND	0.02
Selenium (SW-846 6010)	ND	0.1
Thallium (SW-846 6010)	ND	0.2
Vanadium (SW-846 6010)	ND	0.03
Zinc (SW-846 6010)	ND	0.02

Superior Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 21960
Method Blank(s)

	CJ111.12-01		CJ111.44-01	
	Conc. mg/L	RL	Conc. mg/L	RL
Mercury (SW-846 7470)	ND	0.001		
Antimony (SW-846 6010)			ND	0.1
Arsenic (SW-846 6010)			ND	0.1
Barium (SW-846 6010)			ND	0.015
Beryllium (SW-846 6010)			ND	0.005
Cadmium (SW-846 6010)			ND	0.005
Chromium (SW-846 6010)			ND	0.01
Cobalt (SW-846 6010)			ND	0.01
Copper (SW-846 6010)			ND	0.02
[illegible] (SW-846 6010)			ND	0.05
Molybdenum (SW-846 6010)			ND	0.02
Nickel (SW-846 6010)			ND	0.02
Silver (SW-846 6010)			ND	0.02
Selenium (SW-846 6010)			ND	0.1
Thallium (SW-846 6010)			ND	0.2
Vanadium (SW-846 6010)			ND	0.03
Zinc (SW-846 6010)			ND	0.02

Superior Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 21960

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (mg/L)						
CJ111.12 02 / 03 - Laboratory Control Spikes						
Mercury (SW-846 7470)		0.02	0.018/0.018	90/90	75-125	0
For Water Matrix (mg/L)						
CJ111.44 02 / 03 - Laboratory Control Spikes						
[illegible]mony (SW-846 6010)		1	0.99/1.1	99/110	75-125	11
[illegible]senic (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
Barium (SW-846 6010)		1	0.95/0.97	95/97	75-125	2
Beryllium (SW-846 6010)		1	0.92/0.94	92/94	75-125	2
Cadmium (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
Chromium (SW-846 6010)		1	1.0/1.0	100/100	75-125	0
Cobalt (SW-846 6010)		1	1.0/1.0	100/100	75-125	0
Copper (SW-846 6010)		1	0.97/1.0	97/100	75-125	3
Lead (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
Molybdenum (SW-846 6010)		1	0.98/1.0	98/100	75-125	2
Nickel (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
Silver (SW-846 6010)		2	1.9/2.0	95/100	75-125	5
Selenium (SW-846 6010)		1	0.95/1.0	95/100	75-125	5
Thallium (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
Vanadium (SW-846 6010)		1	0.96/1.0	96/100	75-125	4
Zinc (SW-846 6010)		1	1.0/1.1	100/110	75-125	10
For Water Matrix (mg/L)						
CJ111.12 04 / 05 - Sample Spiked: 21960 - 01						
[illegible]ercury (SW-846 7470)	ND	0.020	0.024/0.023	120/115	75-125	4

Superior
Analytical Laboratory

Analysis for CAM 17 Metals
California Code of Regulations Title 22
Methods SW-846 6010 & 7000 Series

Quality Assurance and Control Data

Laboratory Number: 21960

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (mg/L)						
CJ111.44 04 / 05 - Sample Spiked: 21960 - 01						
Antimony (SW-846 6010)	ND	1	0.95/0.94	95/94	75-125	1
Arsenic (SW-846 6010)	0.16	1	1.1/1.1	94/94	75-125	0
Barium (SW-846 6010)	0.025	1	0.96/0.93	94/91	75-125	3
Beryllium (SW-846 6010)	ND	1	0.89/0.87	89/87	75-125	2
Cadmium (SW-846 6010)	ND	1	0.98/0.96	98/96	75-125	2
Chromium (SW-846 6010)	ND	1	0.96/0.94	96/94	75-125	2
Cobalt (SW-846 6010)	ND	1	0.96/0.94	96/94	75-125	2
Copper (SW-846 6010)	ND	1	0.95/0.92	95/92	75-125	3
Lead (SW-846 6010)	ND	1	0.95/0.93	95/93	75-125	2
Molybdenum (SW-846 6010)	ND	1	0.96/0.93	96/93	75-125	3
Nickel (SW-846 6010)	ND	1	0.97/0.93	97/93	75-125	4
Silver (SW-846 6010)	ND	2	1.9/1.8	95/90	75-125	5
Selenium (SW-846 6010)	ND	1	1.0/0.96	100/96	75-125	4
Thallium (SW-846 6010)	ND	1	0.95/0.96	95/96	75-125	1
Vanadium (SW-846 6010)	ND	1	0.94/0.92	94/92	75-125	2
Zinc (SW-846 6010)	ND	1	1.0/0.98	100/98	75-125	2

Definitions:
= Not Detected
= Reporting Limit
= Not Analysed
= Relative Percent Difference
L = parts per billion (ppb)
L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

21960

Nº 155

Please Initial:
Samples Stored in ice. ✓ No ice
Appropriate containers ✓
Samples preserved No
VOA's without headspace
Comments:

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ALAMEDA FEDERAL CENTER
SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Year	Month	Day	Time	Sample Number / Sample Description	EPA 418.1	EPA 8010	EPA 8015M	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance	EPA ~~200.7~~ 6010 CAM 17	24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X								X	96	10	10	13	MW-3															X	X			

LABORATORY NAME AND ADDRESS

SUPERIOR ANAL. LAB.
825 ARNOLD DRIVE #114
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	10/10/96 1350		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab: [signature]	10/10/96 13:50

Please Deliver Analytical Results to:
Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 4__ 4906 facsimile

SPECIAL INSTRUCTIONS

PLEASE FILTER SAMPLE AT LAB (0.45 μm FILTER) PRIOR TO ANALYSIS

INC

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ALAMEDA FEDERAL CENTER
SAMPLING CREW: ROB BARRY

Matrix: Water	Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCl~~ H_2SO_4	1 Liter Plastic - HNO_3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number: Sample Description	Analyses: EPA ~~418.1~~ 5520 O&G	EPA 8010	EPA 8015M TPH Diesel	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X				2	1	1			96	11	15	14	GW-2	X		X	X														
↓				2	1	1			↓	↓	↓	↓	TW-1-2	↓		↓	↓														
↓				2	1	1			↓	↓	↓	↓	TW-2-2	↓		↓	↓														

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DRIVE
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	11/15/96 1400	[illegible]	[illegible]
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number:	Date/Time	Received By Lab:	Date/Time

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT
AS WE DISCUSSED, ALSO RUN SAMPLE # 22013-3 FOR
STLC (Hg) - 72 HR TAT!

APPENDIX 4

HAZARDOUS WASTE MANIFESTS AND CERTIFICATES OF DISPOSAL

UNDERGROUND STORAGE TANK
HAZARDOUS WASTE MANIFESTS
AND
CERTIFICATES OF DESTRUCTION

DAY OR NIGHT TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO.

CUSTOMER CAL INC.

JOB NO. 969625

FOR: ERICKSON, INC. TANK NO. 19350

LOCATION: RICHMOND DATE: 97/01/09 TIME: 16:26

EST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT FO

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 10000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1%
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.
ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Ignacio Ortega — REPRESENTATIVE

TITLE

Dave Soto — INSPECTOR

CP599

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of [illegible]e 6.

969625

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	CA1470000760
Manifest Document No.	34344
2. Page 1 of	1
Information in the shaded areas is not required by Federal law.	
A. State Manifest Document Number	[illegible]
B. State Generator's ID	[illegible]
3. Generator's Name and Mailing Address	JAMES LEW, GSA 450 GOLDEN GATE AVE. SF, CA 94102
4. Generator's Phone	(415) 522-3228
5. Transporter 1 Company Name	ERICKSON INC.
6. US EPA ID Number	CAD009466392
C. State Transporter's ID	[illegible]
D. Transporter's Phone	(510) [illegible]
7. Transporter 2 Company Name	
8. US EPA ID Number	
E. State Transporter's ID	
F. Transporter's Phone	
9. Designated Facility Name and Site Address	Erickson, Inc. 255 Parr Blvd. Richmond, CA. 94801
10. US EPA ID Number	CAD009466392
G. State Facility's ID	CAD009466[illegible]
H. Facility's Phone	[illegible]

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank.	001	TP	10000	P
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above: [illegible]

K. Handling Codes for Wastes Listed Above: 01

15. Special Handling Instructions and Additional Information
Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name. CAROLYN COOLEY Phone (510) 667-6527

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Carolyn Cooley	[signature]	12	06	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ron Campbell	[signature]	12	06	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
DAVID SATO	DAVE SATO	12	09	96

GENERATOR / TRANSPORTER / FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (1/95)
EPA 8700—22

White: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To. P O Box 3000, Sacramento, CA 95812

DAY OR NIGHT TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 15795

CUSTOMER CAL INC.

JOB NO. 69625

FOR: ~~ERICKSON, INC.~~ TANK NO. ~~19351~~

LOCATION: ~~RICHMOND~~ DATE: ~~97/01/09~~ TIME: ~~16:26~~

TEST METHOD ~~VISUAL GASTECH/1314 SMPN~~ LAST PRODUCT ~~FO~~

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 10000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: ~~OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1%~~
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN ~~CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS~~ WASTE FACILITY.
~~ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK~~ SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Francisco Chavez — REPRESENTATIVE

TITLE

Dave Sato — INSPECTOR

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

969625

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: CA147000076031164
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: GSA, 620 Central Ave, Alameda, Ca 94501
4. Generator's Phone: 510 337-5109

A. State Manifest Document Number: 96431164
B. State Generator's ID

5. Transporter 1 Company Name: ERICKSON I.N.C.
6. US EPA ID Number: CAD009466392

C. State Transporter's ID
D. Transporter's Phone: (510) 235-1393

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address:
Erickson, Inc.
255 Parr Blvd.
Richmond, CA. 94801

10. US EPA ID Number: CAD009466392

G. State Facility's ID: CAD009466392
H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank	001	TF	10000	[illegible]	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above: 1 Empty Storage Tank 1933 ... Tank ... Service Permit ...

K. Handling Codes for Wastes Listed Above: 01

15. Special Handling Instructions and Additional Information
Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name. Carolyn Cooley & Phone (510) 667-6527

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
CAROLYN COOLEY	[signature]	12	06	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Thomas Schmidt	[signature]	12	06	9[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name	Signature	Month	Day	Year
DAVID SATO	[signature]	12	06	9

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-...

GENERATOR / TRANSPORTER / FACILITY

DTSC 8022A (1/95)
EPA 8700—22

White To: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS
P.O. Box 3000, Sacramento, CA 95812

ASBESTOS-CONTAINING MATERIAL HAZARDOUS WASTE MANIFESTS AND CERTIFICATE OF DISPOSAL

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CA1470007600 Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GENERAL SERVICES ADMINISTRATION
450 GOLDEN GATE AVE., SAN FRANCISCO, CA 94102-3400

4. Generator's Phone (415) 522-3227 James Lew-Contracting Officer

5. Transporter 1 Company Name — 6. US EPA ID Number
FALCON DISPOSAL SERVICE, INC. CAD000048934

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address — 10. US EPA ID Number
CALIFORNIA ASBESTOS MONOFILL
O'BYRNES FERRY ROAD
COPPEROPOLIS, CA 95228 CAL000027411

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. R.Q., ASBESTOS, 9, NA2212, PGIII	001	CM	00006	Y
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information
SITE ADDRESS: ALAMEDA FEDERAL CENTER, 620 CENTRAL AVE., ALAMEDA, CA 94501
FALCON DISPOSAL SERVICE, 42335 BOSCELL ROAD, FREMONT, CA 94538
WEAR APPROPRIATE PPE. 24-HOUR EMERGENCY PHONE (510) 252-9500. ERG #171. (CAL EPA)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: CAROLYN COOLEY — Signature — Month 11 Day 13 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MILT MUCHNA — Signature — Month 11 Day 13 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: CLIFTON S. HUNTON — Signature — Month 11 Day 14 Year 96

DO NOT WRITE BELOW THIS LINE.

GENERATOR — TRANSPORTER — FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (1/95)
EPA 8700—22

White: TSDF SENDS THIS COPY TO DTSC WITHIN 30 DAYS
To P.O. Box 3000, Sacramento, CA 95812

APPENDIX 5

NON-HAZARDOUS WASTE MANIFESTS AND CERTIFICATES OF DISPOSAL

EXCAVATED SOIL
NON-HAZARDOUS WASTE MANIFESTS

ALLIED WASTE SERVICES, Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: 3

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA
Location:

Address: 620 CENTRAL
Address:

ALAMEDA, CA

Phone No: (707) 4467996
Phone No:

Approval Number	Gross Weight (Pounds)	Tare Weight (Pounds)	Net Weight (Pounds)	Net Weight (Tons)
408450	62160	30000	32160	16.08

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

/s/ [signature] [illegible] 11-21-96

Signature | Generator Authorized Agent Name | Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING
Driver Name: C DUPBOW

Address: P.O. BOX 519
Vehicle License No./State: 5P27018

BYRON, CA 94514
Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11/21/96

Driver Signature | Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature | Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL
Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

[signature] [illegible] 11 21 96

Signature | Authorized Agent Name | Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17151 - 1
TIME IN: 14:39 I/O: I
TIME OUT: 14:39
STAGE TICKET: 18911

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	16.08	T				

GROSS: 62160 PB LBS
TARE: 30000 PT LBS
NET: 32160 LBS TONS 16.08

CUSTOMER:
WEIGHMASTER:

WEIGH IN CLERK: BROWN, KEN JR WEIGH OUT CLERK: BROWN, KEN JR

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	18.20
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature Generator Authorized Agent Name 11-21-96 Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: D. CAMPBELL

Address: P.O. BOX 519 Vehicle License No./State: 5P 27018

BYRON, CA 94514 Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

11/21/96

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

ALTAMONT LANDFILL & RRF

DATE: 11/1/96 TICKET: 17125 - 1
TIME IN: 11:42 I/O: I
TIME OUT: 11:42
STAGE TICKET: 18885

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA;
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	18.20	T				

GROSS: 66400 PB LBS CUSTOMER:
TARE: 30000 PT LBS
NET: 36400 LBS TONS: 18.20 WEIGHMASTER:

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700I OF DIVISION 5 OF THE CALIFORNIA

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	62960	16.48
	Tare Weight (Pounds) 30000	
	Net Weight (Pounds) 32960	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[signature] [illegible] 11-21-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: D. CAMPBELL

Address: P.O. BOX 519 Vehicle License No./State: 5P27018

BYRON, CA 94514 Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11/21/96

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

[signature] 11/21/96

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

[signature] [illegible] 11/21/96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17099 - 1
TIME IN: 08:49 I/O: I
TIME OUT: 08:49
STAGE TICKET: 18858

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	16.48	T				

GROSS: 62960 PB LBS
TARE: 30000 PT LBS
NET: 32960 LBS TONS: 16.48

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450		18.89
	Tare Weight (Pounds)	
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[signature] [illegible] 11-21-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: [illegible]

Address: P.O. BOX 519 Vehicle License No./State: 9C15122 CA

BYRON, CA 94514 Truck Number: 41

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11-21-96

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

[signature] 11-21-96

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

[signature] 11-21-96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17145 - 1
TIME IN: 13:50 I/O: I
TIME OUT: 13:50
STAGE TICKET: 18905

CARRIER: G GOLDEN HILLS
TRUCK#: 84 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	18.89	T				

GROSS: 69020 PB LBS
TARE: 31240 PT LBS
NET: 37780 LBS TONS: 18.89

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	21.51
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature / Generator Authorized Agent Name / Date 11-21-96

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: JIM OCHINGER

Address: P.O. BOX 519 Vehicle License No./State: 9E5132 CA

BYRON, CA 94514 Truck Number: 84

I hereby certify that the above named material was picked up at the generator site listed above

Driver Signature / Shipment Date 11-21-96

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature / Delivery Date 11-21-96

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature / Authorized Agent Name / Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17122 - 1
TIME IN: 11:28 I/O: I
TIME OUT: 11:28
STAGE TICKET: 18882

CARRIER: G GOLDEN HILLS
TRUCK#: 84 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA

PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	21.51	T				

GROSS: 74260 PB LBS
TARE: 31240 PT LBS
NET: 43020 LBS TONS: 21.51

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	21.78
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature / Generator Authorized Agent Name / Date 11-21-96

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: Tim Oehninger

Address: P.O. BOX 519 Vehicle License No./State: 9C15132 CA

BYRON, CA 94514 Truck Number: 84

I hereby certify that the above named material was picked up at the generator site listed above

Driver Signature 11-21-96 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature 11-21-96 Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature / Authorized Agent Name / Receipt Date 11/21/96

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17100 - 1
TIME IN: 08:52 I/O: I
TIME OUT: 08:52
STAGE TICKET: 18859

CARRIER: G GOLDEN HILLS
TRUCK#: 84 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	21.28	T				

GROSS: 73800 PB LBS
TARE: 31240 PT LBS
NET: 42560 LBS TONS: 21.28

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALLIED WASTE SERVICES INC.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	26.15
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

11-21-96

Signature / Generator Authorized Agent Name / Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: John Salinas

Address: P.O. BOX 519 Vehicle License No./State: 9NU2756

BYRON, CA 94514 Truck Number: L-41

I hereby certify that the above named material was picked up at the generator site listed above

11-21-96

Driver Signature / Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature / Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature / Authorized Agent Name / Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17141 - 1
TIME IN: 13:32 I/O: I
TIME OUT: 13:32
STAGE TICKET: 18901

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	26.15	T				

GROSS: 83300 PB LBS
TARE: 31000 PT LBS
NET: 52300 LBS TONS: 26.15

CUSTOMER: _____
WEIGHMASTER: _____

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	25.08
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[signature] [illegible] 11-21-96

Signature / Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: John Salinas

Address: P.O. BOX 519 Vehicle License No./State: 9-A02657

BYRON, CA 94514 Truck Number: L-11

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11-21-96

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17121 - 1
TIME IN: 11:02 I/O: I
TIME OUT: 11:02
STAGE TICKET: 18881

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP: TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G G8A
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	25.08	T				

GROSS: 81160 PB LBS
TARE: 31000 PT LBS
NET: 50160 LBS TONS: 25.08

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450	Tare Weight (Pounds)	23.50
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[signature] [illegible] White 11-21-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: John Sullivan

Address: P.O. BOX 519 Vehicle License No./State: 9A02657

BYRON, CA 94514 Truck Number: L-41

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11-21-96

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/21/96 TICKET: 17094 - 1
TIME IN: 08:20 I/O: I
TIME OUT: 08:22
STAGE TICKET: 18852

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	23.50	T				

GROSS: 78000 PB LBS
TARE: 31000 PT LBS
NET: 47000 LBS TONS: 23.50

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
4084501	Tare Weight (Pounds)	23.34
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature Generator Authorized Agent Name 11-21-9654.24 Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: Doug Koch

Address: P.O. BOX 519 Vehicle License No./State: 5P27023

BYRON, CA 94514 Truck Number: L53

I hereby certify that the above named material was picked up at the generator site listed above

I hereby certify that the above named material was delivered without incident to the destination listed below

Doug Koch 11-26-96

Driver Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature Authorized Agent Name 11/26/96 Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17411 - 1
TIME IN: 09:34 I/O: I
TIME OUT: 09:34
STAGE TICKET: 19195

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L53 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G OSA
ORIGIN: ALAM ALAMEDA PROFILE 400451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C&C CLASS II COVER SOIL	23.34	T				

GROSS: 77180 PD LBS
TARE: 30500 PT LBS
NET: 46680 LBS TONS: 23.34

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALLIED WASTE SERVICES INC.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450 1	Tare Weight (Pounds)	24.75
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature | Timothy O White | Generator Authorized Agent Name | 11-26-96 | Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: Doug Koch

Address: P.O. BOX 519 Vehicle License No./State: SP 27023

BYRON, CA 94514 Truck Number: L-53

I hereby certify that the above named material was picked up at the generator site listed above

I hereby certify that the above named material was delivered without incident to the destination listed below

Doug Koch | 11-26-96 | Shipment Date | Driver Signature | Delivery Date

Driver Signature

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

J Rue | 11-26-96

Signature | Authorized Agent Name | Receipt Date

TAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17459 - 1
TIME IN: 12:46 I/O: I
TIME OUT: 12:46
STAGE TICKET: 19243

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L53 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
ENERATOR: G GSA
ORIGIN: ALAM ALAMEDA

PROFILE 408451

MIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	24.75	T				

GROSS: 00000 PB LBS
TARE: 30500 PT LBS
NET: 49500 LBS TONS: 24.75

CUSTOMER:

WEIGHMASTER:

GH IN CLERK: RAMIREZ, JOSE

WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
4084501	Tare Weight (Pounds)	26.68
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature Generator Authorized Agent Name 11-25-96 Date

TRANSPORTER

Transporter Name: ~~CABALLERO~~ LUTREL TRUCKING Driver Name: Doug Koch

Address: ~~2550 BERRYESSA RD #527~~ P.O. Box 579 BY Ron, CA 94514 ~~SAN JOSE, CA 95132~~ Vehicle License No./State: SP27023

Truck Number: L 53

I hereby certify that the above named material was picked up at the generator site listed above

Doug Koch

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

11-26-96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17490 - 1
TIME IN: 15:43 I/O: I
TIME OUT: 15:43
STAGE TICKET: 19283

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: LS3 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 400451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	26.68	T				

GROSS: 83860 PB LBS
TARE: 30500 PT LBS
NET: 53360 LBS TONS: 26.68

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707)4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Tare Weight (Pounds)	Net Weight (Pounds)	Net Weight (Tons)
408450 1	66900	30000	36900	18.45

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

11-21-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: CAMPBELL

Address: P.O. BOX 519 Vehicle License No./State: 5P27018

BYRON, CA 94514 Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

11/26

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

11/26

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

1-26-96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17426 - 1
TIME IN: 10:41 I/O: I
TIME OUT: 10:41
STAGE TICKET: 19211

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	18.45	T				

GROSS: 66900 PB LBS
TARE: 30000 PT LBS
NET: 36900 LBS TONS: 18.45

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number
40845~~8~~1

Description of Material
Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

Gross Weight (Pounds)
61400

Tare Weight (Pounds)
30000

Net Weight (Pounds)
31400

Net Weight (Tons)
15.70

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[signature] [illegible] 11-25-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: ~~CABALLERO~~ LUTTEL TRUCKING Driver Name: CAMPBELL

Address: ~~2530 BERRYESSA RD #527~~ P.O. BOX 519 Vehicle License No./State: 5P27018
~~SAN JOSE, CA 95132~~ BYRON, CA 94514

Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

[signature] 11/26

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

[signature] 11/26

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

_____

Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17471 - 1
TIME IN: 13:32 I/O: I
TIME OUT: 13:32
STAGE TICKET: 19254

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	15.70	T				

GROSS: 61400 PB LBS
TARE: 30000 PT LBS
NET: 31400 LBS TONS: 15.70

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
4084501	65780	17.89
	Tare Weight (Pounds) 30000	
	Net Weight (Pounds) 35780	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

11-25-96

Signature Generator Authorized Agent Name Date

TRANSPORTER

Transporter Name: ~~CABALLERO~~ LUTREL TRUCKING Driver Name: D. CAMPBELL

Address: ~~2530 BERRYESSA RD #527~~ P.O. BOX 579 BYRON, CA 94514 ~~SAN JOSE, CA 95132~~ Vehicle License No./State: 5P27018

Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

11/26

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

11/26

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

11-25-96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17504 - 1
TIME IN: 16:15 I/O: I
TIME OUT: 16:16
STAGE TICKET: 19287

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	17.89	T				

GROSS: 65780 PR LBS
TARE: 30000 PT LBS
NET: 35780 LBS TONS: 17.89

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE

WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450 7	Tare Weight (Pounds)	26.26
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum
Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

11-26-96 26

Signature Generator Authorized Agent Name Date

WT TAG 17418-1

Lutrel TAG # 15996

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: John Salinas

Address: P.O. BOX 519 Vehicle License No./State: 9A02657

BYRON, CA 94514 Truck Number: L-41

I hereby certify that the above named material was picked up at the generator site listed above

I hereby certify that the above named material was delivered without incident to the destination listed below

11-26-96

Driver Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

F.P. 11-26-96

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17469 - 1
TIME IN: 13:13 I/O: I
TIME OUT: 13:13
STAGE TICKET: 19252

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	26.26	T				

GROSS: 83520 PB LBS
TARE: 31000 PT LBS
NET: 52520 LBS TONS: 26.26

CUSTOMER: _____
WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700I OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: _____

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number	Gross Weight (Pounds)	Net Weight (Tons)
408450 1	Tare Weight (Pounds)	24181
	Net Weight (Pounds)	

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature Generator Authorized Agent Name Date

WTTAG#

TAG#15996

TRANSPORTER

Transporter Name: LUTREL TRUCKING Driver Name: John Salina

Address: P.O. BOX 519 Vehicle License No./State: 9H12657

BYRON, CA 94514 Truck Number: L-41

I hereby certify that the above named material was picked up at the generator site listed above.

11-26-91

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL Phone (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature Authorized Agent Name Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/26/96 TICKET: 17418 - 1
TIME IN: 09:49 I/O: I
TIME OUT: 09:49
STAGE TICKET: 19201

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	24.81	T				

GROSS: 80620 PB LBS
TARE: 31000 PT LBS
NET: 49620 LBS TONS: 24.81

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: ____________

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA | Location:

Address: 620 CENTRAL | Address:

ALAMEDA, CA

Phone No: (707) 4467996 | Phone No:

Approval Number
4084501

Gross Weight (Pounds) 72080

Tare Weight (Pounds) 30000

Net Weight (Pounds) 42080

Net Weight (Tons) 21.04

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature: [signature] Generator Authorized Agent Name: [signature] Date: 11-2?-96

TRANSPORTER

Transporter Name: LUTREL ~~CABALLERO~~ TRUCKING | Driver Name: D CAMPBELL

Address: P.O. BOX 519 ~~[illegible] RD #587~~ BYRON, CA 94514 ~~SAN JOSE, CA [illegible]32~~ | Vehicle License No./State: SP27016

Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

Driver Signature: [signature] Shipment Date: 11/27

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature: [signature] Delivery Date: 11/27

DESTINATION

Facility Name: ALTAMONT LANDFILL | Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature | Authorized Agent Name: [signature] | Receipt Date: 11-27-96

ALTAMONT LANDFILL & RRF

DATE: 11/27/96 TICKET: 17532 - 1
TIME IN: 09:36 I/O: I
TIME OUT: 09:36
STAGE TICKET: 19317

CARRIER: LUT LUTRED TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	21.04	T				

GROSS: 72080 PB LBS
TARE: 30000 PT LBS
NET: 42080 LBS TONS: 21.04

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

Log #: ____________

800 989-3478
415 492-9030
(fax) 415 479-5013

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA
Location:

Address: 620 CENTRAL
ALAMEDA, CA
Address:

Phone No: (707) 4467996
Phone No:

Approval Number	Gross Weight (Pounds)
408450 1	75620

Tare Weight (Pounds): 30000

Net Weight (Pounds): 45620

Net Weight (Tons): 22.81

Description of Material

Non-Regulated Petroleum
Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature   Generator Authorized Agent Name   Date: 11-25-96

TRANSPORTER

Transporter Name: ~~[illegible]~~ LUTREL TRUCKING
Driver Name: D CAMPBELL

Address: ~~[illegible]~~ P.O. Box 519
~~[illegible]~~ BYRON, CA 94514
Vehicle License No./State: SP27018

Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

Driver Signature   Shipment Date: 11/27

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature   Delivery Date: 11/27

DESTINATION

Facility Name: ALTAMONT LANDFILL
Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature   Authorized Agent Name   Receipt Date: 11-27-96

ALTAMONT LANDFILL & RRF

DATE: 11/27/96 TICKET: 17562 - 1
TIME IN: 12:35 I/O: I
TIME OUT: 12:35
STAGE TICKET: 19349

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	22.81	T				

GROSS: 75620 PB LBS
TARE: 30000 PT LBS
NET: 45620 LBS TONS: 22.81

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA

Location:

Address: 620 CENTRAL

Address:

ALAMEDA, CA

Phone No: (707) 4467996

Phone No:

Approval Number: 40845071

Gross Weight (Pounds): 68300

Tare Weight (Pounds): 30,000

Net Weight (Pounds): 3830

Net Weight (Tons): 19.15

Description of Material:

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature — Generator Authorized Agent Name — 11-25-96 Date

TRANSPORTER

Transporter Name: LUTREL ~~CABALLERO~~ TRUCKING

Driver Name: D CAMPBELL

Address: P.O. BOX 519 ~~3530 BERRYESSA RD #27~~ BYRON, CA 94514 ~~SAN JOSE, CA 95132~~

Vehicle License No./State: SP27018

Truck Number: L-45

I hereby certify that the above named material was picked up at the generator site listed above

11/27 Shipment Date — Driver Signature

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature — 11/27 Delivery Date

DESTINATION

Facility Name: ALTAMONT LANDFILL

Phone: (510) 449-6349

Address: 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature — Authorized Agent Name — 11-27-96 Receipt Date

ALTAMONT LANDFILL & RRF

DATE: 11/27/96 TICKET: 17592 - 1
TIME IN: 15:57 I/O: I
TIME OUT: 15:57
STAGE TICKET: 19377

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	19.15	T				

GROSS: 68300 PR LBS
TARE: 30000 PT LBS
NET: 38300 LBS TONS: 19.15

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18001 - 1
TIME IN: 10:25 I/O: I
TIME OUT: 10:25
STAGE TICKET: 19800

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	24.90	T				

GROSS: 80800 PB LBS
TARE: 31000 PT LBS
NET: 49800 LBS TONS: 24.90

CUSTOMER: [signature]
WEIGHMASTER: [signature]

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/06/96 TICKET: 18310 - 1
TIME IN: 14:04 I/O: I
TIME OUT: 14:04
STAGE TICKET: 20118

CARRIER: LUT LUTREL TRUCKING, INC.
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408451

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	C2C CLASS II COVER SOIL	19.05	T				

GROSS: 68100 PB LBS CUSTOMER:
TARE: 30000 PT LBS
NET: 38100 LBS TONS: 19.05 WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700I OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

UST TANK CONTENTS
NON-HAZARDOUS WASTE MANIFESTS

NT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18072 - 1
TIME IN: 14:05 I/O: I
TIME OUT: 14:05
STAGE TICKET: 19876

RIER: LUT LUTREL TRUCKING, INC
UCK#: L41 END DUMP TRAILER#:
OMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
ATOR: G GSA
IGIN: ALAM ALAMEDA PROFILE 408450

ST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	22.87	T				

: 76740 PB LBS
: 31000 PT LBS
45740 LBS TONS: 22.87

CUSTOMER: _____

WEIGHMASTER: _____

N CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

~~IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED,~~
URED, OR, COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS
IFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY
TER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA
NESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT
DARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18122 - 1
TIME IN: 18:11 I/O: I
TIME OUT: 18:11
STAGE TICKET: 19921

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA

PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	13.28	T				

GROSS: 57560 PB LBS
TARE: 31000 PT LBS
NET: 26560 LBS TONS: 13.28

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18046 - 1
TIME IN: 12:53 I/O: I
TIME OUT: 12:53
STAGE TICKET: 19845

CARRIER: CRO CROSS TRUCKING
TRUCK#: 2004 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	28.56	T				

GROSS: 90940 PB LBS
TARE: 33820 PT LBS
NET: 57120 LBS TONS: 28.56

CUSTOMER: _____
WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18109 - 1
TIME IN: 16:16 I/O: I
TIME OUT: 16:16
STAGE TICKET: 19908

RRIER: CRO CROSS TRUCKING
RUCK#: 2004 END DUMP TRAILER#:
TOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
RATOR: G GSA
RIGIN: ALAM ALAMEDA PROFILE 408450

EST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	25.15	T				

S: 84120 PB LBS
E: 33820 PT LBS
T: 50300 LBS TONS: 25.15

CUSTOMER: _____
WEIGHMASTER: _____

IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

S TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED,
SURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS
TIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY
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INESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT
NDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18121 - 1
TIME IN: 17:48 I/O: I
TIME OUT: 17:48 STAGE TICKET: 19920

CARRIER: LUT LUTREL TRUCKING, INC

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18121 - 1
TIME IN: 17:48 I/O: I
TIME OUT: 17:48 STAGE TICKET: 19920

CARRIER: LUT LUTREL TRUCKING, INC

TRUCK#: L45 TRAILER#:
~~CUSTOMER: ALLI~~ ~~ALLIED ENVIRONMENTAL SERVICES WEST~~
GENERATOR: G GSA PROFILE 408450
ORIGIN: ALAM ALAMEDA

MANIFEST TAL	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	FEE
	SAN CLASS II OPS LAYER	15.03	T				

CUSTOMER:

GROSS: 60060 PB LBS
TARE: 30000 PT LBS
NET: 30060 LBS TONS: 15.03

WEIGHMASTER:

WEIGH OUT CLERK: RAMIREZ, JOSE

WEIGH IN CLERK: RAMIREZ, JOSE

12/7/96

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

TAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18053 - 1
TIME IN: 13:07 I/O: I
TIME OUT: 13:07
STAGE TICKET: 19852

CARRIER: LUT LUTREL TRUCKING, INC.
TRUCK#: L45 END DUMP TRAILER#:
USTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
NERATOR: G GSA
ORIGIN: ALAM ALAMEDA

PROFILE 408450

T	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	21.31	T				

SS: 72620 PB LBS
RE: 30000 PT LBS
ET: 42620 LBS TONS: 21.31

CUSTOMER:

WEIGHMASTER:

IN CLERK: RAMIREZ, JOSE

WEIGH OUT CLERK: RAMIREZ, JOSE

IS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED,
ASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS
RTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY
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SINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT
NDARDS, OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

in Tons

LTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17845 - 1
TIME IN: 10:52 I/O: I
TIME OUT: 10:52
STAGE TICKET: 19642

CARRIER: LUT LUTRE TRUCKING, INC
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II DPS LAYER	27.43	T				

GROSS: 85860 PB LBS
TARE: 31000 PT LBS
NET: 54860 LBS TONS 27.43

CUSTOMER: [signature]
WEIGHMASTER: _____

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700I OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

IN

LTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17903 - 1
TIME IN: 14:26 I/O: I
TIME OUT: 14:26
STAGE TICKET: 19701

CARRIER: LUT LUTRELL TRUCKING, INC.
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

ANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	27.28	T				

GROSS: 85560 PB LBS
TARE: 31000 PT LBS
NET: 54560 LBS TONS: 27.28

CUSTOMER: _____

WEIGHMASTER: _____

IGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

1 of

LTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17933 - 1
TIME IN: 17:33 I/O: I
TIME OUT: 17:33
STAGE TICKET: 19731

CARRIER: LUT LUTREL TRUCKING, INC.
TRUCK#: L41 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	19.25	T				

GROSS: 69500 PB LBS
TARE: 31000 PT LBS
NET: 38500 LBS TONS: 19.25

CUSTOMER: John Lalumia

WEIGHMASTER:

IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

S TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED,
OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS
WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY
ENCING WITH SECTION 12700I OF DIVISION 5 OF THE CALIFORNIA
ONE CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT
PARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17932 - 1
TIME IN: 17:20 I/O: I
TIME OUT: 17:20
STAGE TICKET: 19730

CARRIER: LUT LUTRE TRUCKING, INC.
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II OPS LAYER	17.53	T				

GROSS: 65060 PB LBS
TARE: 30000 PT LBS
NET: 35060 LBS TONS: 17.53

CUSTOMER: _____

WEIGHMASTER: _____

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17847 - 1
TIME IN: 11:09 I/O: I
TIME OUT: 11:09
STAGE TICKET: 19645

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II DPS LAYER	18.80	T				

GROSS: 67600 PB LBS
TARE: 30000 PT LBS
NET: 37600 LBS TONS: 18.80

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17898 - 1
TIME IN: 14:12 I/O: I
TIME OUT: 14:12
STAGE TICKET: 19696

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 END DUMP TRAILER#:
CUSTOMER: ALLI ALLIED ENVIRONMENTAL SERVICES WEST
GENERATOR: G GSA
ORIGIN: ALAM ALAMEDA PROFILE 408450

MANIFEST	WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	SAN CLASS II DPS LAYER	19.79	T				

GROSS: 69580 PB LBS
TARE: 30000 PT LBS
NET: 39580 LBS TONS: 19.79

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT

WASTEWATER SLUDGE
NON-HAZARDOUS WASTE MANIFESTS

ALLIED WASTE SERVICES Inc.

77 Mark Drive
Suite 21
San Rafael, CA 94903

800 989-3478
415 492-9030
(fax) 415 479-5013

Log #: _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: GSA Location:

Address: 620 CENTRAL Address:

ALAMEDA, CA

Phone No: (707) 4467996 Phone No:

Approval Number

ALAMEDA SLUDGE

Gross Weight (Pounds)

Tare Weight (Pounds)

Net Weight (Pounds)

Net Weight (Tons)

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non-DOT/RCRA Regulated

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any other applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Signature Generator Authorized Agent Name 12/17/96 Date

TRANSPORTER

Transporter Name: PESCO Driver Name: ELIAS GONZALEZ C.

Address: 310 BERRYESSA STREET Vehicle License No./State: 2N33897

MARTINEZ, CA 94553 Truck Number CA 10783

I hereby certify that the above named material was picked up at the generator site listed above

I hereby certify that the above named material was delivered without incident to the destination listed below

Driver Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Facility Name: REDWOOD LANDFILL Phone: (415) 449-6349

Address: 8950 REDWOOD HIGHWAY, NOVATO, CA 94948

I hereby certify that the above named material has been accepted and to the best of my knwoledge the foregoing is true and accurate.

Signature Authorized Agent Name Receipt Date

REDWOOD LANDFILL INC.
8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- FOR YOUR OWN SAFETY, WE RECOMMEND THAT YOU WEAR LEATHER WORK SHOES WITH REINFORCED SOLES, HEAVY SAFETY GLOVES, SAFETY GLASSES, WORK CLOTHING, AND CARRY A DUST MASK.
- PLEASE YIELD TO EQUIPMENT.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.
- THANK YOU.

X _____
DRIVER'S SIGNATURE

RECEIVED BY: DI SANTI GHAVAMI

ACCOUNT NUMBER: 1030 CUSTOMER: ALLIED ENVIRONMENTAL SERVICES

VEHICLE: PESCO TIME: 7:27:38 DATE: 12/18/96
COMMODITY: WASTE WATER LOAD # : 59
GROSS WT: 31100 PER TON: 36.11 FEE 159.61

TARE WT: 22260

NET WT: 8840

TOTAL 159.50

B2/S2-2 CUSTOMER COPY *** CHARGE *** LOAD TICKET #: 11879

CONCRETE
BILL OF LADING

TRANSPORTATION
EPA #CAD0000489
HAZ WASTE #3529

FALCON DISPOSAL SERVICE
An Environmental Management Company

42335 BOSCELL ROAD, FREMONT, CA 94538
(510) 252-9500 • FAX: (510) 252-9555
BAY AREA FACILITY

851022

FALCON CUSTOMER # 0833	SITE #
CUSTOMER NAME	REQUESTED BY MICHELLE
BILLING ADDRESS	CUSTOMER PHONE (707) 4[illegible]
CITY / STATE CA / ZIP	PURCHASE ORDER #
JOB DATE / JOB TIME / JOB CONTACT	JOB CONTACT PHONE / JOB # / FS ☐
GENERATOR NAME	EPA ID #
ADDRESS	BOE #
CITY / STATE CA / ZIP	BIN DROPPED 20 [illegible] / BIN PICKED UP
ACCT # / WAST STREAM APPROVAL # / DISPOSAL FACILITY / APPT. TIME / DATE	BIN DROPPPED / BIN PICKED UP
MANIFESTED BY / MANIFEST # / DISPOSAL BILLED TO	BIN IN DISPATCH / BIN OUT DISPATCH

SERVICES REQUESTED
[illegible] FOR DISPOSAL - [illegible] YD. FOR [illegible] DISPOSAL.
- DISPOSAL AT RECYCLING CNTR -

SERVICES PERFORMED
PU 1 20 RT. / TAKE TO YARD.

REMARKS

CUSTOMER SIGNATURE | TOTAL HOURS

DRIVER HAULER	EMP NO.	DRIVER SIGNATURE	TRUCK TRAILER #

GRANULAR ACTIVATED CARBON CERTIFICATES OF REACTIVATION

CERTIFICATE OF REACTIVATION

Westates Carbon - Arizona, Inc.

A Wheelabrator Technologies Company

WCAI
P. O. Box B
2523 Mutahar Street
Parker, Arizona 85344

GENERAL SERVICES ADMINISRATION	01/22/97	2249OA
DRUM	5	970004NH
ALAMEDA, CA.		

The spent carbon received on the above date was processed through the Westates Carbon - Arizona, Inc. thermal treatment system. This spent carbon was reactivated, in accordance with federal regulations, by a thermal process that completely removed volatile and semi-volatile organic contaminants adsorbed on the spent carbon and reactivated the carbon for suitable reuse.

Reactivation of the spent carbon by the Westates Carbon-Arizona, Inc. treatment system completes all of the certificate holder's responsibilities under the United States Resource Conservation and Recovery Act.

FEDERAL EPA I.D. AZD 982 441 253

Monte McCue, WCAI Plant Manager

FEB 03 1997
Date

CERTIFICATE OF REACTIVATION

Westates Carbon - Arizona, Inc.

A Wheelabrator Technologies Company

WCAI
P. O. Box E
2523 Mutahar Street
Parker, Arizona 85344

GENERAL SERVICES ADMINISTRATION	01/24/97	000113

DRUM	13	970004NH

ALAMEDA, CA.

The spent carbon received on the above date was processed through the Westates Carbon - Arizona, Inc. thermal treatment system. This spent carbon was reactivated, in accordance with federal regulations, by a thermal process that completely removed volatile and semi-volatile organic contaminants adsorbed on the spent carbon and reactivated the carbon for suitable reuse.

Reactivation of the spent carbon by the Westates Carbon-Arizona, Inc. treatment system completes all of the certificate holder's responsibilities under the United States Resource Conservation and Recovery Act.

FEDERAL EPA I.D. AZD 982 441 263

Monte McCue, WCAI Plant Manager

FEB 03 1997
Date

WEIGHT TICKETS OF
CLEAN, DRY SOIL
ADDED TO UST TANK CONTENTS

Oct - July

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17793 - 1
TIME IN: 07:33 I/O: O
TIME OUT: 07:33
STAGE TICKET: 19591

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 LIC#: 3A02657 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENVIRONMENTAL SERVICES - OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE:

ORIGIN:

WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
RFD BACKFILL DIRT	25.88	T				

GROSS: 82760
TARE: 31000 PB
NET: 51760 TONS: 25.88

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA

WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

Dirt out

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17866 - 1
TIME IN: 12:02 I/O: O
TIME OUT: 12:02
STAGE TICKET: 19665

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 LIC#: 9A02657 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES OF OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE: ORIGIN:

WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
BFD BACKFILL DIRT	15					

GROSS: 61520
TARE: 31000 PB
NET: 30520 TONS: 15.26

CUSTOMER: John Galvan
WEIGHMASTER:

WEIGH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

Dirt out July

LTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17911 - 1
TIME IN: 14:51 I/O: O
TIME OUT: 14:51
STAGE TICKET: 19709

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 RIG: 9A02657 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
ESTINATION: ALA ALAMEDA
OUTE: ORIGIN:

ASTE DESCRIPTION	QUAN	PER	RATE	AMOUNT	TAX	TOTAL
ED BACKFILL DIRT	9.57	T				

ROSS: 50140
TARE: 31000 PB
NET: 19140 TONS: 9.57

CUSTOMER: [signature]
WEIGHMASTER: _____

IGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

Out TO Alameda

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17935 - 1
TIME IN: 18:01 I/O: O
TIME OUT: 18:01
STAGE TICKET: 19733

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 LIC#: 9A02657 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV SERVICES - OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE: ORIGIN:

WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
BACKFILL DIRT	7.78	T				

GROSS: 46560
TARE: 31000 PB
NET: 15560 TONS: 7.78

CUSTOMER:
WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LUTREL
1605)

AMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17860 - 1
TIME IN: 11:50 I/O: 0
TIME OUT: 11:50
STAGE TICKET: 19659

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 LIC: SP27018 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
TINATION: ALA ALAMEDA
TE: ORIGIN:

TE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
BACKFILL DIRT	8.73	T				

CUSTOMER:

GS: 47460
RE: 30000 PB
ET: 17460 TONS: 8.73 WEIGHMASTER:

H IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

HIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, EASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS ERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY HAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA USINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT TANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LUTREL
1605)

LTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17797 - 1
TIME IN: 07:58 I/O: 0
TIME OUT: 07:58
STAGE TICKET: 19596

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 LIC: SP27018 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
ESTINATION: ALA ALAMEDA
OUTE: ORIGIN:

STE, DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
D BACKFILL DIRT	13.83	T				

CUSTOMER:

OSS: 57660
ARE: 30000 PB
NET: 27660 TONS: 13.83 WEIGHMASTER:

GH IN CLERK: HALL, LUOLA WEIGH OUT CLERK: HALL, LUOLA

IS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LUTRL
#16051

ALTAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17910 - 1
TIME IN: 14:49 I/O: O
TIME OUT: 14:49
STAGE TICKET: 19708

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 LIC: SP27018 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
ESTINATION: ALA ALAMEDA
OUTE: ORIGIN:

ASTE DESCRIPTION
FD BACKFILL DIRT

	QUAN	PER	RATE	AMOUNT	TAX	TOTAL
	5.74	T				

ROSS: 41480
TARE: 30000 PB
NET: 11480 TONS: 5.74

CUSTOMER:
WEIGHMASTER:

IGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

TAMONT LANDFILL & RRF

DATE: 12/03/96 TICKET: 17934 - 1
TIME IN: 17:58 I/O: O
TIME OUT: 17:58
STAGE TICKET: 19732

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45 LIC: SP27018 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
TINATION: ALA ALAMEDA
TE: NA NON-APP ORIGIN:

TE DESCRIPTION
BACKFILL DIRT

	QUAN	PER	RATE	AMOUNT	TAX	TOTAL
	12.63	T				

S: 55260
E: 30000 PB
T: 25260 TONS: 12.63

CUSTOMER:
WEIGHMASTER:

IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

S TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, URED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS RTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY APTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA SINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT NDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 17973 - 1
TIME IN: 08:49 I/O: 0
TIME OUT: 08:49
STAGE TICKET: 19772

CARRIER: CRO CROSS TRUCKING
TRUCK#: 2004 LIC: 9C28477 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
ESTINATION: ALA ALAMEDA
OUTE: ORIGIN:

ASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
FD BACKFILL DIRT	15.88	T				

ROSS: 65580
TARE: 33820 PB
NET: 31760 TONS: 15.88

CUSTOMER: _____
WEIGHMASTER: _____

IGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18055 - 1
TIME IN: 13:17 I/O: 0
TIME OUT: 13:17
STAGE TICKET: 19854

CARRIER: CRO CROSS TRUCKING
TRUCK#: 2004 LIC: 9C28477 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES - OUTBOUND
ESTINATION: ALA ALAMEDA
OUTE: ORIGIN:

ASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
FD BACKFILL DIRT	10.57	T				

ROSS: 54960
TARE: 33820 PB
NET: 21140 TONS: 10.57

CUSTOMER: _____
WEIGHMASTER: _____

IGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

Back out

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18009 - 1
TIME IN: 10:50 I/O: 0
TIME OUT: 10:50
STAGE TICKET: 19807

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L41 PID: 9A02657 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE: ORIGIN:

WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
BFD BACKFILL DIRT	15.82	T				

GROSS: 62640
TARE: 31000 PB
NET: 31640 TONS: 15.82

CUSTOMER: John Calimas
WEIGHMASTER:

WEIGH IN CLERK: FELIX PENA WEIGH OUT CLERK: FELIX PENA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 12700 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

Out

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18078 - 1
TIME IN: 14:25 I/O: O
TIME OUT: 14:25
STAGE TICKET: 19885

CARRIER: LUT LUTRE TRUCKING, INC
TRUCK#: L41 LIC: 9A02653 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV SERVICES OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE:

ORIGIN:

WASTE DESCRIPTION	QUAN	PER	RATE	AMOUNT	TAX	TOTAL
FD BACKFILL DIRT	10.93	T				

GROSS: 52860
TARE: 31000 PB
NET: 21860 TONS: 10.93

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE

WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

ALTAMONT LANDFILL & RRF

DATE: 12/04/96 TICKET: 18059 - 1
TIME IN: 13:34 I/O: O
TIME OUT: 13:34
STAGE TICKET: 19859

CARRIER: LUT LUTRELL TRUCKING, INC.
TRUCK#: L45 LIC: SP27018 TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES OUTBOUND
DESTINATION: ALA ALAMEDA
ROUTE: ORIGIN:

WASTE DESCRIPTION	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
BFD BACKFILL DIRT	7.55	T				

GROSS: 45100
TARE: 30000 PB
NET: 15100 TONS: 7.55

CUSTOMER:

WEIGHMASTER:

WEIGH IN CLERK: RAMIREZ, JOSE WEIGH OUT CLERK: RAMIREZ, JOSE

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

LTAMONT LANDFILL & RRF

DATE: 12/06/96 TICKET: 18265 - 1
TIME IN: 08:42 I/O: O
TIME OUT: 08:42
STAGE TICKET: 20073

CARRIER: LUT LUTREL TRUCKING, INC
TRUCK#: L45
IC: SP2701B TYPE: ED TRAILER#:
CUSTOMER: ALLIO ALLIED ENV. SERVICES 2 OUTBOUND
ESTINATION: ALA ALAMEDA
ORIGIN:
OUTE:

DESCRIPTION
BACKFILL DIRT

	QUAN.	PER	RATE	AMOUNT	TAX	TOTAL
	8.89	T				

ROSS: 47780
ARE: 30000 PB
NET: 17780 TONS: 8.89

CUSTOMER:

WEIGHMASTER:

GH IN CLERK: HALL, LUOLA

WEIGH OUT CLERK: HALL, LUOLA

THIS IS TO CERTIFY THAT THE FOLLOWING DESCRIBED COMMODITY WAS WEIGHED, MEASURED, OR COUNTED BY A WEIGHMASTER WHOSE SIGNATURE IS ON THIS CERTIFICATE, WHO IS A RECOGNIZED AUTHORITY OF ACCURACY, AS PRESCRIBED BY CHAPTER 7 COMMENCING WITH SECTION 127001 OF DIVISION 5 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE ADMINISTERED BY THE DIVISION OF MEASUREMENT STANDARDS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.

APPENDIX 6

ALAMEDA COUNTY
HEALTH SERVICES AGENCY
INSPECTION REPORT

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # 4655 Site Name Alameda Federal Ctr Today's Date 12/6/96

Site Address 620 Central

City Alameda Zip 94501 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
____ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments: Came out to site to oversee sampling of tank pit & removal of 2 10,000-gallon USTs (Tanks 3 & 4). ~~Heat blows~~ tops have already been cut in order to remove sludge, sand & product before disposal. A concrete pad exists beneath the USTs, and due to the instability of the tank pit and the groundwater, this pad will not be removed. Therefore, vertical excavation below the pad will not be conducted. The west end rim of Tank 4 had several large holes in it. Large wooden pegs were hammered at bottom into holes to prevent leakage of groundwater into tank. (Tanks were probably used for heating oil due to the pipes from the USTs leading to the boiler room to north of USTs). Two pea size holes on the west side rim of the Tank 3 at top of tank. Pea size hole in middle of east end of Tank 3. Some pitting observed on Tank 3. Sand bar wrapping still on tank. Stained soil & product-covered soil on superficial areas of bottom of tank pit will be excavated today & hauled off. One soil sample was collected from each of the sidewalls at 7' bgs. Stained soil was noted in a zone around the pit from 4' - 8' bgs. Oil was noted in southeast sample & east & west walls. Odor was strong in southeast sample. Soils were gravelly clay.

II, III

Contact Bob Barry

Title PROJECT MANAGER

Signature [signature]

Inspector Juliet Shin

Signature [signature]

96431164

96434344

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # 4655 Site Name Alameda Federal Courthouse Today's Date 12/3/96

Site Address 620 Central Ave

City Alameda Zip 94501 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

_____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
_____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
_____ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:
Came out to site to check on status of tank removal (2 10,000-gallon diesel USTs). (a.ka. Tanks 3+4). At ~10:00 AM, they were adding dry soil to the contents of the USTs (wet soil) and mixing the soil to allow for drier, more acceptable soil for the landfill. According to Rob Barry, extensive contaminated soil was observed in the excavation originally at the south end. Also, a zone of soil contamination (refer to photo) was noted at the northeast portion of tank. This zone of soil contamination (Green soil) was observed on east wall when I came out to site. There was some floating product observed on groundwater initially, according to Rob Barry. The floating product observed on the water when I came out to the site (which was very heavy) was resulting from the inside of the USTs. The liquid contents was being removed from the USTs, placed into pit, and pumped to a baker tank and a carbon filter treatment system prior to discharge to the storm drain. The observed zone of soil contamination was actually observed along all sidewalls from ~5' to 9 or 10' bgs. This is indicative of

II, III

Contact Rob Barry
Title Proj. Mgr.
Signature [signature]

Inspector Juliet Shin
Signature [signature]

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

9/20/2

Site ID # 4655 Site Name Alameda Federal Center Today's Date 12/3/96

Site Address 620 Central Ave

City Alameda Zip 94501 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
____ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:
Smear zone. ~~So, soil~~ According to Rob Barry, there is an old boiler room to the north of these USTs. They ran into a concrete-encased series of pipes on the East side of tank pit. There were five pipelines and three of the pipelines ran from the USTs (carrying oil, to the boiler room. These pipes ~~have~~ will be taken off site w/ the USTs. So, they will continue to remove sludge & soil from USTs today & tomorrow & will probably have USTs removed on Thursday.

II, III

Contact Rob Barry
Title Prod. Mgr
Signature [signature]

Inspector Juliet Shin
Signature [signature]

APPENDIX 7

PERMITS

EBMUD WASTEWATER DISCHARGE PERMIT

EAST BAY
MUNICIPAL UTILITY DISTRICT

RoB Copy for you, I have one in the files MC

CERTIFIED MAIL
(Return Receipt Requested)
Certified Mail No. P 143 834 435

OCT 2 1996

October 16, 1996

Mr. David Esparza
CAL Inc.
2040 Peabody Road, Suite 400
Vacaville, CA 95687

Dear Mr. Esparza:

Re: Wastewater Discharge Permit (Account No. 503-50020)

The Wastewater Discharge Permit for CAL Inc, effective October 24, 1996, through April 23, 1997, is enclosed for your information and records. Please read the Standard Provisions and Reporting Requirements attached to the Permit. As a Permit holder, you are legally responsible for complying with all permit conditions and requirements.

CAL Inc. shall report to the Source Control Division any changes, either permanent or temporary, to the premises or operation that significantly affect either the volume or quality of wastewater discharged or deviate from the Terms and Conditions under which this Permit is granted.

If you have any questions regarding this matter, please contact Sue Jenné of the Source Control Division at (510) 287-1541.

Sincerely,

JOSEPH G. DAMAS, JR.
Manager of Source Control

JGD:SMJ:llg

[PERMIT]GSACAL_GW_PERMIT.

Enclosures

375 ELEVENTH STREET . OAKLAND . CA 94607-4240 . (510) 835-3000

General Services Administration, Region 9
Phillip Burton Federal Building and U.S. Courthouse
450 Golden Gate Avenue
San Francisco, CA 94102-3400

September 23, 1996

SEP 24 1996

East Bay Municipal District
375 Eleventh Street
Oakland, CA 94607-4240
Attention: Sue Jenne

Dear Ms. Jenne:

The General Services Administration (GSA) is requesting a waiver of the prohibition to discharge groundwater to the wastewater sewer system. Further, GSA requests a permit from EBMUD to discharge groundwater to the wastewater sewer system.

GSA has contracted with CAL INC to remove two 10,000 gallon underground storage tanks (USTs) from the Alameda Federal Center, Alameda, CA. The USTs were used to supply diesel to generators for the Maritime Academy located at the site in the 1940s. The site is now used strictly as administrative office space.

During the course of work, it is expected that approximately 36,000 gallons of groundwater per day for a period of about 1 week will be removed from the excavation. CAL INC will operate a groundwater pre-treatment system that will ensure that no additional pollutants are introduced to the wastewater sewer system. Unfortunately, reclamation of the groundwater will not be feasible, because of the need to dewater the excavation in order to carry out the removal of the USTs, because of the volume of groundwater that will be produced, and because of the prohibitive costs of hauling and off-site disposal.

Enclosed you will find an EBMUD application, the application fee of $2,490, a written procedure to maintain the pretreatment system, and background information including previous investigation results, as requested.

CAL INC. is hereby authorized to act as the GSA's representative in this matter and shall be responsible for fulfilling the necessary permit requirements of EBMUD. If you have any questions, please call me at (415) 522-3227 or Robert Barry, CAL Inc. at (707) 446-7996.

Sincerely,

John Stegner

John Stegner (9PEC)
Contracting Officer

cc: James Lew (9PEC)
Marty Rapozo, Abide
Robert Barry, CAL INC

RECORD OF REVIEW
This item has been reviewed for general conformance with the contract documents and any comment shown is subject to the requirements of the contract documents. Contract conditions place the responsibility for coordination and compliance with contract documents on the contractor.
☒ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ SUBMIT SPECIFIED ITEM
☐ RESUBMITTAL NOT REQ'D ☐ REVISE AND RESUBMIT
Date 10/01/96 By LR
CAPE ENVIRONMENTAL MANAGEMENT INC

EBMUD

WASTEWATER DISCHARGE PERMIT APPLICATION

RECEIVED
SEP - 3 1996
SOURCE CONTROL DIVISION

PERMIT NUMBER
503-50020

APPLICANT BUSINESS NAME
CAL INC

ADDRESS OF PREMISE DISCHARGING WASTEWATER	BUSINESS MAILING ADDRESS
620 Central Ave., Alameda, CA (STREET ADDRESS)	2040 Peabody Rd.,Suite 400 (STREET ADDRESS)
Alameda Federal Center (CITY)	Vacaville, Ca 95687 (CITY / ZIP CODE)

CHIEF EXECUTIVE OFFICER

David Esparza (NAME)	President (TITLE)
2040 Peabody Rd.,Suite 400 (STREET ADDRESS)	Vacaville, CA 95687 (CITY / ZIP CODE)

PERSON TO BE CONTACTED ABOUT THIS APPLICATION	PERSON TO BE CONTACTED IN EVENT OF EMERGENCY
Joe Krohn (NAME)	Joe Krohn (NAME)
Senior Geologist (TITLE) 707-446-7996 (PHONE)	707-446-7996 (DAY PHONE) 707-446-9110 (NIGHT PHONE)

DOCUMENTATION TO BE RETURNED WITH THE PERMIT APPLICATION:

- ☒ PROCESS DESCRIPTION
- ☒ WATER BALANCE CALCULATIONS
- ☐ WASTEWATER STRENGTH DATA BASE
- ☒ SCHEMATIC FLOW DIAGRAM
- ☒ BUILDING LAYOUT PLAN
- ☒ DESCRIPTION OF TREATMENT SYSTEM
- ☐ SELF-MONITORING METHOD
- ☒ SPILL PREVENTION AND CONTAINMENT PLAN
- ☒ A LIST OF ALL ENVIRONMENTAL PERMITS (E.G. Air, Hazardous Waste) (NONE YET)
- ☒ OTHER (SPECIFY) ① WASTEWATER CHARACTERIZATION DATA ② $2,490 PERMIT APPLICATION FEE

PROVISIONS

Applicant will comply with the EBMUD Wastewater Control Ordinance and all applicable rules and regulations.

Applicant will report to EBMUD, Wastewater Department any changes, permanent or temporary, to the premise or operations that significantly change the quality or volume of the wastewater discharge or deviation from the terms and conditions under which this permit is granted.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Esparza
NAME (See certification requirements on reverse)

SIGNATURE

President
TITLE

8/30/96
DATE

SD-30.1 2/91 N

EBMUD

CAL INC

BUSINESS NAME

Process Description

PURPOSE — The **Process Description** is intended to provide a description of the primary business activities and the substances which may enter into the wastewater from the business activity.

EBMUD USE	
Permit Number	503-50020
Business Classification Code	4950

BUSINESS ACTIVITY

Excavation and removal of two 10,000 gal. underground storage tanks.

DESCRIPTION OF PRODUCT

TYPE OF PRODUCT OR BRAND NAME	QUANTITIES	
	Past Calendar Year	Estimated This Year
Treated groundwater	-0-	866 Ccf

PROCESS DESCRIPTION

Proposed/ PROCESS DESCRIPTION List all wastewater generating operations	CHARACTERISTICS List all substances that may be discharged to the sewer.
Example: Rinsewater from electroplating bath	**Cr, Cu, Ni, Zn**
Example: Washdown of milk filling area	**fatty acids, milk**
Dewater Diesel UST	Water containing diesel
Excavation for Tank Removed	at concentrations of
	approximately 3 ppm

DISCHARGE PERIOD Proposed

a. Time of day from _____ to _____

b. Days of the week 24 hrs a day 7 days a week, for 3-4 weeks

BATCH DISCHARGE(S)

a. Day(s) of the week: _____ b. Time(s) of the day _____

c. Volume discharged _____ d. Rate of discharge 25 GPM

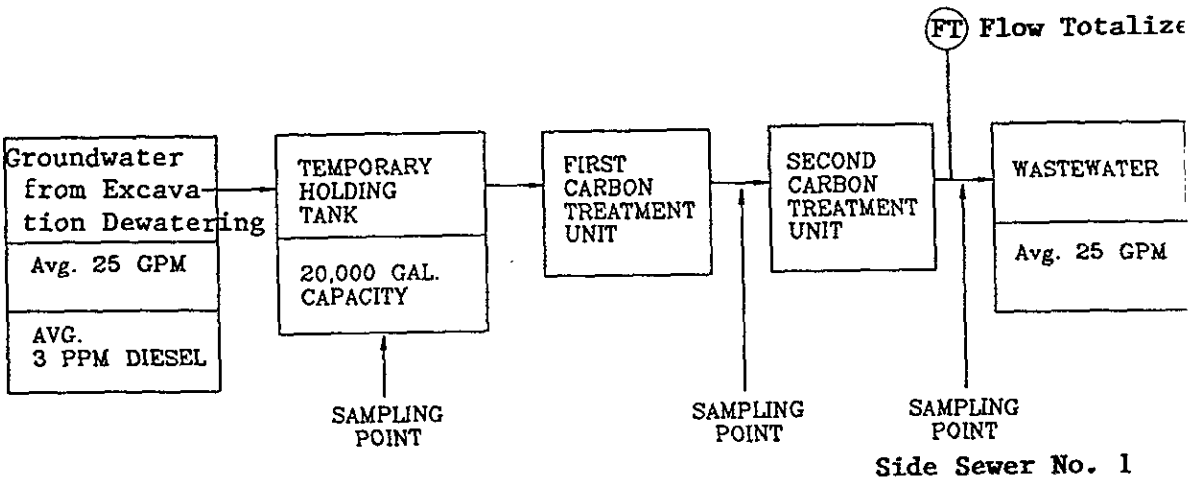
OTHER WASTES — List the type and volume of liquid waste and sludges removed from the premises by means other than the community sewer.

WASTE REMOVED BY (Name, address and State Transporter ID No.)	TYPE OF WASTE (Example. alkaline cleaners, organic solvents, treatment sludge)	WASTE I.D. No.	VOLUME (lbs)(gal)/mo

SD-31 • 2/

Permit No.

SCHEMATIC FLOW CHART
EXCAVATION DEWATERING
AND
GROUND PRE-TREATMENT SYSTEM
UST REMOVAL
GSA - ALAMEDA FEDERAL CENTER



CAL ENVIRONMENTAL INC
VACAVILLE, CA 95688 707-446-7996
JOB NUMBER 1816
REVISION
SCHMEATIC FLOW DIAGRAM
ALAMEDA FEDERAL CENTER 620 CENTRAL
ALAMEDA, CA.

EBMUD

Business Name CAL Inc.

Water Balance / Strength Summary

PURPOSE: This information will enable EBMUD to evaluate the volumes, source(s) and strengths of wastewater discharged to the community sewer.

Permit Number 503-50020

WATER USE AND DISPOSITION: Show on a separate sheet the method and calculations used to determine the quantities shown in the table.

Figures are: ☐ gallons per calendar day ☒ gallons per working day Number of working days per year 18

WATER USE	WATER SUPPLY FROM:			WASTEWATER DISCHARGED TO:					
	EBMUD	OTHER (1)		SIDE SEWER (gal/day)				OTHER (2)	
	gal/day	gal/day	CODE	No.1	No.____	No.____	No.____	gal/day	CODE
Sanitary									
Processes									
Boiler									
Cooling									
Washing									
Irrigation									
Product									
Stormwater									
Other (3)		36,000		36,000					
Subtotal		36,000		36,000					

EBMUD AND OTHER SUPPLY TOTAL 36,000 ALL SIDE SEWERS TOTAL 36,000

NOTES:

1. Enter the quantity and the appropriate code letter indicating the source:
   a. Well **b.** Creek **c.** Stormwater **d.** Reclaimed Water **e.** Raw Materials.
2. Enter the quantity and appropriate code letter indicating the discharge point:
   a. Stormdrain **b.** Rail, Truck, Barge **c.** Evaporation **d.** Product
3. Describe Other: Dewater diesel tank excavation for tank removal

SANITARY DISCHARGE: Please use the following data from the Uniform Plumbing Code, 1985, to determine sanitary wastewater volumes.

Field service employees - 5 gallons per employee per day
Office employees - 20 gallons per employee per day
Production employees - 25 gallons per employee per day
Production employees with showers - 35 gallons per employee per day

Include the effect that seasonal and weekend staffing changes may have on determining average volumes.

AVERAGE WASTEWATER STRENGTH: Data base must be attached, average self-monitoring and EBMUD data.

SIDE SEWER (mg/L)

	No. 1	No.____	No.____	No.____
CODF	15			
TSS	2			

WASTEWATER DISCHARGE PERMIT
Terms and Conditions

EBMUD

CAL Inc.
Account No. 503-50020

GENERAL REQUIREMENTS

I. Title I, Section 5 of EBMUD Ordinance No. 311 prohibits the discharge of groundwater to the community sewer. This Permit to discharge groundwater is considered an exception of the prohibition and is issued based on CAL Inc.'s application that discharge of pollutants to the community sewer will be minimized and methods to reclaim the groundwater, to the extent technically and economically feasible, have been made.

II. CAL Inc. shall comply with all items of the attached STANDARD PROVISIONS AND REPORTING REQUIREMENTS, revised 07/96 (SPARR).

III. This Permit is granted to CAL Inc., only for the discharge of treated groundwater generated during dewatering for the excavation and removal of Tank 3 and Tank 4 at Building 8 of the Alameda Federal Center located at 620 Central Avenue in Alameda, California.

IV. CAL Inc. shall cease discharge of the treated groundwater immediately if not in compliance with any of the Terms and Conditions of this Permit.

COMPLIANCE REQUIREMENTS

I. CAL Inc. shall pretreat all groundwater prior to discharging to the side sewer at 620 Central Avenue in Alameda. Pretreatment shall consist of processes displayed in *Schematic Flow Diagram, Alameda Federal Center, 620 Central Ave., Alameda, CA., 9/21/96.* CAL Inc. shall maintain the Pretreatment System in proper operating condition.

II. CAL Inc. shall maintain a current accidental spill prevention plan to eliminate or minimize the potential for an accidental or slug discharge of pollutants into the sanitary sewer system. The spill plan shall contain a response procedure which is posted in the work areas where spills are most likely to occur. The response procedure shall be prepared in accordance with Section B Paragraph I of *SPARR*, revised 07/96.

III. CAL Inc. identified the side sewer manhole located at the corner of Richardson Avenue and South Cressy Drive in Alameda, as the discharge location. The side sewer manhole is identified in *Site Map for the Removal of (2) 10,000 UST's, Alameda Federal Center, 620 Central Avenue, Alameda, CA, 9/2/96.* CAL Inc. shall not discharge at any other location without prior approval from the Source Control Division.

SD-30.7 2/

COMPLIANCE REQUIREMENTS (continued)

IV. CAL Inc. shall conduct sampling on the treated groundwater in accordance with the Self-Monitoring Reporting Requirements of this Permit, two hours after the start up of the pretreatment system. After sampling, the system shall be shut down, until EBMUD has reviewed the technical report. No commencement of groundwater discharge shall start without prior approval from EBMUD.

REPORTING REQUIREMENTS

I. Violations shall be reported in accordance with Section B Paragraph II of SPARR.

SELF-MONITORING REPORTING REQUIREMENTS

I. CAL Inc. shall submit a Technical Report to the District, within 30 days after the completion of any groundwater discharge. The Report shall contain, at a minimum, the following information:

- Date and time of the commencement of the discharge.
- Date and time of the conclusion of the discharge.
- Monthly totalizer readings from the totalizer located on the final discharge of the pretreatment system.
- Total volume discharged to the sanitary sewer in gallons.
- A description of the sampling method.
- All laboratory results and the corresponding chain of custody documentation.
- Certification and signature prepared in accordance with Section B Part V of *SPARR*, "Signature Requirements".

II. CAL Inc. shall monitor and sample the wastewater in accordance with Section C of *SPARR*. The wastewater shall be representative of the wastewater to be discharged into the side sewer.

III. Sample representative of the discharge from the pretreatment system to the sanitary sewer shall be taken at the sample tap downstream from the second carbon treatment unit. This sample location shall be referred to as Side Sewer No. 1 (SS#1) in all self-monitoring reports. The sample location is indicated in *Schematic Flow Diagram, Alameda Federal Center, 620 Central Ave., Alameda, CA., 9/21/96.*

SELF-MONITORING REPORTING REQUIREMENTS (continued)

IV. SS#1 shall be sampled at a minimum of:

- Two hours after start up of the pretreatment system.
- Weekly after start up.

Parameters to be monitored and the corresponding analytical method shall be:

Parameter	Analysis Method
TPH - diesel	EPA 8015 modified - diesel

CAL Inc.
Account No. 503-50020

MONITORING and TESTING CHARGES

Total EBMUD Inspections Per Year: 1 @ $540.00 each = $540.00 /year

Total Analyses Per Year:

Parameter	Tests per year	Charge per test	Total Charge per year
Oil & Grease (HC)	1	$47.00	$47.00

Monitoring and Testing Charge = $587.00 /year
$97.83 /month

WASTEWATER DISPOSAL CHARGE

All wastewater discharged will be charged for treatment and disposal service at the unit rate measured for other carbon treated groundwater discharges.
(1 Ccf = 100 cubic feet = 748 gallons)

Unit rate = $0.39 /Ccf
Discharge volume = 866 Ccf/month or $337.74 /month

WASTEWATER CAPACITY CHARGE

The capacity fee is calculated by multiplying the maximum monthly wastewater discharge volume by the applicable capacity fee rate in effect at start-up. Each month, 1/36 of the capacity charged will be billed to the account, until the entire charge has been paid in three years.

Discharge volume = 866 Ccf/month
Capacity fee rate = $48.76 /Ccf/month
Capacity fee = $42,226.16 or $1,172.95 /month

WASTEWATER DISCHARGE PERMIT

Terms and Conditions

EBMUD

FEES AND WASTEWATER CHARGES

The following fees and charges are due when billed by the District:

Permit Fee	$2,490.00 (PAID)
Monthly Monitoring Charges	$97.83
Monthly Wastewater Disposal Charge	$337.74
Monthly Wastewater Capacity Charge	$1,172.95
Total Monthly Charges =	$1,608.52

This Permit may be amended to include changes to rates and charges which may be established by the District during the term of this Permit.

AVERAGE WASTEWATER DISCHARGE *

LAST 12 MONTHS	PRECEDING 12 - 24 MONTHS
N/A	N/A

* Gallons per calendar day

AUTHORIZATION

The above named Applicant is hereby authorized to discharge wastewater to the community sewer, subject to said Applicant's compliance with EBMUD Wastewater Control Ordinance, compliance conditions, reporting requirements and billing conditions.

Effective Date: October 24, 1996

Expiration Date: April 23, 1997

David R Williams 10/21/96

DIRECTOR, WASTEWATER DEPARTMENT DATE

SD-30 2 2/>

STANDARD PROVISIONS AND REPORTING REQUIREMENTS *(SPARR)*

The SPARR contains general stipulations, reporting and sampling requirements that are common to Wastewater Discharge Permits issued by the District. The SPARR are included as enforceable terms and conditions of the permit, pursuant to EBMUD Ordinance No. 311 (Ordinance 311). The Permit Holder shall reference Ordinance 311 in addition to the Wastewater Discharge Permit and SPARR.

SECTION A. GENERAL PROVISIONS

I. Terms and Conditions of Permit

This Wastewater Discharge Permit is issued pursuant to Ordinance 311 and EBMUD resolutions setting rates and charges, unless specifically approved by the Director. Applications for permit renewal shall be submitted to the District at a minimum of 60 days prior to expiration.

II. Disposal of Hazardous Waste

The disposal of hazardous waste by the Permit Holder shall be in accordance with all local, State and Federal laws and regulations applicable to such matters.

III. Dilution Prohibition

The Permit Holder shall not increase the use of process water, or in any other way dilute the process discharge or hazardous waste, as a substitute for treatment, to achieve compliance.

IV. Bypass of Treatment Facilities

The Permit Holder shall not bypass treatment facilities unless:

a. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance;

c. The Permit Holder submitted advance notice of the need for a bypass to the District. If the Permit Holder knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

The Permit Holder shall submit notice of an unanticipated bypass as required in Section B, Paragraph II. Twenty-four Hour Violation Reporting.

V. Calibration and Maintenance of Equipment

All flow measurement, discharge sampling, process monitoring, and treatment equipment shall be periodically calibrated, inspected and maintained to ensure their accuracy and reliability.

VI. Closure Plan

Permit Holders that intend to close a facility or cease a regulated process shall provide a written closure plan at least 90 days prior to closing or immediately, when intent to close becomes known less than 90 days prior to closing.

The plan shall include the following:

a. Date of proposed work or production stoppage;

b. Date of proposed final closure (after cleaning and demobilizing activities are complete);

c. All chemical and container consolidation activities and raw material and waste inventory. The inventory shall include, but is not limited to all barrels, plating tanks, and miscellaneous chemicals and containers. Consolidation activities include, but are not limited to container marking, chemical sampling and analysis, and waste treatment;

d. Description of cleaning activities involving hazardous materials;

e. Description of methods of disposing of all inventoried items.

V. Signatory Requirements

All applications, reports, or information requested by the Director, shall be signed by a duly authorized representative and must contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

VI. Retention of Records

a. The Permit Holder shall retain all records of monitoring information, including calibration and maintenance records, original strip chart recordings for continuous monitoring instrumentation, copies of reports required by this Permit, and records used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the District shall be retained and preserved by the Permit Holder until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

SECTION C. MONITORING AND SAMPLING

I. Representative Sampling

Samples and measurements taken, as required in this Permit, shall be representative of the volume and nature of the monitored discharge.

II. Chain of Custody

a. For each sample, a Chain of Custody shall document:

1. The location, the type of sample (grab or composite), the date(s) and time, or span of time the samples were taken;
2. The number of container(s), and type (glass, plastic, vial, etc.);
3. Preservation techniques (ice, refrigeration at 4 °C, chemicals added, etc.);
4. Sampler's name, legibly written;
5. Sample ID number (to cross reference with the sample ID number on the Laboratory results);
6. All persons handling the sample and the individual receiving the sample at the laboratory, including their signature, printed name, company, date and time the sample was relinquished and accepted.

b. If a sample is transported or handled by a courier, delivery service (public or private) or shipper, indicate the company or individual's name and the method of packaging the samples on Chain of Custody.

c. Analyses performed in the Field shall be indicated as such on the Chain of Custody (e.g. pH - field test).

d. If the Chain of Custody submitted with a Self-Monitoring Report is incomplete, the Report may be construed as incomplete and the sampling shall be repeated.

Parameter	Preservative	Maximum Hold Time	EPA Method	STD Methods* 18th Ed.
Nickel (Total)	HNO_3 to pH<2 Cool to 4°C	6 months	249.1 249.2 200.7	3111 B or C 3113 B 3120 B
Oil & Grease (Total) Oil & Grease (HC)	H_2SO_4 to pH<2 Cool to 4°C	28 days	413.1 418.1 (IR)	5520-B 5520-F
Phenolic Compounds	H_2SO_4 to pH<2 Cool to 4°C	24 days	420.1 420.2	5530-D
pH, Hydrogen Ion	None	Analyze immediately	150.1	4500-H+ B
Silver (Total)	HNO_3 to pH<2 Cool to 4°C	6 months	272.1 272.2 200.7	3111 B or C 3113 B 3120 B
Temperature (°C)	None	Analyze immediately	170.1	2550-B
Total Suspended Solids, TSS, filtered with Whatman 934 AH Glass Microfiber filter, or equivalent	Cool to 4°C	7 days	160.2	2540-D
Zinc (Total)	HNO_3 to pH<2 Cool to 4°C	6 months	289.1 289.2 200.7	3111 B or C
Organochlorine Pesticides & Poly Chlorinated Biphenyls (PCBs)	Cool to 4°C	7 days until extraction; 40 days after extraction	608	6630 B & C
Purgeable Organics (BTEX)	HCl to pH <2, add ascorbic acid if Cl_2 is present. VOA vials, No headspace. Cool to 4°C	14 days	624, 602 8020	6210 B
Semi-Volatile Organics (BNA's)	Cool to 4°C	7 days until extraction; 40 days after extraction	625	6410 B
Total Identifiable Chlorinated Hydrocarbon (Volatile Organics)	HCl to pH<2, add ascorbic acid if Cl_2 is present. VOA vials, No headspace. Cool to 4°C	14 days	624	6210 B
Total Petroleum Hydrocarbon (TPH)	Cool to 4°C	14 days	8015	-----

* Standard Methods For The Examination of Water and Wastewater

b. A general partner or proprietor if the Permit Holder is a partnership or sole proprietorship, respectively.

c. A person having overall responsibility for operation of the regulated facility, if the Permit Holder is a public agency, including the State of California or the United States of America.

d. A representative of the individual designated in paragraph (a), (b) or (c) if:
The authorization is made in writing by the individual described in paragraph (a), (b) or (c) and submitted to the District, and the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the wastewater discharge originates, such as the position of plant manager, a field superintendent, or a position of equivalent responsibility, or an individual or a position having overall responsibility for environmental matters for the facility.

If an authorization under paragraph (d) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) must be submitted to the District prior to or together with any reports to be signed by an authorized representative.

VI. Hazardous Waste - Listed and characterized wastes under the Section 3001 of the Resource Conservation and Recovery Act (RCRA), as described in the Code of Federal Regulations (40 CFR Part 261) or as defined in California Health and Safety Code Section 25117.

VII. Limits
Average limitations (monthly and 4-day), the monthly average is the arithmetic average value of all samples taken in a calendar month. A 4-day average is the arithmetic average value of 4 valid consecutive samples collected by the District and the Permit Holder.
Maximum limitations - The maximum concentration of a pollutant allowed to be discharged at any time, as determined from the analysis of a grab or composite sample.

VIII. Permit Holder - Any person issued a Wastewater Discharge Permit.

IX. Samples
Grab - an individual sample collected in a short period of time not exceeding fifteen minutes.
Composite - Samples consisting of a number of discrete aliquots combined into a single sample, representative of a period of time.

X. Significant Noncompliance - A Person is in significant noncompliance (SNC) if its violation meets one or more of the following criteria:

a. Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.

b. Technical Review Criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC.
TRC = 1.4 for Oil and Grease.
TRC = 1.2 for all other pollutants (except pH).

c. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the exercise of emergency authority.

d. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a Wastewater Discharge Permit or Manager's Order for starting construction, completing construction, or attaining final compliance.

e. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self monitoring reports, and reports on compliance with compliance schedules.

f. Failure to accurately report noncompliance.

g. Any other violation or group of violations of discharge prohibitions of Section A, II.

Federal, State, and local laws and regulations pertaining to water, air, soil, and noise pollution.

1.08 PROTECTION OF NATURAL RESOURCES

A. Preserve the natural resources within the project boundaries and outside the limits of permanent work performed under this Contract in their existing condition or restore to an equivalent or improved condition upon completion of the work. Repair or restore to original condition all trees or other landscape features scarred or damaged by equipment or operations. Obtain Contracting Officer's approval before repair or restoration. Confine construction activities to areas defined by the work schedule, drawings, and specifications. Federal Acquisition Regulation clause 52.236-9 applies.

B. Construction equipment is to be kept in good repair, without leaks of hydraulic or lubricating fluids. If such leaks or drips do occur, they shall be cleaned up immediately. Drip pans shall be utilized when vehicles are parked. Confine equipment maintenance and/or repair to one location. Control runoff in this area to prevent contamination of soils and water.

C. At or before Contract completion, obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and all other vestiges of construction. Temporary roads, parking areas, staging areas, and similar temporary use areas be where excavation has been accomplished shall be graded in conformance with surrounding areas. Restore all disturbed areas to their original condition.

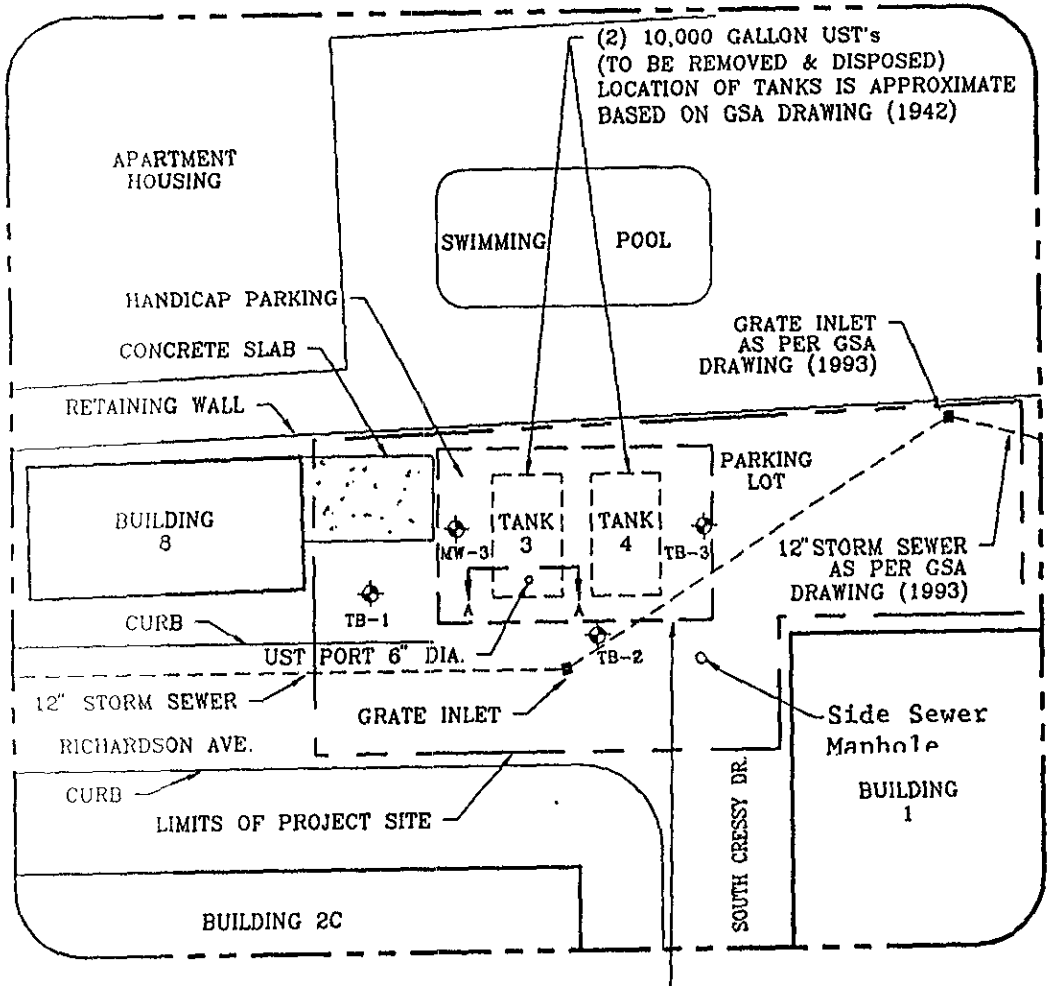
1.09 EROSION AND SEDIMENT CONTROL MEASURES:

A. Burn-off of ground cover is not permitted.

B. Borrow pits are not permitted on Government property.

C. Provide necessary controls to prevent visible or measurable erosion from leaving the construction site.

D. Provide temporary protection for erodible soils. Employ methods such as mechanical retardation, sediment basins, or vegetation and mulch. All earthwork brought to final grade shall be immediately finished as indicated or specified. Immediately protect sideslopes and backslopes upon completion of rough grading. Plan and conduct all earthwork to minimize duration of exposure of unprotected soils. In no case shall soil stabilization measures be delayed more than 14 days following temporary or permanent ceasing of construction activity in that portion of the



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NOTE:
CROSS SECTION A-A OF TANK #3
SEE FIGURE 4

SCALE
0' 5' 10' 15' 20' 25'

CAL ENVIRONMENTAL SERVICES INC	JOB NUMBER: 1816	DRAWN BY: P LENTINO	DATE: 9/02/96
VACAVILLE, CA.95688 707-446-7996	REVISIONS:	CAD FILENAME: 1816_F3	SCALE: SCALE BAR

SITE MAP FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG# FIG 3

Permit No. 503-50020

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMITS
AND
ALAMEDA COUNTY
HEALTH CARE SERVICES AGENCY
UNDERGROUND STORAGE TANK
CLOSURE PLAN
AND
ALAMEDA COUNTY
HEALTH CARE SERVICES AGENCY
INSPECTION REPORTS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM: [X] 1 NEW PERMIT [ ] 2 INTERIM PERMIT [ ] 3 RENEWAL PERMIT [ ] 4 AMENDED PERMIT [ ] 5 CHANGE OF INFORMATION [ ] 6 TEMPORARY SITE CLOSURE [ ] 7 PERMANENTLY CLOSED SITE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME	NAME OF OPERATOR	
Alameda Federal Center	General Services Administration	
ADDRESS: 620 Central Ave	NEAREST CROSS STREET: Mc Kay	PARCEL # (OPTIONAL)
CITY NAME: Alameda,	STATE: CA / ZIP CODE: 94502	SITE PHONE # WITH AREA CODE: 415-522-3227

✓ BOX TO INDICATE: [X] CORPORATION [ ] INDIVIDUAL [ ] PARTNERSHIP [ ] LOCAL-AGENCY DISTRICTS* [ ] COUNTY-AGENCY* [ ] STATE-AGENCY* [ ] FEDERAL-AGENCY*

* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST _____

TYPE OF BUSINESS	[ ] IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE	E. P. A. I. D. # (optional)
[ ] 1 GAS STATION [ ] 2 DISTRIBUTOR [ ] 3 FARM [ ] 4 PROCESSOR [X] 5 OTHER			

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST): Krohn, Joe	PHONE # WITH AREA CODE: 707-446-7996	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST): Esparza, David	PHONE # WITH AREA CODE: 707-446-4163	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME	CARE OF ADDRESS INFORMATION		
General Services Administration	John Stegner		
MAILING OR STREET ADDRESS: 450 Golden Gate Ave.	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL-AGENCY [ ] STATE-AGENCY [ ] CORPORATION [ ] PARTNERSHIP [ ] COUNTY-AGENCY [X] FEDERAL-AGENCY		
CITY NAME: San Francisco	STATE: CA	ZIP CODE: 94102-3400	PHONE # WITH AREA CODE: 415-522-3227

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER	CARE OF ADDRESS INFORMATION		
Same As above			
MAILING OR STREET ADDRESS	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL-AGENCY [ ] STATE-AGENCY [ ] CORPORATION [ ] PARTNERSHIP [ ] COUNTY-AGENCY [ ] FEDERAL-AGENCY		
CITY NAME	STATE	ZIP CODE	PHONE # WITH AREA CODE

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44- [ ][ ][ ][ ][ ][ ]

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) – IDENTIFY THE METHOD(S) USED

✓ box to indicate: [ ] 1 SELF-INSURED [ ] 2 GUARANTEE [ ] 3 INSURANCE [ ] 4 SURETY BOND [ ] 5 LETTER OF CREDIT [ ] 6 EXEMPTION [ ] 99 OTHER _____

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I. [ ] II [ ] III [ ]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED)	OWNER'S TITLE	DATE MONTH/DAY/YEAR
JAMES N LEW	PROJECT MANAGER	09.20.96

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	FACILITY #
[ ][ ]	[ ][ ][ ]	[ ][ ][ ][ ][ ][ ]

LOCATION CODE - *OPTIONAL*	CENSUS TRACT # - *OPTIONAL*	SUPVISOR - DISTRICT CODE - *OPTIONAL*

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.
OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: [X] 1 NEW PERMIT; [ ] 2 INTERIM PERMIT; [ ] 3 RENEWAL PERMIT; [ ] 4 AMENDED PERMIT; [ ] 5 CHANGE OF INFORMATION; [ ] 6 TEMPORARY TANK CLOSURE; [ ] 7 PERMANENTLY CLOSED ON SITE; [ ] 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: Alameda Federal Center

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. #	B. MANUFACTURED BY:
C. DATE INSTALLED (MO/DAY/YEAR)	D. TANK CAPACITY IN GALLONS: 10,000 gallons

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A: [X] 1 MOTOR VEHICLE FUEL; [ ] 2 PETROLEUM; [ ] 3 CHEMICAL PRODUCT; [ ] 4 OIL; [ ] 80 EMPTY; [ ] 95 UNKNOWN

B: [ ] 1 PRODUCT; [ ] 2 WASTE

C: [ ] 1a REGULAR UNLEADED; [ ] 1b PREMIUM UNLEADED; [ ] 1c MIDGRADE UNLEADED; [ ] 2 LEADED; [X] 3 DIESEL; [ ] 4 GASAHOL; [ ] 5 JET FUEL; [ ] 6 AVIATION GAS; [ ] 7 METHANOL; [ ] 8 M85; [ ] 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED — C. A. S. #:

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: [ ] 1 DOUBLE WALL; [X] 2 SINGLE WALL; [ ] 3 SINGLE WALL WITH EXTERIOR LINER; [ ] 4 SINGLE WALL IN A VAULT; [ ] 5 INTERNAL BLADDER SYSTEM; [ ] 95 UNKNOWN; [ ] 99 OTHER_____

B. TANK MATERIAL (Primary Tank): [?] 1 BARE STEEL; [ ] 2 STAINLESS STEEL; [ ] 3 FIBERGLASS; [ ] 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC; [ ] 5 CONCRETE; [ ] 6 POLYVINYL CHLORIDE; [ ] 7 ALUMINUM; [ ] 8 100% METHANOL COMPATIBLE W/FRP; [ ] 9 BRONZE; [ ] 10 GALVANIZED STEEL; [ ] 95 UNKNOWN; [ ] 99 OTHER_____

C. INTERIOR LINING OR COATING: [ ] 1 RUBBER LINED; [ ] 2 ALKYD LINING; [ ] 3 EPOXY LINING; [ ] 4 PHENOLIC LINING; [ ] 5 GLASS LINING; [ ] 6 UNLINED; [X] 95 UNKNOWN; [ ] 99 OTHER_____

IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: [ ] 1 POLYETHYLENE WRAP; [ ] 2 COATING; [ ] 3 VINYL WRAP; [ ] 4 FIBERGLASS REINFORCED PLASTIC; [ ] 5 CATHODIC PROTECTION; [ ] 91 NONE; [X] 95 UNKNOWN; [ ] 99 OTHER_____

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____
DROP TUBE YES ___ NO X STRIKER PLATE YES ___ NO X DISPENSER CONTAINMENT YES ___ NO X

IV. PIPING INFORMATION

CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A U 1 SUCTION; A U 2 PRESSURE; A (U) 3 GRAVITY; A U 4 FLEXIBLE PIPING; A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL; A U 2 DOUBLE WALL; A U 3 LINED TRENCH; A U 95 UNKNOWN; A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL; A U 2 STAINLESS STEEL; A U 3 POLYVINYL CHLORIDE (PVC); A U 4 FIBERGLASS PIPE; A U 5 ALUMINUM; A U 6 CONCRETE; A U 7 STEEL W/ COATING; A U 8 100% METHANOL COMPATIBLE W/FRP; A U 9 GALVANIZED STEEL; A U 10 CATHODIC PROTECTION; A U 95 UNKNOWN; A U 99 OTHER_____

D. LEAK DETECTION: [ ] 1 MECHANICAL LINE LEAK DETECTOR; [ ] 2 LINE TIGHTNESS TESTING; [ ] 3 CONTINUOUS INTERSTITIAL MONITORING; [ ] 4 ELECTRONIC LINE LEAK DETECTOR; [ ] 5 AUTOMATIC PUMP SHUTDOWN; [ ] 99 OTHER_____

V. TANK LEAK DETECTION

[ ] 1 VISUAL CHECK; [ ] 2 MANUAL INVENTORY RECONCILIATION; [ ] 3 VADOZE MONITORING; [ ] 4 AUTOMATIC TANK GAUGING; [ ] 5 GROUND WATER MONITORING; [ ] 6 ANNUAL TANK TESTING; [ ] 7 CONTINUOUS INTERSTITIAL MONITORING; [ ] 8 SIR; [ ] 9 WEEKLY MANUAL TANK GAUGING; [ ] 10 MONTHLY TANK TESTING; [X] 95 UNKNOWN; [ ] 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING	3. WAS TANK FILLED WITH INERT MATERIAL?
1950	1 GALLONS	YES [X] NO [ ]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	DATE
James Lew, GSA	09.20.96

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# — COUNTY # [ ][ ] JURISDICTION # [ ][ ][ ] FACILITY # [ ][ ][ ][ ][ ][ ] TANK # [ ][ ][ ][ ][ ][ ]

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

OCT 11 1996

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

October 8, 1996

Mr. James Lew
General Services Administration (GSA)
San Francisco Service Center (9PEC)
450 Golden Gate Ave., 3rd Flr. East
San Francisco, CA 94102-3400

STID 4655

Re: Removal of Tanks #3 and #4 at the Alameda Federal Center, located at 620 Central Avenue, Alameda, California

Dear Mr. Lew,

This office has reviewed over CAL, Inc.'s (CAL) draft workplan, dated September 1996, addressing the removal of Tanks #3 and #4 at the above site. The work plan is acceptable to this office with the following additional comments/requests:

- A minimum of one monitoring well may be required in the vicinity of Tanks #3 and #4 if any residual soil or groundwater contamination is identified and left in place in the excavation pits. A permanent monitoring well will most likely need to be installed based on the floating product previously observed in Well MW-3, which is currently located immediately adjacent to Tanks #3 and #4; and based on the elevated levels of Polynuclear Aromatic Hydrocarbons (PNAs), Oil & Grease, and Total Extractable Petroleum Hydrocarbons (TEPH) identified in soil samples collected from boring TB3, also located in proximity to these tanks.

- Table 2, on page 29, should list BTEX and Oil & Grease under the proposed analyses.

- A Tank Removal Report should be submitted within 45 days after completing tank removal activities.

- Copies of discharge permits from the East Bay Municipal Utilities District should be submitted to this office prior to beginning field work.

- Please be reminded to conduct laboratory analysis on samples collected from the excavated stockpiled soil in order to determine whether this soil may be used as backfill.

- On Page 8 of the draft workplan, Title 23 California Code of Regulations should also be listed under Section 3.2. Under Section 3.3, the "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites" should also be listed.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Senior Hazardous Materials Specialist

cc: G. Robert Barry
CAL, Inc.
P.O. Box 6327
Vacaville, CA 95696-6327

Acting Chief

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PARKWAY, RM 250
ALAMEDA, CA 94502-6577
PHONE # 510/567-6700
FAX # 510/337-9335

Project Specialist

RECORD OF REVIEW
This item has been reviewed for general conformance with the contract documents and any comment shown is subject to the requirements of the contract documents. Contract conditions place the responsibility for coordination and compliance with contract documents on the contractor
☒ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ SUBMIT SPECIFIED ITEM
☐ RESUBMITTAL NOT REQ'D ☐ REVISE AND RESUBMIT
Date 10/01/96 By CH
CAPE ENVIRONMENTAL MANAGEMENT INC

UNDERGROUND TANK CLOSURE PLAN
*** * * Complete according to attached instructions * * ***

1. Name of Business CAL INC

   Business Owner or Contact Person **(PRINT)** David Esparza

2. Site Address Alameda Federal Center 620 Central Ave.

   City Alameda Zip 94502 Phone 415-522-3227

3. Mailing Address 2040 Peabody Rd., Ste 400

   City Vacaville Zip 95687 Phone 707-446-7996

4. Property Owner General Services Adminstration

   Business Name (if applicable) _____

   Address 450 Golden Gate Ave.

   City, State San Francisco, CA Zip 94102-3400

5. Generator name under which tank will be manifested

   General Services Adminstration

   EPA ID# under which tank will be manifested C A C 0 0 1 0 6 3 7 2 0

6. Contractor CAL INC

Address 2040 Peabody Rd., Ste 400

City Vacaville, CA 95687 Phone 707-446-7996

License Type* A, B, ASB, HAZ ID# 657754

*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.

7. Consultant (if applicable) CAL INC

Address 2040 Peabody Rd., Ste 400

City, State Vacaville, CA 95687 Phone 707-446-7996

8. Main Contact Person for Investigation (if applicable)

Name Joe Krohn Title Senior Geologist

Company CAL INC

Phone 707-446-7996

9. Number of underground tanks being closed with this plan two

Length of piping being removed under this plan ≤ 20 feet

Total number of underground tanks at this facility (**confirmed with owner or operator) 2

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

**** Underground storage tanks must be handled as hazardous waste ****

a) Product/Residual Sludge/Rinsate Transporter

Name Erickson EPA I.D. No. CAD009466392

Hauler License No. 0019 License Exp. Date July 31, 1997

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

b) Product/Residual Sludge/Rinsate Disposal Site

Name Evergreen Envtl EPA ID# CAD980887418

Address 6880 Smith Ave.

City Newark State CA Zip 94560

c) Tank and Piping Transporter

Name Erickson EPA I.D. No. CAD009466392

Hauler License No. 0019 License Exp. Date 7/31/97

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Erickson EPA I.D. No. CAD009466392

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

11. Sample Collector

Name Robert Berry

Company CAL INC

Address 2040 Peabody Rd., Ste 400

City Vacaville, State CA Zip 95687 Phone 707-446-7996

12. Laboratory

Name Superior Analytical Laboratory

Address P.O. Box 2648

City Martinez State CA Zip 94553

State Certification No. 1542

13. Have tanks or pipes leaked in the past? Yes[ ] No[ ] Unknown[X]

If yes, describe. There is documented minor soil and groundwater contamination

14. Describe methods to be used for rendering tank(s) inert:

Dry ice shall be placed into the tanks prior to removal

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be permanently plugged.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. **It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.**

15. Tank History and Sampling Information ***** (see instructions) *****

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
10,000 gallon	Last use in 1950 Diesel	Tank content (liquid) Tank Content (solids) Soil	Composite Composite Sidewalls at water table, excavation bottom (~14ft)
10,000 gallon	Last use in 1950 Diesel	Tank Contents (liquid) Tank Contents (soild) Soil	Composite Composite Sidewalls at water table (5 feet) Excavation bottom (14 feet)

One soil sample must be collected for every 20 linear feet of piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

Excavated/Stockpiled Soi	
Stockpiled Soil Volume (estimated)	Sampling Plan
Approximately 300 cubic yards	1 composite sample per 50 cubic yards (soil will be screened using a OVA/PID prior to sampling)

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [ ] no [X] unknown

If yes, explain reasoning Uncontaminated soil will be use as backfill

If unknown at this point in time, please be aware that **excavated soil may not be returned to the excavation without prior approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.**

16. Chemical methods and associated detection limits to be used for analyzing samples:
The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.
See attached Table 2.

17. Submit Site Health and Safety Plan (See Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
TPH-diesel		EPA 8015 modified	1 ppm
B.T.E.X.		EPA 8260	5 ppb
Oil & grease		SMWW 5520	50 ppm

18. Submit Worker's Compensation Certificate copy

Name of Insurer Howard Folmar

19. Submit Plot Plan ***(See Instructions)***

20. Enclose Deposit (See Instructions)

21. **Report any leaks or contamination to this office within 5 days of discovery.**
The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.

22. **Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.**

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business CAL INC

Name of Individual David Esparza

Signature _____ Date 9/20/96

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business General Services Administration

Name of Individual James Lew

Signature _____ Date 9.20.96

TABLE #2
RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND TANK LEAKS

HYDROCARBON LEAK	SOIL ANALYSIS	WATER ANALYSIS
Unknown Fuel	TPH G GCFID(5030) TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) TPH D GCFID(3510) BTX&E 602, 624 or 8260
Leaded Gas	TPH G GCFID(5030) BTX&E 8020 OR 8240 TPH AND BTX&E 8260 TOTAL LEAD AA ------Optional------- TEL DHS-LUFT EDB DHS-AB1803	TPH G GCFID(5030) BTX&E 602 or 624 TOTAL LEAD AA TEL DHS-LUFT EDB DHS-AB1803
Unleaded Gas	TPH G GCFID(5030) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) BTX&E 602, 624 or 8260
Diesel, Jet Fuel and Kerosene	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Fuel/Heating Oil	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Chlorinated Solvents	CL HC 8010 or 8240 BTX&E 8020 or 8240 CL HC AND BTX&E 8260	CL HC 601 or 624 BTX&E 602 or 624 CL HC AND BTX&E 8260
Non-chlorinated Solvents	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602 or 624 TPH and BTX&E 8260
Waste and Used Oil or Unknown (All analyses must be completed and submitted)	TPH G GCFID(5030) TPH D GCFID(3550) TPH AND BTX&E 8260 O & G 5520 D & F BTX&E 8020 or 8240 CL HC 8010 or 8240	TPH G GCFID(5030) TPH D GCFID(3510 O & G 5520 B & F BTX&E 602, 624 or 8260 CL HC 601 or 624
	ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni METHOD 8270 FOR SOIL OR WATER TO DETECT: PCB* PCP* PNA CREOSOTE	 PCB PCP PNA CREOSOTE

* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 10 August 1990

EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.

2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.

3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.

4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.

5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydro- carbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.

6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).

7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).

8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. **Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.**

9. **PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:**

	SOIL PPM	WATER PPB
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

10. LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.

11. IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

    The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chroma- togram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

ALAMEDA COUNTY ENVIRONMENTAL PROTECTION DIVISION

DECLARATION OF SITE ACCOUNT REFUND RECIPIENT

There may be excess funds remaining in the Site Account at the completion of this project. The PAYOR (person or company that issues the check) will use this form to predesignate another party to receive any funds refunded at the completion of this project. In the absence of this form, the PAYOR will receive the refund.

SITE INFORMATION:

Site ID Number
(if known)

Alameda Federal Center
Name of Site

620 Central Ave.
Street Address

Alameda , CA 94502
City, State & Zip Code

I designate the following person or business to receive any refund due at the completion of all deposit/refund projects:

CAL INC
Name

2040 Peabody Rd.,Ste 400
Street Address

Vacaville, CA 95687
City, State & Zip Code

Signature of Payor

9/30/96
Date

Dave Esparza
Name of Payor
(PLEASE PRINT CLEARLY)

CAL Inc
Company Name of Payor

RETURN FORM TO:
County of Alameda, Environmental Protection
1131 Harbor Bay Parkway, Rm 250
Alameda CA 94502-6577
Phone#(510) 567-6700

rev.4/6/95;closure.pln\RW

HOT WORK PERMIT

PACIFIC CHEMICAL LABS, INC.

San Francisco (415) 821-2201 769-7481 *San Diego* (619) 585-8763 474-8548

CHEMIST CERTIFICATE NO.

PACIFIC EXCAVATORS	US	12/2/96
Survey Requested by	Vessel Owner or Agent	Date
FUEL OIL TANKS	UST	620 CENTRAL
Vessel	Type of Vessel	Specific Location of Vessel
BUNKER FUEL 3A	O2/CGI/VISUAL	1000
Last Three (3) Cargoes	Tests Performed	Time Survey Completed

TANK #1 - SAFE FOR HOT WORK

TANK #2 SAFE FOR HOT WORK

Oxygen - 20.8%
COMB. GAS - 0% LEL

MAINTAIN FIREWATCH W/CHARGED HOSE

STBY 1030 - 1200 HRS
TESTING.

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified

SAFE FOR HOT WORK Means that in the compartment so designated (a) oxygen content of the atmosphere is at least 19 5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed, and that (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit, and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate, and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements

NOT SAFE FOR HOT WORK Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19 5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation

The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions

Signed _____ Name _____ Company _____ Date

Signed _____ Marine Chemist _____ Certificate No

ZONE 7 WATER AGENCY
WELL DESTRUCTION PERMIT
AND
WELL DESTRUCTION REPORT

ZONE 7 WATER AGENCY
WELL INSTALLATION PERMIT

CAL INC

Corporate Office
2040 Peabody Road
Suite 400
Vacaville, CA 95687
707/446-7996
FAX 707/446-4906

Mailing Address
P.O. Box 6327
Vacaville, CA 95696-6327

Washington D.C.
360 Montgomery Avenue
Suite 600
Bethesda, MD 20814

San Francisco
Opera Plaza
801 Van Ness Avenue
#E3-134
San Francisco, CA 94102
415/824-2966

Monterey
395 Del Monte Center
#203
Monterey, CA 93940

Sacramento
210 Estates Drive
Suite 208
Roseville, CA 95678
916/393-1221

October 2, 1996

Mr. Wyman Hong
Zone 7 Water Agency
5997 Parkside Drive
Pleasanton, CA 94588

TRANSMITTAL OF WELL INSTALLATION AND WELL DESTRUCTION PERMITS

UST REMOVAL PROJECT
ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

GSA CONTRACT NO. GS-09P-96-KZC-0013 GSA PROJECT NO. RCA21602

Dear Mr. Hong:

As we discussed today, enclosed please find one copy of a Well Installation Permit for fourteen temporary dewatering wells to be installed at the Alameda Federal Center. These wells will be installed to facilitate the excavation and removal of two 10,000 gallon underground storage tanks (USTs). The wells will be in existence for approximately 2 weeks. Upon project completion, the wells will be removed and backfilled using clean sand.

Also enclosed please find one copy of a well destruction permit application. The well to be destroyed is a 2-inch PVC monitoring well located adjacent to the USTs to be removed. The well will be excavated in the course of removing the USTs.

Thank you for your attention in this matter. Please contact either Joe Krohn or me if you have any questions regarding this submittal.

Sincerely,

G. Robert Barry
Environmental Geologist

attachments

\\SERVER\C-DRIVE\PROJECTS\1816\Transmittal Letter Of Zone 7 Permit
10/02/96 2:49 PM

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIF.

CLIENT
Name JAMES LEW, GENERAL SERVICES ADMINISTRATION
Address 450 GOLDEN GATE AVE. Voice (415) 522-3228
City SAN FRANCISCO, CA Zip ~~Suite~~ 94102

APPLICANT
Name ROB BARRY CAL INC. Fax (707) 446-4906
Address 2010 PEABODY RD. #400 Voice (707) 446-7996
City VACAVILLE, CA 95687 Zip 95687-6694

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	___
Monitoring	___	Well Destruction	___

PROPOSED WATER SUPPLY WELL USE

Domestic ___	Industrial ___	Other	TEMPORARY DEWATERING WELLS
Municipal ___	Irrigation ___		

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ___
Cable ___ Other JETTING

DRILLER'S LICENSE NO. 476668

WELL PROJECTS

Drill Hole Diameter	6	in.	Maximum Depth	15	ft.
Casing Diameter	2	in.			
Surface Seal Depth	0	ft.	Number	14	

GEOTECHNICAL PROJECTS

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

ESTIMATED STARTING DATE OCTOBER 15, 1996
ESTIMATED COMPLETION DATE NOVEMBER 5, 1996

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

APPLICANT'S SIGNATURE Rob Barry Date 10/2/96

FOR OFFICE USE

PERMIT NUMBER 96732
LOCATION NUMBER

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

B. WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(C.) GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 8 Oct 96
Wyman Hong

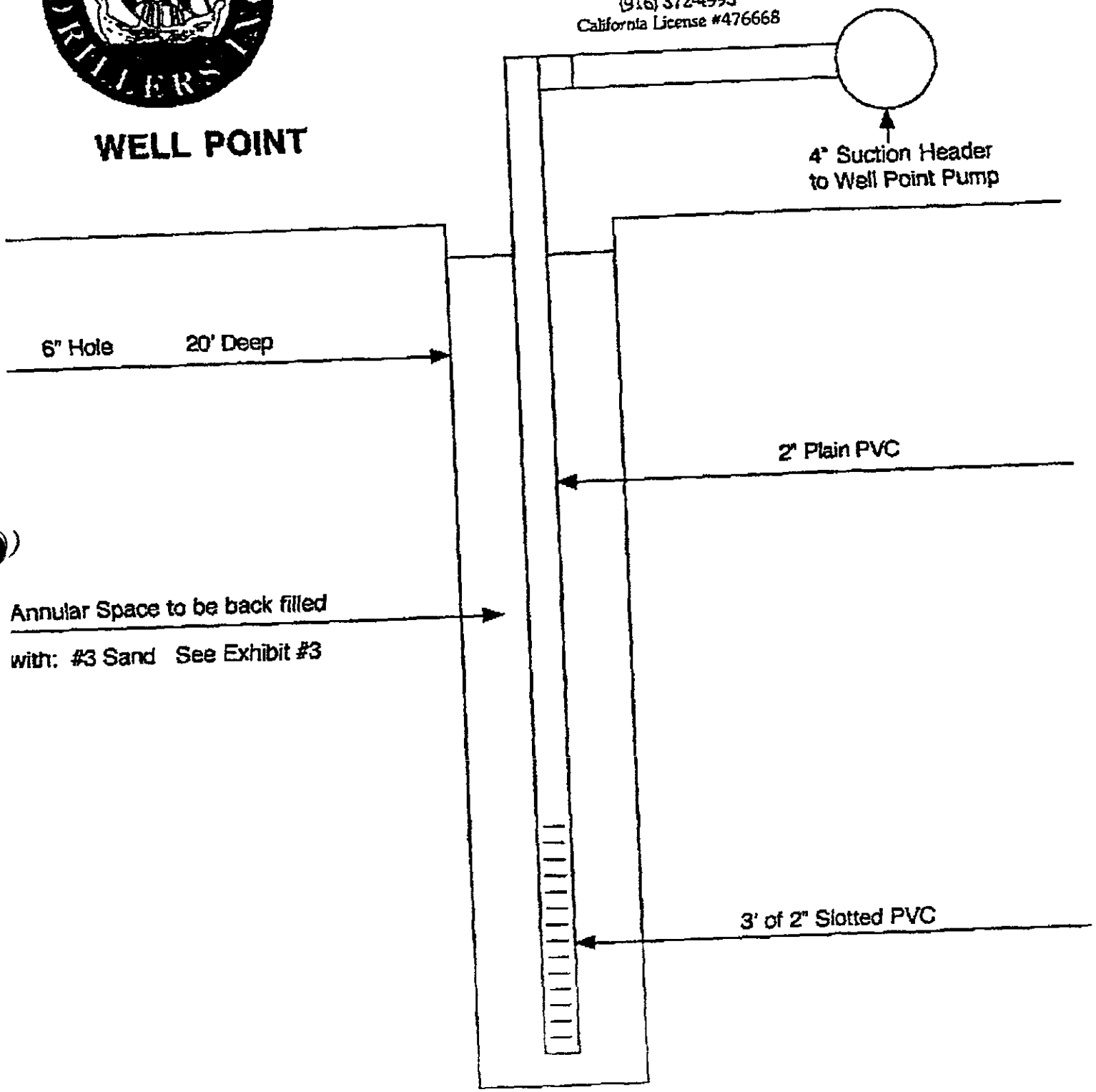
91992

VIKING DRILLERS, INC.

Dewatering Systems

801 Northport Drive
West Sacramento, CA 95691
(916) 372-4993
California License #476668

WELL POINT



FAX (916) 372-1337

8 October 1996

ZONE 7
WATER RESOURCES ENGINEERING
DRILLING ORDINANCE

ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA
WELL 2S/4W 11M80
PERMIT 96731

Destruction Requirements:

1. Remove the entire well casing, surface seal and gravel pack by excavation.

These destruction requirements as proposed by Rob Barry of Cal, Inc. meet or exceed Zone 7 minimum requirements.

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIF.

CLIENT
Name JAMES LEW, GENERAL SERVICES ADMINISTRATION
Address 450 GOLDEN GATE AVE. Voice (415) 522-3228
City SAN FRANCISCO, CA Zip 94102

APPLICANT
Name ROB BARRY CAL INC.
Fax (707) 446-4906
Address 2040 PEABODY RD. SUITE 400 Voice (707) 446-7996
City VACAVILLE, CA 95687 Zip 95687-6694

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	___
Monitoring	___	Well Destruction (MW-3)	X

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other N/A
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ___
Cable ___ Other EXCAVATION

DRILLER'S LICENSE NO. ___

WELL PROJECTS

Drill Hole Diameter		in.	Maximum Depth	15	ft.
Casing Diameter	2	in.			
Surface Seal Depth	___	ft.	Number	1	

GEOTECHNICAL PROJECTS

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

ESTIMATED STARTING DATE OCTOBER 15, 1996
ESTIMATED COMPLETION DATE NOVEMBER 5, 1996

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

APPLICANT'S SIGNATURE J. Rob Barry Date 10/2/96

FOR OFFICE USE

PERMIT NUMBER 96731
LOCATION NUMBER 2S/4W 11M80

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

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

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

(E.) WELL DESTRUCTION. See attached.

Approved Wyman Hong Wyman Hong Date 8 Oct 96

81992

CAL INC

Corporate Office
2040 Peabody Road
Suite 400
Vacaville, CA 95687
707/446-7996
FAX 707/446-4906

Mailing Address
P.O. Box 6327
Vacaville, CA 95696-6327

Washington D.C.
4360 Montgomery Avenue
Suite 600
Bethesda, MD 20814

San Francisco
Opera Plaza
801 Van Ness Avenue
#E3-134
San Francisco, CA 94102
415/824-2966

Monterey
395 Del Monte Center
#203
Monterey, CA 93940

Sacramento
210 Estates Drive
Suite 208
Roseville, CA 95678
916/393-1221

January 8, 1997

Mr. Wyman Hong
Zone 7 Water Agency
5997 Parkside Drive
Pleasanton, CA 94588

WELL DESTRUCTION REPORT
UST REMOVAL PROJECT
ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

GSA CONTRACT NO. GS-09P-96-KZC-0013
GSA PROJECT NO. RCA21602

Dear Mr. Hong:

As we discussed today, as planned, CAL INC destroyed monitoring well number MW-3 at the Alameda Federal Center on November 18, 1996. The well was located within the shored underground storage tank (UST) excavation area and was excavated entirely. If you are interested, photographs are available.

Please contact either Joe Krohn or me if you have any questions.

Sincerely,

G. Robert Barry
Project Manager

attachments

\\SERVER\C-DRIVE\PROJECTS\1816\Transmittal Letter for AgBase Tests
01/08/97 4.47 PM

CITY OF ALAMEDA
FIRE DEPARTMENT
UNDERGROUND TANK REMOVAL PERMIT

OCT 21 1996

CITY OF ALAMEDA
CENTRAL PERMITS OFFICE
2250 Central Ave., Room 190
Alameda, CA 94501

Permit No: F96-0054
Status: APPROVED

10/17/96 11:16

JOB ADDRESS : 620 CENTRAL AVE
PERMIT TYPE : FIRE PREV. DIVISION PERMIT
Parcel number : 074 -1305-026-00

Owner : UNITED STATES OF AMERICA

Applied : 10/16/96
Approved : 10/17/96
Final :
Expired :
Class code : 050
Valuation: 100,000

Applicant : CAL INC.
2040 PEABODY RD #400
VACAVILLE,CA 95687
707-446-7996
Project Title : T/I GSA-REMOVAL 2 TANKS
Project Desc. : T/I GSA-REMOVAL 2 UNDERGROUND TANK

Fee description	Units	Fee/Unit	Ext fee	Data
REMOVE UNDERGROUND TANK(S)	404.00	1.00	404.00	
ADDITIONAL MICROFICHE FEE	48.72	1.00	48.72	
PERMIT FILING FEE		1.00	30.00	

*** Fees Required ***

Account No.	Receipt No.	Date	Payment
310-300-9081-3726	R9604772	10/16/96	404.00
310-300-9081-3726	R9604772	10/16/96	48.72
001-300-4240-3745	R9604772	10/16/96	12.71
001-300-4240-3305	R9604772	10/16/96	5.09
001-300-4240-3792	R9604772	10/16/96	4.06
310-300-9409-3790	R9604772	10/16/96	8.14

*** Fees Collected & Credits ***

Fees:	482.72		
Adjustments:	.00	Total Credits:	.00
Total Fees:	482.72	Total Payments:	482.72
		Balance Due:	.00

FOR INSPECTIONS CALL: BUILDING 748-4564 (8:00-10:00 A.M.)
PLUMBING & MECHANICAL 748-4563 (8:00-10:00 A.M.)
ELECTRICAL 748-4634 (8:00-10:00 A.M.)

PERMIT # F96-0054

CITY OF ALAMEDA
10/17/96

APPROVED BY:
VLD

VALUATION: 100,000

ADDRESS: 620 CENTRAL AVE
JOB: T/I GSA-REMOVAL 2 TANKS
PERMITTEE: CAL INC.
PHONE: 707-446-7996

FOUNDATIONS:

GROUND PLUMBING:

ROUGH ELECTRIC:

ROUGH PLUMBING:

ROUGH HEATING & VENTILATION:

SUB FLOOR:

FRAME:

INSULATION:

CERTIFICATE

COMMENTS

SHEETROCK/INTERIOR LATH:

(Required Before Taping or Plastering)

EXTERIOR LATH:

(Required Before Stucco)

DESIGN REVIEW:

GAS TEST

KELLY TEST

SEWER REPAIR/REPLACEMENT

FINAL ELECTRIC:

FINAL - FIRE DEPT.:

FINAL - PLUMBING:

FINAL - HEATING & VENTILATION:

FINAL - BUILDING:

DO NOT OCCUPY STRUCTURE UNTIL CERTIFICATION OF OCCUPANCY HAS BEEN ISSUED. FOR CERTIFICATE OF OCCUPANCY TO BE ISSUED, A COPY OF THE HARD CARD WITH ALL FINALS NEEDS TO BE FILED WITH THE CENTRAL PERMIT OFFICE.

******SMOKE DETECTORS REQUIRED---U.B.C. SEC. 1210*******

"When alterations, repairs or additions are made to an existing residence and the valuation of the improvements exceed $1,000.00, the entire building shall be provided with smoke detectors as required for new residences."

FOR INSPECTIONS - CALL

BUILDING 748-4564
8:00 - 10:00 A.M.

PLUMBING & MECHANICAL 748-4563
8:00 - 10:00 A.M.

ELECTRICAL 748-463
8:00-10:00 A.M.

FIRE 748-4602

CITY OF ALAMEDA
BUSINESS LICENSE

CITY of ALAMEDA

2263 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA 94501-4456
(510) 748-4561

BUSINESS LICENSE TAX CERTIFICATE

FOR PERIOD
FROM 09/19/96 TO 06/30/97
NUMBER 7088

BUSINESS NAME (DBA)	ACCOUNT NUMBER	TRANSACTION	DATE	AMOUNT
CAL INC	15536		09/19/96	

BUSINESS LOCATION	ZIP CODE
2040 PEABODY RD 400 VACAVILLE, CA 95687	95687

BUSINESS OWNER	BUSINESS TELEPHONE
DAVID ESPARZA	707 446 7996

TYPE OF BUSINESS	TAX RATE CATEGORY
GENERAL CONTRACTORS	1

MAILING ADDRESS	BUSINESS TYPE
CAL INC PO BOX 6327 VACAVILLE, CA 95687	82A

	CONTRACTOR'S NUMBER
	657754

TAXPAYER I.D. NUMBER OR SOCIAL SECURITY NUMBER	SALES TAX NUMBER
770001288	

THIS CERTIFICATE IS EFFECTIVE FOR THE PERIOD SHOWN ABOVE

NON-TRANSFERABLE
POST IN A CONSPICUOUS PLACE

READ IMPORTANT NOTICE ON REVERSE SIDE

CAL INC

Corporate Office
2040 Peabody Road
Suite 400
Vacaville, CA 95687
707/446-7996
FAX 707/446-4906

Mailing Address
P.O. Box 6327
Vacaville, CA 95696-6327

Washington D.C.
360 Montgomery Avenue
Suite 600
Bethesda, MD 20814

San Francisco
Opera Plaza
801 Van Ness Avenue
#E3-134
San Francisco, CA 94102
415/824-2966

Monterey
395 Del Monte Center
#203
Monterey, CA 93940

Sacramento
210 Estates Drive
Suite 208
Roseville, CA 95678
916/393-1221

February 5, 1997

Ms. Sue Jenne'
EBMUD Source Control Division
375 - 11th Street
Oakland, CA 94607

TRANSMITTAL OF GROUNDWATER DISCHARGE REPORT
UST REMOVAL PROJECT
ALAMEDA FEDERAL CENTER
ALAMEDA, CALIFORNIA 94503

GSA CONTRACT NO. GS-09P-96-KZC-0013
GSA PROJECT NO. RCA21602

Dear Ms. Jenne':

Enclosed you will find the Groundwater Discharge Report for the GSA Alameda Federal Center underground storage tank (UST) removal project. The report outlines CAL INC's discharges of treated groundwater to the sanitary sewer during UST removal activities.

Please contact me or Joe Krohn, if you have any questions or need additional information.

Sincerely,

G. Robert Barry
Project Manager

N \PROJECTS\1816\Trans Ltr-EBMUD-GW report

CAL INC

GROUNDWATER DISCHARGE REPORT
UST REMOVAL PROJECT
ALAMEDA FEDERAL CENTER
620 CENTRAL AVENUE
ALAMEDA, CALIFORNIA 94503

PREPARED ON BEHALF OF:

EAST BAY MUNICIPAL UTILITY DISTRICT
SOURCE CONTROL DIVISION
375 - 11TH STREET
OAKLAND, CALIFORNIA 94607

PREPARED BY:

CAL INC
2040 PEABODY ROAD, SUITE 400
VACAVILLE, CALIFORNIA 95687

FEBRUARY 1997

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1.0 INTRODUCTION

This report presents the results of the self-monitoring reporting requirements for wastewater discharge permit granted by East Bay Municipal Utility District (EBMUD) to CAL INC. The discharge permit was granted for the purpose of discharging treated groundwater to the sanitary sewer generated during the removal of two underground storage tanks (USTs) at the Alameda Federal Center, 620 Central Avenue, Alameda, California.

1.1 Site Location and Description

The Alameda Federal Center is located in the northwest portion of the City of Alameda, approximately 500 feet east of the San Francisco Bay shoreline (Figure 1). The site is situated in a relatively flat tidal plain area which slopes gently towards the Bay (southwest). The site covers an area of approximately 10 acres. The Alameda Federal Center maintains several buildings used for administrative office and storage functions (Figure 2). The focus of the activities conducted for this project were located southeast of Building 1 and north of Building 8, as shown on Figure 3.

The USTs were overlain by a paved parking lot (Figure 3). Adjacent facilities include a parking area to the north, a residential recreation area to the west (including a swimming pool), Building 8 to the south, the intersection of South Cressy Drive and Richardson Avenue to the east, and Building 1 to the northwest.

Based on the results of previous sampling conducted in the area of the USTs, both soil and groundwater in the area were known to contain elevated levels of petroleum hydrocarbons.

1.2 Purpose and Scope of Work

The overall purpose of the on-site work was to remove the two existing 10,000 gallon USTs. In order to remove the tanks, it was necessary to excavate to a depth of approximately 12 feet below ground surface (bgs). Because the static groundwater level was approximately 5 feet bgs, dewatering was necessary to allow for the excavation activities. Since the groundwater in the area was known to be contaminated with petroleum products, a treatment system was also designed to remove contaminants prior to discharge.

The scope of work for the dewatering process included the installation of a well point dewatering system and the installation of a groundwater treatment compound. A description of the dewatering system and the results of system water quality monitoring are presented in the following sections.

2.0 SYSTEM OPERATION

2.1 Dewatering and Treatment System

A dewatering system consisting of eleven well points, a 20,000 gallon above ground water storage tank, and a two stage carbon filtration system was installed in the vicinity of the UST pit. A generalized schematic of the system is presented in Figure 4. The layout of the well point system and treatment compound is shown on Figure 5.

The dewatering system was originally designed to depress the groundwater table to approximately 16 feet bgs. However, due to unanticipated relatively impermeable soil conditions (clayey/silty soil), the water table was depressed to only 7 feet bgs, and water collected inside the excavation to a static level of approximately 7 feet. Centrifugal pumps placed directly inside the excavation were used to remove all residual water inside the excavation not removed by the well point system. The water removed with the centrifugal pumps was also treated using the groundwater treatment system prior to discharge to the sanitary sewer.

2.2 Period of Operation

Table 1 outlines the period of operation of the water removal system. In summary, the dewatering system was operated during the following major time intervals:

- The dewatering system was initially operated on October 25, 1996 to allow for sample collection from the water treatment system to assure that the system was removing petroleum contamination. The system was shut down pending analytical results.

- The dewatering system operated from November 5 through November 12, 1996 during asbestos abatement activities required for product pipeline removal. EBMUD collected water samples from the treatment system on November 6, 1996..

- The system was restarted on November 15, 1996 for approximately 2 hours to allow for collection of water samples.

- The system operated from November 18 through December 6, 1996 during excavation and tank removal activities. To keep standing water out of the excavation, CAL INC began intermittent supplementary pumping of water from the excavation using centrifugal pumps.

- On December 6, 1996, the granular activated carbon (GAC) treatment units achieved "breakthrough" and began discharging untreated water to the sanitary sewer. CAL INC collected a sample and immediately shut down the dewatering system. The GAC was replaced on December 11, 1996, and the water remaining in the storage tank was treated and discharged into the sanitary sewer.

The groundwater removal and treatment system operated for approximately 23 days. The total estimated volume of discharge is 224,000 gallons.

3.0 DISCHARGE MONITORING

The dewatering system was operated on an irregular schedule due to changing site conditions. As a result, samples were not collected on a regular schedule. Rather, samples were collected at approximately equal intervals of system operation (approximately 7 day intervals). A description of the sampling procedures and the results of the analytical testing conducted during the discharge monitoring are presented in the following sections.

3.1 Discharge Monitoring Procedures

Water samples were collected from three different points in the groundwater treatment system: 1) at the discharge point from the groundwater removal system; 2) at the discharge from the first granular activated carbon (GAC) treatment unit; and 3) downstream of the second GAC treatment unit at the discharge to the sanitary sewer.

Samples were collected from the treatment system on October 25, November 15, and December 6, 1996. All samples were collected directly into sample containers provided by the analytical laboratory. The water samples were analyzed for EPA Method 8020, EPA 8015 Modified (Total Petroleum Hydrocarbons (TPH)-Diesel), and SMWW 5520 (Oil & Grease).

3.2 Discharge Monitoring Results

The analytical results of discharge monitoring are presented in Table 2. Laboratory analytical reports are presented in Appendix 2. Sample numbers beginning with "GW" are samples collected from the discharge point from the groundwater removal system. Sample numbers beginning with "TW-1-" are samples collected downstream from the first GAC treatment unit. Sample numbers beginning with "TW-2-" are samples collected downstream from the second GAC treatment unit.

The results of the October 25 and November 15, 1996 monitoring indicated that the water treatment system was removing contaminants as designed. The samples collected on December 6, 1996 confirmed that breakthrough had occurred. CAL INC estimates that no more than 200 gallons of water that did not meet the EBMUD discharge limits were discharged into the sanitary sewer.

Approximately 224,000 gallons of groundwater were removed from the excavation area, treated, and discharged to the sanitary sewer. All EBMUD discharge permit compliance requirements were met.

4.0 SIGNATORY REQUIREMENTS

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G. Robert Barry, CAL INC Project Manager

APPENDIX 1

TABLES AND FIGURES

TABLE 1
SUMMARY OF WATER REMOVAL OPERATION
GSA Alameda
UST Removal Project

Date	Activity	Total Gallons	Total Cumulative Gallons	Comments
10/25/96	System startup and testing	6000	6000	CAL INC collects water samples
10/26/96				Waiting for EBMUD review and approval of sample results
10/27/96				
10/28/96				
10/29/96				
10/30/96				
10/31/96				
11/1/96				
11/2/96				
11/3/96				
11/4/96				
11/5/96	Asbestos abatement	25000	31000	EBMUD approves System operation; System on
11/6/96	Asbestos abatement	19000		EBMUD collects sample
11/7/96	Asbestos abatement	16000		
11/8/96	Asbestos abatement	11000		
11/9/96	Asbestos abatement	6000		
11/10/96	Asbestos abatement	2000		
11/11/96	Asbestos abatement	2000		
11/12/96	Asbestos abatement	2000	89000	System shut down due to noise
11/13/96				
11/14/96				
11/15/96	Install Shoring	2000	91000	System turned on for CAL INC collects water samples; System off
11/16/96				
11/17/96				
11/18/96	Excavation and UST Removal	12000	103000	System turned on
11/19/96	Excavation and UST Removal	21000		
11/20/96	Excavation and UST Removal	18000		
11/21/96	Excavation and UST Removal	14000		
11/22/96	Excavation and UST Removal	11000		
11/23/96	Excavation and UST Removal	9000		
11/24/96	Excavation and UST Removal	4000		
11/25/96	Excavation and UST Removal	2000		
11/26/96	Excavation and UST Removal	2000		
11/27/96	Excavation and UST Removal	2000		
11/28/96	Excavation and UST Removal	2000		
11/29/96	Excavation and UST Removal	2000		
11/30/96	Excavation and UST Removal	2000		
12/1/96	Excavation and UST Removal	2000		
12/2/96	Excavation and UST Removal	2000		
12/3/96	Excavation and UST Removal	2000		

TABLE 1
SUMMARY OF WATER REMOVAL OPERATION
GSA Alameda
UST Removal Project

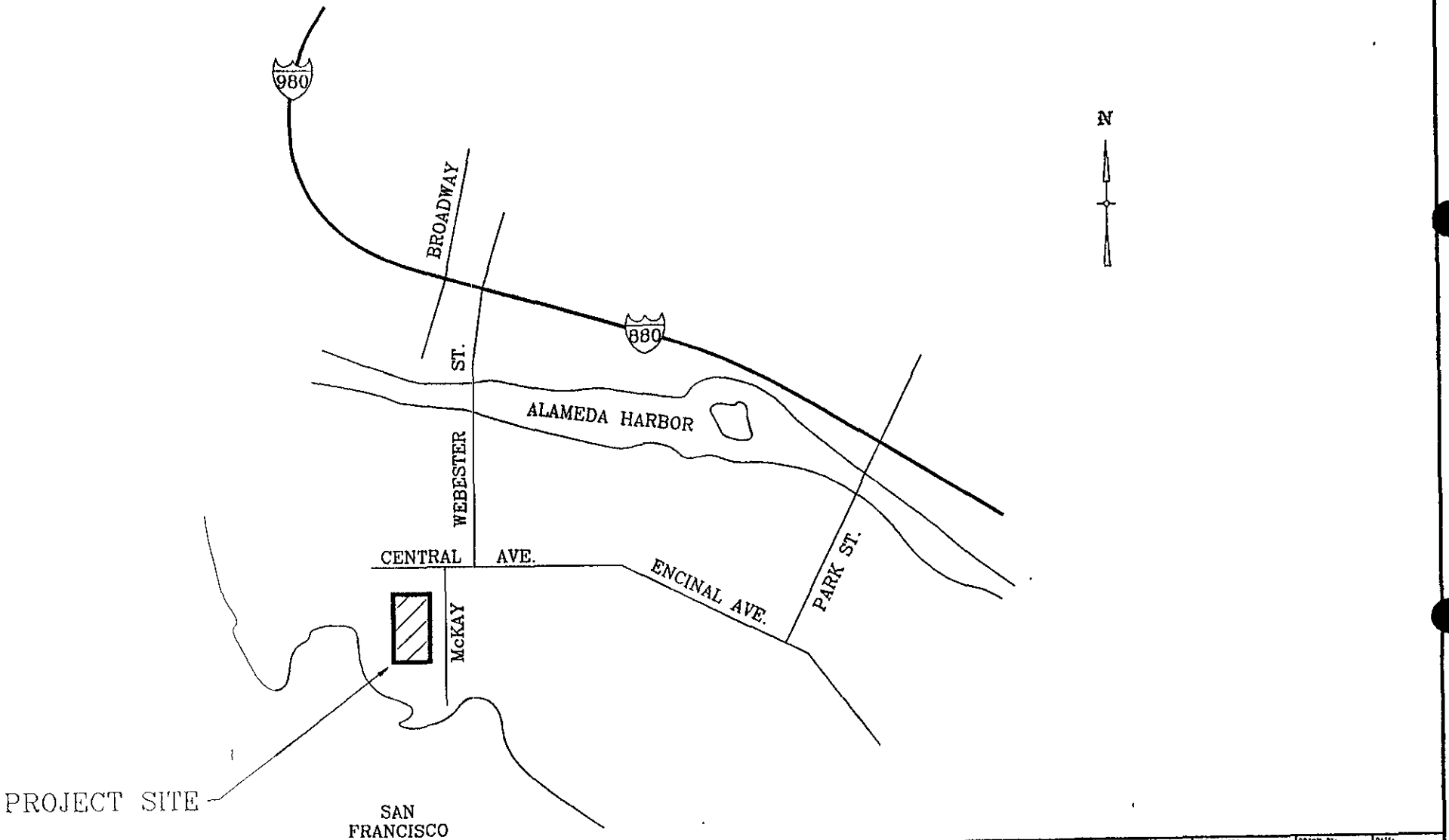
Date	Activity	Total Gallons	Total Cumulative Gallons	Comments
12/4/96	Excavation and UST Removal	2000		
12/5/96	Excavation and UST Removal	2000		
12/6/96	Excavation and UST Removal	2000	204000	GAC breakthrough, CAL INC collects water samples; System shut down
12/7/96				
12/8/96				
12/9/96				
12/10/96				
12/11/96	Drain excavation for backfill	20000	224000	Replace carbon; System turned on System shut down

TABLE 2
RESULTS OF ANALYSES ON WATER SAMPLES

GSA Alameda
UST Removal Project

Sample Number	Sample Date	Benzene	Toluene	Chloro Benzene	Ethyl Benzene	Total Xylenes	1,3-Dichloro Benzene	1,4-Dichloro Benzene	1,2-Dichloro Benzene	TPH-D	Oil & Grease
GW-1	10/25/96	<0.5	1.1	<0.5	<0.5	1	na	na	na	320 W	5100
TW-1-1	10/25/96	<0.5	0.6	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	140 W	<5000
TW-2-1	10/25/96	<0.5	< 0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	80 W	<5000
GW-2	11/15/96	<0.5	< 0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	240 W	<5000
TW-1-2	11/15/96	<0.5	< 0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	60 **	<5000
TW-2-2	11/15/96	<0.5	< 0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	70 **	<5000
GW-3	12/06/96	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	90 W	<5000
TW-1-3	12/06/96	<0.5	<0.5	<0.5	<0.5	3.3	0.7 P	2.3 P	<0.5	51000 W	190000
TW-2-3	12/06/96	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	1.6 P	1.1	37000 W	110000

Units	All units are micrograms per liter (µg/L)
GW-1	Sample collected from dewatering system influent
TW-1	Sample collected after first granulated activated carbon unit
TW-2	Sample collected at the sanitary sewer discharge point
na	not analyzed
P	There is a greater than 25 % difference for detected concentration between the two GC columns.
W	The pattern of the chromatogram resembles a weathered, aged, or degraded petroleum hydrocarbon
**	Hydrocarbons were found in the range of diesel, but do not resemble a diesel finger print

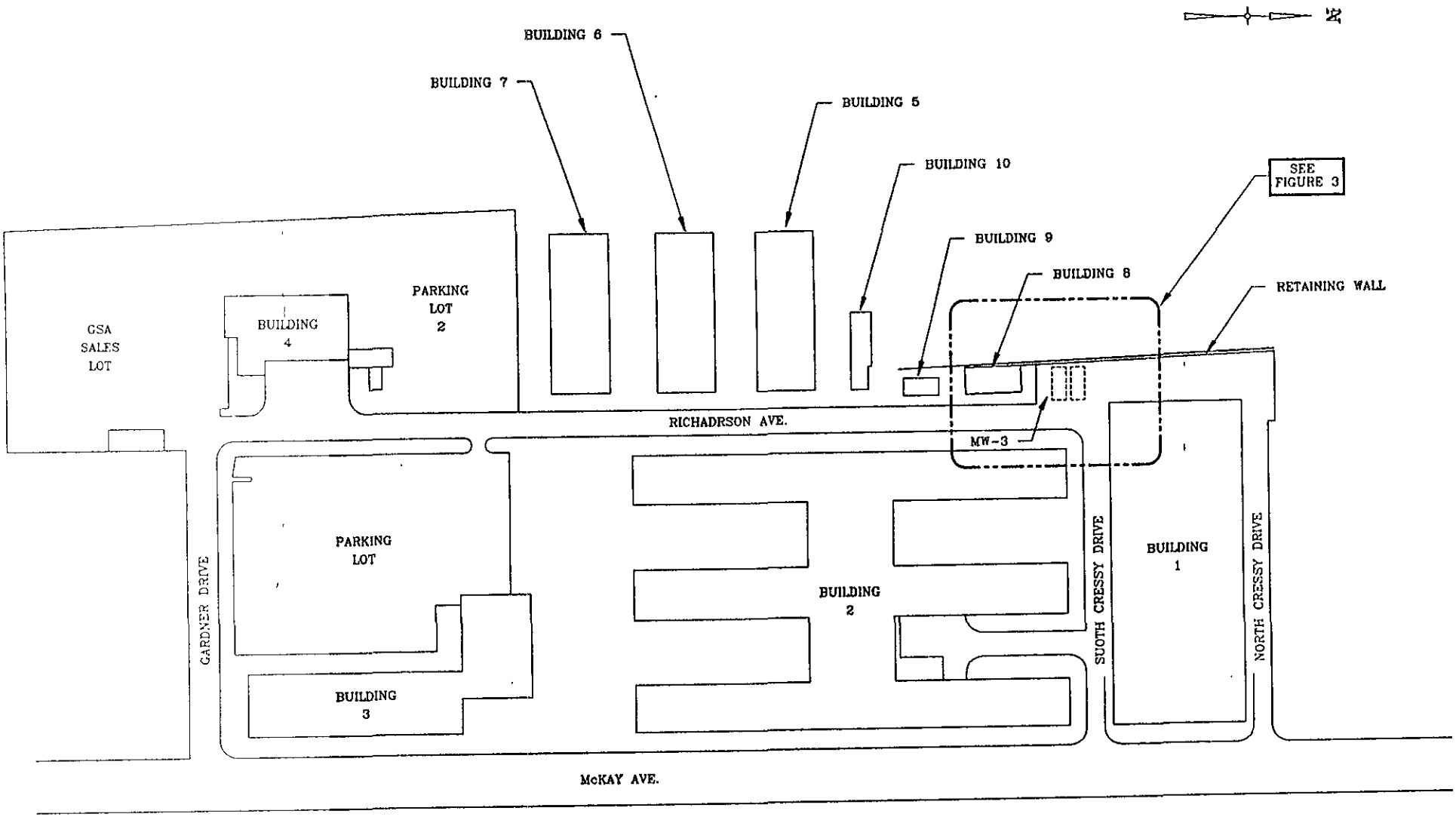


CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA 95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/01/96
REVISION	CAD FILENAME	SCALE
	1816_F1	NONE

VICINITY MAP FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

DWG. FIG 1



GRAPHIC SCALE

0' 10' 25' 50' 100' 150' 200' 250'

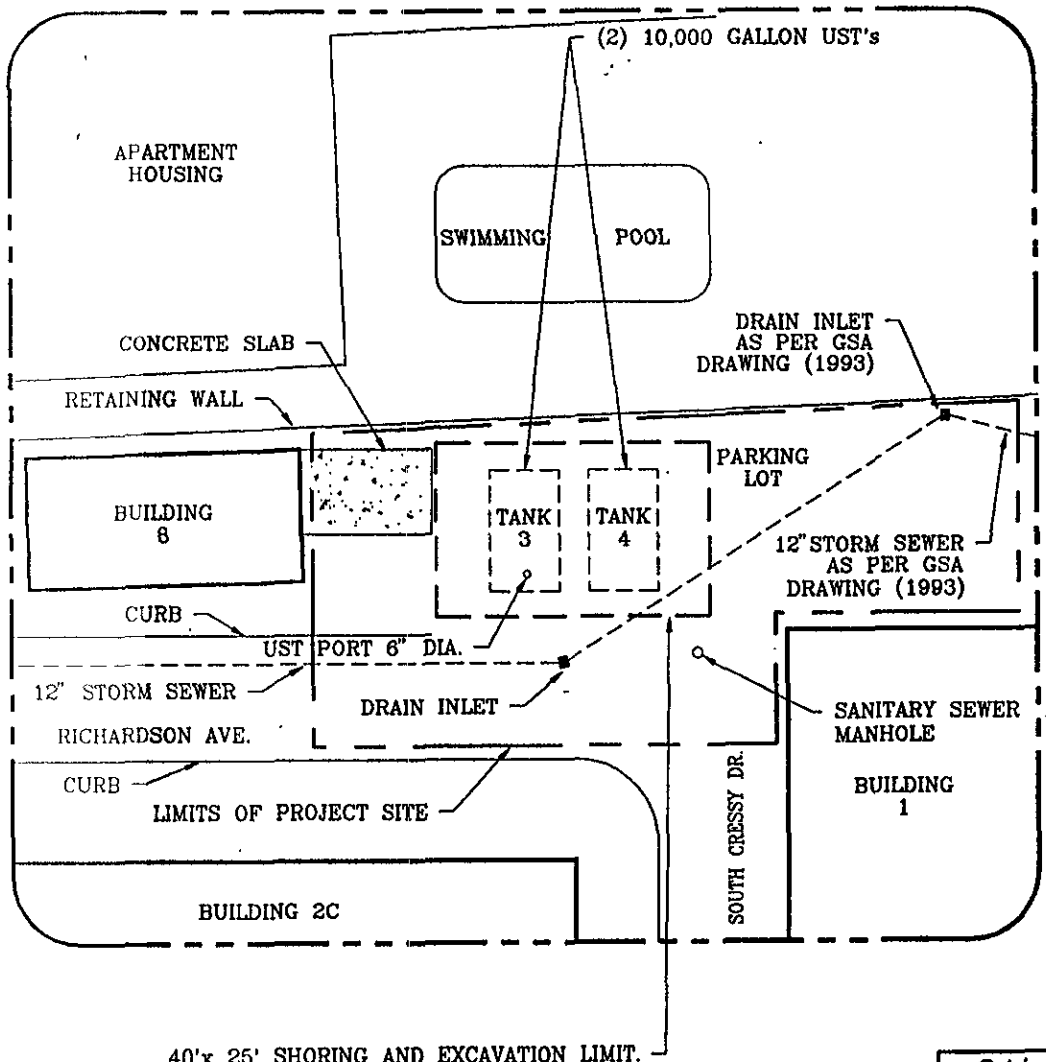
CAL ENVIRONMENTAL SERVICES INC

VACAVILLE, CA.95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/02/96
REVISIONS	CAD FILENAME	SCALE
	1816_F2	SCALE BAR

SITE PLAN FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 2



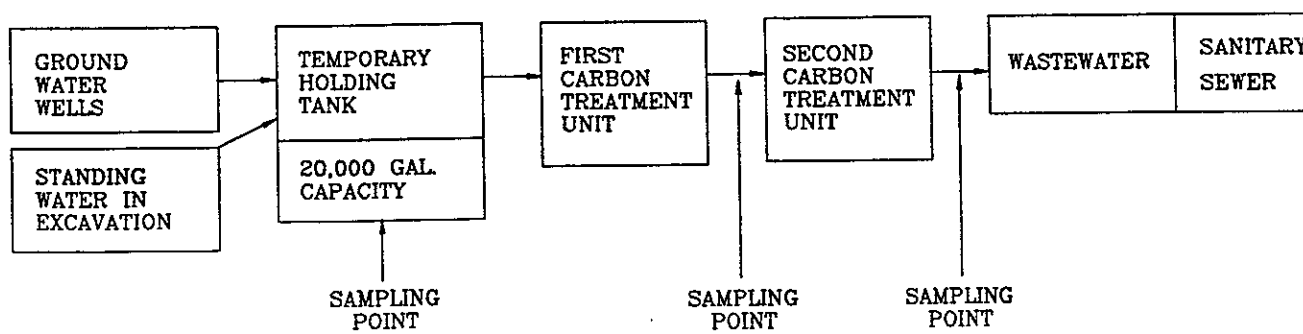
CAL ENVIRONMENTAL SERVICES INC
VACAVILLE, CA.95688 707-446-7996

JOB NUMBER	DRAWN BY	DATE
1816	P LENTINO	9/02/96
REVISION	CAD FILENAME	SCALE
	1816_F3	SCALE BAR

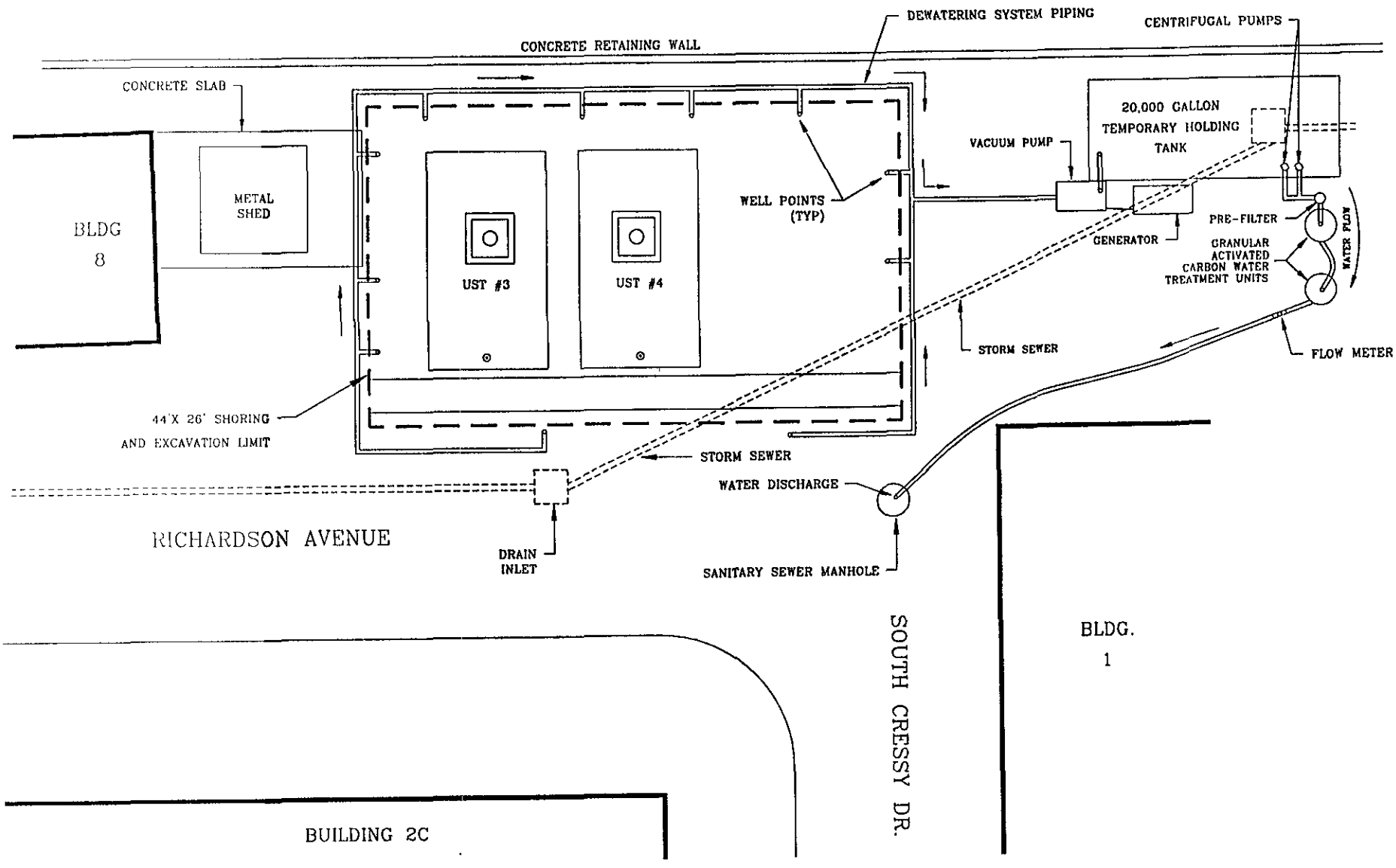
SITE MAP FOR THE REMOVAL OF (2) 10,000 UST's
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 3

SCHEMATIC FLOW DIAGRAM
EXCAVATION DEWATERING
AND
GROUNDWATER PRE-TREATMENT SYSTEM
UST REMOVAL
GSA ALAMEDA FEDERAL CENTER



CAL ENVIRONMENTAL SERVICES INC	JOB NUMBER: 1816	DRAWN BY: P LENTINO	DATE: 9/21/96
VACAVILLE, CA 95688 707-446-7996	REVISIONS:	CAD FILENAME: 1816_F4	SCALE: NONE
SCHEMATIC FLOW DIAGRAM ALAMEDA FEDERAL CENTER 620 CENTRAL AVE. ALAMEDA, CA.			FIG 4



CAL ENVIRONMENTAL SERVICES INC	JOB NUMBER: 1816	DRAWN BY: P LENTINO	DATE: 9/02/96
VACAVILLE, CA.95688 707-446-7996	REVISION:	CAD FILENAME: 1816_F5	SCALE: SCALE BAR

DEWATERING AND TREATMENT SYSTEM
ALAMEDA FEDERAL CENTER 620 CENTRAL AVE.
ALAMEDA, CA.

FIG 5

APPENDIX 2

LABORATORY ANALYTICAL RESULTS

Superior Analytical Laboratory

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Date: October 29, 1996

Attn: ROB BARRY

Laboratory Number : 22022

Project Number/Name : GSA ALA
Facility/Site : ALAMEDA

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on October 25, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 24, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Superior
Analytical Laboratory

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22022

Sample Receipt

Three water samples were received by Superior Analytical Laboratory on October 25, 1996.

Cooler temperature was 5.2°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 5520, 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

. INC
:n: ROB BARRY

Project GSA ALAMEDA
Reported on October 28, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	01
CW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	02
CW-2	10/25/96	10/25/96	10/25/96	10/25/96	CJ251.46	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ251.46-01	Method Blank	MB	Water	10/25/96	10/25/96
CJ251.46-02	Laboratory Spike	LS	Water	10/25/96	10/25/96
CJ251.46-03	Laboratory Spike Duplicate	LSD	Water	10/25/96	10/25/96

Superior Analytical Laboratory

'al INC
.ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 28, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01 @	GW-1	Water	1.0	-
22022-02 @	TW-1	Water	1.0	-
22022-03 @	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	RL	22022-02 Conc. ug/L	RL	22022-03 Conc. ug/L	RL
Diesel:	320W	50	140W	50	80W	50
>> Surrogate Recoveries (%) <<						
Tetracosane	102		103		107	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22022
Method Blank(s)

	CJ251.46-01 Conc. ug/L	RL
Diesel:	ND	50
> Surrogate Recoveries (%) <<		
Tetracosane	111	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CJ251.46 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	1000/1100	100/110	50-150	10
Surrogate Recoveries (%) << Tetracosane				113/110	50-150	

- Sample contians a mixture of weathered diesel and heavier hydrocarbons. Possible
otor oil.

- The pattern of the chromatogram resembles a weathered, aged,
or degraded petroleum hydrocarbon.
- Hydrocarbons were found in the range of diesel, but do not
resemble a diesel fingerprint.

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

a1 INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 26, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	01
TW-1	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	02
TW-2	10/25/96	10/25/96	10/25/96	10/25/96	CJ252.37	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ252.37-01	Method Blank	MB	Water	10/25/96	10/25/96
CJ252.37-02	Laboratory Spike	LS	Water	10/25/96	10/25/96
CJ252.37-03	Laboratory Spike Duplicate	LSD	Water	10/25/96	10/25/96
CJ252.37-04	GW-1	MS 22022-01	Water	10/25/96	10/25/96
CJ252.37-05	GW-1	MSD 22022-01	Water	10/25/96	10/25/96

Superior
Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 26, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01	GW-1	Water	1.0	-
22022-02	TW-1	Water	1.0	-
22022-03	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	RL	22022-02 Conc. ug/L	RL	22022-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	1.1	0.5	0.6	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	1.0	0.5	1.5	0.5	0.6	0.5
>Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	92		99		95	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22022
Method Blank(s)

	CJ252.37-01 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	92	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CJ252.37 02 / 03 - Laboratory Control Spikes						
Benzene		20	17/16	85/80	65-125	6
Toluene		20	17/16	85/80	65-125	6
Ethyl Benzene		20	17/16	85/80	65-125	6
Xylenes		60	52/50	87/83	65-125	5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94/95	50-150	
For Water Matrix (ug/L)						
CJ252.37 04 / 05 - Sample Spiked: 22022 - 01						
Benzene	ND	20	16/17	80/85	65-125	6
Toluene	1.1	20	17/17	80/80	65-125	0
Ethyl Benzene	ND	20	16/16	80/80	65-125	0
Xylenes	1.0	60	50/51	82/83	65-125	1
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94/91	50-150	

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/ = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 27, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22022

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-1	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	01
TW-1	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	02
TW-2	10/25/96	10/25/96	10/28/96	10/28/96	CJ281.34	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CJ281.34-01	Method Blank	MB	Water	10/28/96	10/28/96
CJ281.34-02	Laboratory Spike	LS	Water	10/28/96	10/28/96
CJ281.34-03	Laboratory Spike Duplicate	LSD	Water	10/28/96	10/28/96

Superior Analytical Laboratory

al INC
ttn: ROB BARRY

Project GSA ALAMEDA
Reported on October 27, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22022-01	GW-1	Water	1.0	-
22022-02	TW-1	Water	1.0	-
22022-03	TW-2	Water	1.0	-

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

Compound	22022-01 Conc. ug/L	22022-01 RL	22022-02 Conc. ug/L	22022-02 RL	22022-03 Conc. ug/L	22022-03 RL
Oil and Grease	5100	5000	ND	5000	ND	5000

Superior
Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22022
Method Blank(s)

	CJ281.34-01	
	Conc.	RL
	ug/L	
Oil and Grease	ND	5000

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22022

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CJ281.34 02 / 03 - Laboratory Control Spikes						
Oil and Grease		30000	30000/33000	100/110	50-110	10

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/ = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

22022

CHAIN OF CUSTODY

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ALAMEDA
SAMPLING CREW: ROB BARRY

Matrix: Water	Matrix: Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - HCL	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number / Sample Description	Analyses: EPA 418.1	EPA 8010 SWMS 5520	EPA 8015M (TPH Diesel)	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance	24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X				3			1	1	96	10	25	12/30	~~GW-1~~ GW-1		X	X											X			
X				3			1	1				14/40	TW-1		X	X											X			
X				3			1	1				14,50	TW-2		X	X											X			

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DR.
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By:	Date/Time	Received By:	Date/Time
Robert Barry	10/25 1600		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
Airbill Number: HAND DELIVERED	Date/Time	Received By Lab: Hsaneh Salimi	Date/Time 10/25/16 1600

Please Deliver Analytical Results to:

Project Manager: ROB BARRY
CAL INC
2040 Peabody Road, Suite 400
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 Facsimile

24 HR. TAT

SPECIAL INSTRUCTIONS

Please Initial: [illegible]
Samples Stored in Ice: 5.2°C ✓
Appropriate containers: ✓
Samples properly preserved:
VOA's free of headspace:
Containers intact:

Superior Analytical Laboratory

NOV 21 1996

Date: November 17, 1996

Cal INC
2040Peabody Rd-400/ PO Box 632
Vacaville, CA 95696

Attn: ROB BARRY

Laboratory Number : 22068

Project Number/Name : GSA ALAMEDA
Facility/Site : AMALEDA FEDERAL CENTER

Dear ROB BARRY:

Attached is Superior Analytical Laboratory report for the samples received on November 15, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after December 15, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Superior

Analytical Laboratory

CASE NARRATIVE

Cal INC
Project Number/Name: GSA ALAMEDA
Laboratory Number: 22068

Sample Receipt

Three water samples were received by Superior Analytical Laboratory on November 15, 1996.

Cooler temperature was 6.2°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods , 5520, 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior
Analytical Laboratory

l INC
tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.02	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK151.02-01	Method Blank	MB	Water	11/15/96	11/15/96
CK151.02-02	Laboratory Spike	LS	Water	11/15/96	11/15/96
CK151.02-03	Laboratory Spike Duplicate	LSD	Water	11/15/96	11/15/96

Superior Analytical Laboratory

l INC
tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

ompound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
iesel:	240W	50	ND	50	ND	50
nknown Hydrocarbons	NA		60**	50	70**	50
Surrogate Recoveries (%) <<						
cosane	118		122		122	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.02-01 Conc. ug/L	RL
Diesel:	ND	50
Unknown Hydrocarbons	ND	50
> Surrogate Recoveries (%) <<		
Tetracosane	107	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.02 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	810/930	81/93	50-150	14
-> Surrogate Recoveries (%) <<						
Tetracosane				105/108	50-150	

V - The pattern of the chromatogram resembles a weathered, aged, or degraded petroleum hydrocarbon.

* - Heavier hydrocarbons were found in the range of diesel, but do not resemble a diesel fingerprint. Possible motor oil.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

al INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.34	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CK151.34-01	Method Blank	MB	Water	11/15/96	11/15/96
CK151.34-02	Laboratory Spike	LS	Water	11/15/96	11/15/96
CK151.34-03	Laboratory Spike Duplicate	LSD	Water	11/15/96	11/15/96

Superior Analytical Laboratory

:l INC
:tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 16, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

Compound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
Oil and Grease	ND	5000	ND	5000	ND	5000

Superior
Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.34-01	
	Conc.	RL
	ug/L	
il and Grease	ND	5000

Superior
Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.34 02 / 03 - Laboratory Control Spikes						
Oil and Grease		30000	30500/30100	102/100	50-110	2

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
= parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

. INC
:n: ROB BARRY

Project GSA ALAMEDA
Reported on November 17, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22068

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SW-2	11/15/96	11/15/96	11/16/96	11/16/96	CK151.37	01
TW-1-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.37	02
TW-2-2	11/15/96	11/15/96	11/15/96	11/15/96	CK151.37	03

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CK151.37-01	Method Blank	MB		Water	11/15/96	11/15/96
CK151.37-05	Method Blank	MB		Water	11/16/96	11/16/96
CK151.37-02	Laboratory Spike	LS		Water	11/15/96	11/15/96
CK151.37-03	MW-8B	MS	22061-01	Water	11/15/96	11/15/96
CK151.37-04	MW-8B	MSD	22061-01	Water	11/15/96	11/15/96

Superior Analytical Laboratory

1 INC
tn: ROB BARRY

Project GSA ALAMEDA
Reported on November 17, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22068-01	GW-2	Water	1.0	-
22068-02	TW-1-2	Water	1.0	-
22068-03	TW-2-2	Water	1.0	-

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

Compound	22068-01 Conc. ug/L	RL	22068-02 Conc. ug/L	RL	22068-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	0.5	0.5	ND	0.5	ND	0.5
1,3-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
1,4-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	94		88		96	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22068
Method Blank(s)

	CK151.37-01 Conc. ug/L	RL	CK151.37-05 Conc. ug/L	RL
enzene	ND	0.5	ND	0.5
oluene	ND	0.5	ND	0.5
hlorobenzene	ND	0.5	ND	0.5
thyl Benzene	ND	0.5	ND	0.5
ylenes	ND	0.5	ND	0.5
,3-Dichlorobenzene	ND	0.5	ND	0.5
,4-Dichlorobenzene	ND	0.5	ND	0.5
,2-Dichlorobenzene	ND	0.5	ND	0.5
Surrogate Recoveries (%) <<				
rifluorotoluene (SS)	89		98	

Superior
Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22068

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CK151.37 02 / - Laboratory Control Spikes						
Benzene		20	17	85	65-135	
Toluene		20	18	90	65-135	
Ethyl Benzene		20	19	95	65-135	
Xylenes		60	57	95	65-135	
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				94	50-150	
For Water Matrix (ug/L)						
CK151.37 03 / 04 - Sample Spiked: 22061 - 01						
Benzene	ND	20	19/20	95/100	65-135	5
Toluene	ND	20	21/21	105/105	65-135	0
Ethyl Benzene	ND	20	20/22	100/110	65-135	10
Xylenes	ND	60	58/58	97/97	65-135	0
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102/108	50-150	

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

CAL INC

CHAIN OF CUSTODY

22068

PROJECT NAME AND DESCRIPTION: GSA ALAMEDA
PROJECT LOCATION: ALAMEDA FEDERAL CENTER
SAMPLING CREW: ROB BARRY

Matrix: Water	Soil	Number of Containers and Preservative Information: Glass Jar	2-inch Brass Tube	VOA - HCL	1 Liter Amber Unpreserved	1 Liter Amber - ~~HCl~~ H_2SO_4	1 Liter Plastic - HNO3	1 Liter Plastic - Unpreserved	Date: Year	Month	Day	Time	Sample Number / Sample Description	Analyses: EPA ~~418.1~~ 5520 O&G	EPA 8010	EPA 8015M TPH Diesel	EPA 8020	EPA 8080	EPA 8240	EPA 8270	TPH-G + BTEX	TTLC Metals	STLC Metals	STLC Lead	TTLC Lead	pH	Specific Conductance		24 Hour TAT	48 Hour TAT	Regular Lab TAT	Other TAT ( )
X				2	1	1			96	11	15	14	GW-2	X		X	X														
↓				2	1	1			↓	↓	↓	↓	TW-1-2	↓		↓	↓														
↓				2	1	1			↓	↓	↓	↓	TW-2-2																		

LABORATORY NAME AND ADDRESS

SAL
825 ARNOLD DRIVE
MARTINEZ, CA

CHAIN OF CUSTODY RECORD

Relinquished By	Date/Time	Received By	Date/Time
Robert Barry	11/15/96 1400	Dawn Clancy GSL	11/15/96 14:00
Dawn Clancy	11/15/96 1700		
Airbill Number:		Received By Lab: Cooli	11/15/96 17:00

Please Initial: RB
Samples Stored in ice. ✓ 6.2°C
Appropriate containers ✓
Samples preserved ✓
VOAs without headspace ✓
Comments:

Please Deliver Analytical Results to:
ROB BARRY

CAL INC
2040 Peabody Road, Suite 300
Vacaville, California 95687
(707) 446-7996
(707) 446-4906 facsimile

SPECIAL INSTRUCTIONS

24 HR TAT
AS WE DISCUSSED, ALSO RUN SAMPLE #22013-3 FOR STLC (Hg) - 72 HR TAT!

Superior Analytical Laboratory

1 NC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	01
TW-1-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	02
TW-2-3	12/06/96	12/06/96	12/07/96	12/07/96	CL071.34	03
S-1-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	04
S-2-7'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	05
S-3-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	06
S-4-6'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	07
S-5-13'	12/06/96	12/06/96	12/07/96	12/07/96	CL072.34	08

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL071.34-01	Method Blank	MB	Water	12/07/96	12/07/96
CL071.34-02	Laboratory Spike	LS	Water	12/07/96	12/07/96
CL071.34-03	Laboratory Spike Duplicate	LSD	Water	12/07/96	12/07/96
CL072.34-01	Method Blank	MB	Soil	12/07/96	12/07/96
CL072.34-02	Laboratory Spike	LS	Soil	12/07/96	12/07/96
CL072.34-03	Laboratory Spike Duplicate	LSD	Soil	12/07/96	12/07/96
CL072.34-04	S-5-13'	MS 22157-08	Soil	12/07/96	12/07/96
CL072.34-05	S-5-13'	MSD 22157-08	Soil	12/07/96	12/07/96

Superior
Analytical Laboratory

al INC
Attn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	1.0	-
22157-03	TW-2-3	Water	1.0	-
22157-04	S-1-7'	Soil	1.0	-

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

Compound	22157-01 Conc. ug/L	RL	22157-02 Conc. ug/L	RL	22157-03 Conc. ug/L	RL	22157-04 Conc. mg/kg	RL
Oil and Grease	ND	5000	190000	5000	110000	5000	6300	85

Superior Analytical Laboratory

l INC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 7, 1996

Total Oil and Grease by Standard Method 5520

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-05	S-2-7'	Soil	1.0	-
22157-06	S-3-6'	Soil	1.0	-
22157-07	S-4-6'	Soil	1.0	-
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL	22157-08 Conc. mg/kg	RL
Oil and Grease	5000	85	2900	85	2100	85	ND	85

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL071.34-01		CL072.34-01	
	Conc.	RL	Conc.	RL
	ug/L		mg/kg	
il and Grease	ND	5000	ND	50

Superior Analytical Laboratory

Total Oil and Grease by Standard Method 5520

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Water Matrix (ug/L)				
		CL071.34 02 / 03 - Laboratory Control Spikes				
Oil and Grease		30000	29300/28100	98/94	50-110	4
		For Soil Matrix (mg/kg)				
		CL072.34 02 / 03 - Laboratory Control Spikes				
Oil and Grease		600	488/556	81/93	60-110	14
		For Soil Matrix (mg/kg)				
		CL072.34 04 / 05 - Sample Spiked: 22157 - 08				
Oil and Grease	ND	600	576/610	96/102	60-110	6

)efinitions:
ND = Not Detected
.L = Reporting Limit
:A = Not Analysed
PD = Relative Percent Difference
:g/L = parts per billion (ppb)
.g/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

a. INC
ttn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 6, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	01
TW-1-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	02
TW-2-3	12/06/96	12/06/96	12/06/96	12/06/96	CL061.05	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CL061.05-06	Method Blank	MB	Water	12/06/96	12/06/96
CL061.05-02	Laboratory Spike	LS	Water	12/06/96	12/06/96
CL061.05-03	Laboratory Spike Duplicate	LSD	Water	12/06/96	12/06/96
CL061.05-04	UAL-1205-W	MS 22147-01	Water	12/06/96	12/06/96
CL061.05-05	UAL-1205-W	MSD 22147-01	Water	12/06/96	12/06/96

Superior Analytical Laboratory

l INC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 6, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	1.0	-
22157-03	TW-2-3	Water	1.0	-

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

Compound	22157-01 Conc. ug/L	RL	22157-02 Conc. ug/L	RL	22157-03 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	ND	0.5	3.3	0.5	0.7	0.5
1,3-Dichlorobenzene	ND	0.5	0.7P	0.5	ND	0.5
1,4-Dichlorobenzene	ND	0.5	2.3P	0.5	1.6P	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5	1.1	0.5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	81		89		ND	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL061.05-06 Conc. ug/L	RL
enzene	ND	0.5
oluene	ND	0.5
hlorobenzene	ND	0.5
thyl Benzene	ND	0.5
ylenes	ND	0.5
,3-Dichlorobenzene	ND	0.5
,4-Dichlorobenzene	ND	0.5
,2-Dichlorobenzene	ND	0.5
Surrogate Recoveries (%) <<		
rifluorotoluene (SS)	74	

Superior Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CL061.05 02 / 03 - Laboratory Control Spikes						
Benzene		20	17/19	85/95	65-135	11
Toluene		20	17/19	85/95	65-135	11
Ethyl Benzene		20	18/19	90/95	65-135	5
Xylenes		60	55/58	92/97	65-135	5
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				88/98	50-150	
For Water Matrix (ug/L)						
CL061.05 04 / 05 - Sample Spiked: 22147 - 01						
Benzene	ND	20	17/18	85/90	65-135	6
Toluene	ND	20	17/18	85/90	65-135	6
Ethyl Benzene	ND	20	17/19	85/95	65-135	11
Xylenes	0.9	60	55/57	90/94	65-135	4
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				91/96	50-150	

? - There is a greater than 25% difference for detected concentration between the two GC columns.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior Analytical Laboratory

: INC
:n: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 22157

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
GW-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	01
TW-1-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	02
TW-2-3	12/06/96	12/06/96	12/06/96	12/06/96	CL063.02	03
S-1-7'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	04
S-2-7'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	05
S-3-6'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	06
S-4-6'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	07
S-5-13'	12/06/96	12/06/96	12/06/96	12/07/96	CL061.42	08

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CL061.42-01	Method Blank	MB		Soil	12/06/96	12/06/96
CL061.42-02	Laboratory Spike	LS		Soil	12/06/96	12/06/96
CL061.42-03	Laboratory Spike Duplicate	LSD		Soil	12/06/96	12/06/96
CL061.42-04	114G-72B	MS	22158-04	Soil	12/06/96	12/06/96
CL061.42-05	114G-72B	MSD	22158-04	Soil	12/06/96	12/06/96
CL063.02-01	Method Blank	MB		Water	12/06/96	12/06/96
CL063.02-02	Laboratory Spike	LS		Water	12/06/96	12/06/96
CL063.02-03	Laboratory Spike Duplicate	LSD		Water	12/06/96	12/06/96

Superior Analytical Laboratory

.l INC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-01	GW-3	Water	1.0	-
22157-02	TW-1-3	Water	20.0	-
22157-03	TW-2-3	Water	20.0	-
22157-04	S-1-7'	Soil	50.0	-

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

Compound	22157-01 Conc. ug/L	RL	22157-02 Conc. ug/L	RL	22157-03 Conc. ug/L	RL	22157-04 Conc. mg/kg	RL
Diesel:	90W	50	51000W	1000	37000W	1000	6000W	50
> Surrogate Recoveries (%) <<								
Tetracosane	94		NDBB		NDBB		143	

Superior Analytical Laboratory

l INC
tn: ROB BARRY

Project ALAMEDA FED. CTR.
Reported on December 9, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22157-05	S-2-7'	Soil	50.0	-
22157-06	S-3-6'	Soil	10.0	-
22157-07	S-4-6'	Soil	50.0	-
22157-08	S-5-13'	Soil	1.0	-

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

Compound	22157-05 Conc. mg/kg	RL	22157-06 Conc. mg/kg	RL	22157-07 Conc. mg/kg	RL	22157-08 Conc. mg/kg	RL
Diesel:	4500W	50	1100W	10	3800W	50	37W	1
> Surrogate Recoveries (%) <<								
Tetracosane	139		124		141		94	

Superior
Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22157
Method Blank(s)

	CL061.42-01		CL063.02-01	
	Conc.	RL	Conc.	RL
	mg/Kg		ug/L	
Diesel:	ND	1	ND	50
> Surrogate Recoveries (%) <<				
Tetracosane	103		115	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 22157

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/Kg)						
CL061.42 02 / 03 - Laboratory Control Spikes						
Diesel:		33	37/38	112/115	50-150	3
> Surrogate Recoveries (%) << Tetracosane				104/104	50-150	
For Water Matrix (ug/L)						
CL063.02 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	1230/1130	123/113	50-150	8
> Surrogate Recoveries (%) << Tetracosane				125/120	50-150	
For Soil Matrix (mg/Kg)						
CL061.42 04 / 05 - Sample Spiked: 22158 - 04						
Diesel:	2	33	35/36	100/103	50-150	3
> Surrogate Recoveries (%) << Tetracosane				104/106	50-150	

Superior Analytical Laboratory

rrative:

- Surrogate was diluted out.

- The pattern of the chromatogram resembles a weathered, aged, or degraded diesel petroleum hydrocarbon and motor oil.

finitions:

) = Not Detected
. = Reporting Limit
\ = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

APPENDIX 3

EBMUD ANALYTICAL RESULTS

EAST BAY
MUNICIPAL UTILITY DISTRICT

January 2, 1997

Mr. David Esparza
CAL Inc.
2040 Peabody Road, Suite 400
Vacaville, CA 95687

Dear Mr. Esparza:

Re: Wastewater Discharge Permit (Account No. 503-50020)

East Bay Municipal Utility District (EBMUD) inspected your facility and sampled the wastewater on November 6, 1996. No discharge violations were noted. The laboratory report is attached for your reference. Selected parameters are listed below:

Regulated Parameter	Permit Limit (mg/l)	Test Results (mg/l)
Arsenic	0.16	< 0.066
Oil and Grease	100	< 2.5

Please call me at (510) 287-1541 if you have any questions.

Sincerely,

Sue M. Jenné

SUE M. JENNÉ
Wastewater Control Representative

calinc/calinc corres

Attachment

EBMUD
LABORATORY SERVICES

RECEIVED
JAN - 2 1997
SOURCE CONTROL DIVISION

ANALYTICAL REPORT

Prepared for: Sue Jenne

Mail Slot: #702

Date: December 30, 1996

Login: L37475

LSR: B941-NO LSR

Site: IW S MISC - CAL Inc.

Submitted by: _____
Jack C. Lim
Senior Chemist

Reviewed By: _____
Jeannette V. Weber
Client Services Supervisor

Reported By: _____
William M. Ellgas
Manager Laboratory Services

Legend to the Report Qualifier Flags:

All Analyses
* - Duplicate Outside Control Limits
B = Analyte Detected in Blank
LA- Lost Analysis
N = Spiked Sample Recovery Outside Control Limits
R = Spike Out of Calibration Range
U = Analyte Not Detected
NEG = Negative (in qualifier field only)
POS = Positive (in qualifier field only)

Metals Only
+ - Calibration Correlation Coefficient <0.995
E - Estimated Value
M - Duplicate Injection Precision not Met
S - Method of Standard Additions Used
W - Post-digestion Spike (PSA) Outside Control Limits

Organics Only
A = Diesel/Gasoline pattern is atypical
C = GC/MS Confirmation
D = Surrogate spike outside of control limits
E = Estimated Value,Concentration above Calibration Range
J = Estimated Value, quantitation does not meet SOP criteria
N = Presumptive Evidence of a Compound
P = Pesticide/Aroclor column difference > 25%

Microbiology Only
< = Less Than
> = Greater Than
~ = Approximately
CG = Confluent growth
ND = Not detected
NA = Not applicable
SP = Spreader

EAST BAY MUNICIPAL UTILITY DISTRICT

ADMINISTRATION
75 11th STREET • OAKLAND, CA 94607-4240
TEL· (510) 835-3000

LABORATORY
2020 WAKE AVENUE • OAKLAND, CA 94607
TEL. (510) 287-1722 OR 1794 • FAX (510) 465-5462

MAIL
PO BOX 24055 • OAKLAND, CA 94623-1055
TEL. (510) 835-3000

EBMUD LABORATORY SERVICES
PO Box 24055
Oakland, CA 94623

Phone (510) 287-1432
FAX (510) 465-5462

Analytical Results Report

Project Number: B941-NO LSR
Sample Id: L37475-1
Site: IW S
Locator: MISC
Collect Date/Time: 06-Nov-96 10:44
Comments:

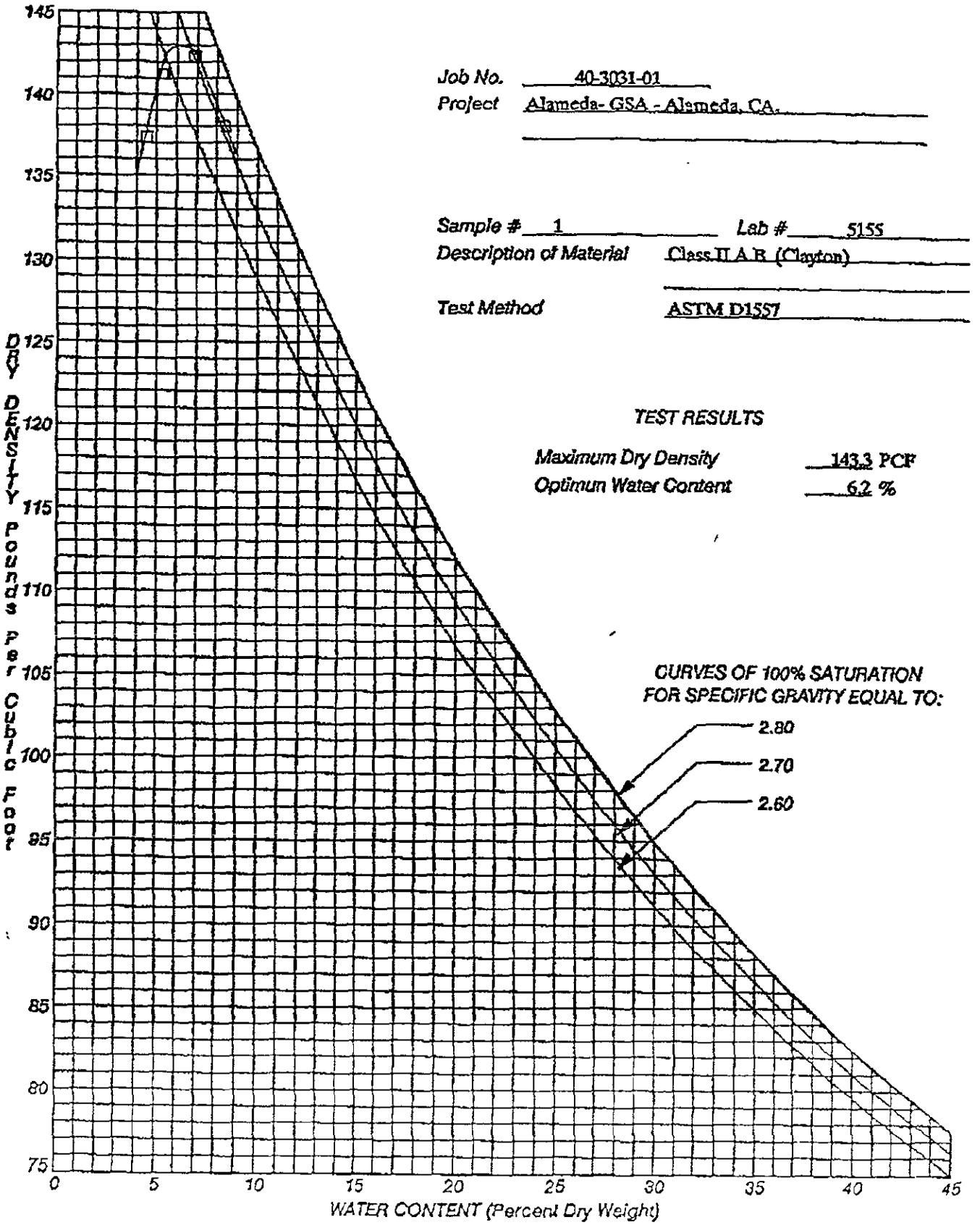
ameter	Units	Qual.	Result	Det. Lim.
:PA 200.7				
,S	ug/l	U	66.0	66.0
,L	ug/l		73.1	66.0
,G	ug/l		5.96	4.40
3	ug/l		82.2	11.0
3A	ug/l		21.4	2.20
3E	ug/l	U	2.20	2.20
:A	ug/l	B	14000	11.0
:D	ug/l	U	3.30	3.30
:O	ug/l	U	11.0	11.0
:R	ug/l		12.9	9.90
:U	ug/l	U	3.30	3.30
FE	ug/l		40.1	11.0
G	ug/l	U	11.0	11.0
K	ug/l		12000	6600
LI	ug/l		17.0	6.60
MG	ug/l		10900	44.0
MN	ug/l		151.	3.30
MO	ug/l		18.6	7.70
NA	ug/l		206000	77.0
NI	ug/l	U	11.0	11.0
PB	ug/l	U	33.0	33.0
SB	ug/l	U	33.0	33.0
SE	ug/l	U	55.0	55.0
SI	ug/l		11700	55.0
SN	ug/l	U	22.0	22.0
SR	ug/l		181.	6.60
TL	ug/l		95.5	55.0
V	ug/l	U	11.0	11.0
ZN	ug/l		15.5	5.50
O & G (HYDROCARBON)	mg/l	U	2.5	2.5

Qualifiers Described on Cover Page.

APPENDIX 9

MATERIALS TESTING RESULTS

AGGREGATE BASE ROCK MOISTURE-DENSITY RELATIONSHIP



Job No. 40-3031-01

Project Alameda- GSA - Alameda, CA.

Sample # 1 Lab # 5155

Description of Material Class II A R (Clayton)

Test Method ASTM D1557

TEST RESULTS

Maximum Dry Density	143.3 PCF
Optimun Water Content	6.2 %

MOISTURE-DENSITY RELATIONSHIP

PLATE

KLEINFELDER
Solsun City, California

LABORATORY CERTIFICATE

SIGNET Testing Labs

ENGINEERS • METALLURGISTS • CHEMISTS • SCIENTISTS • MATERIALS TESTING • CONSTRUCTION INSPECTION

1 · 25064 Viking Street Hayward, California 94545 510/887-8484 Fax 510/783-4295

August 2, 1996

LAB NO.: A4604 **STL NO.:** 331-001

REPORT TO: Dumbarton Quarry
P.O. Box 487
Fremont CA, 94537
Attn: Joe Evans

SUBJECT: Laboratory Testing of Aggregate Base

SAMPLE: Gray rocky silty sand, 3/4" Class 2 Aggregate Base, sampled 7/31/96.

REPORT

A sample of aggregate base was submitted to our laboratory for testing. The sample was tested for determination of gradation, sand equivalent, durability index, r-value, and maximum dry density. Test results are as follows:

GRADING ANALYSIS
(California Test No. 202)

Sieve Size	Sieve Size	Percent Passing	Oper. Range	Contr. Compliance
25.0 mm	1"	100	100	100
19.0 mm	3/4"	96	90-100	87-100
12.5 mm	1/2"	86		
9.5 mm	3/8"	76		
4.75 mm	#4	51	35-60	30-65
2.36 mm	#8	33		
1.18 mm	#16	20		
600 um	#30	13	10-30	5-35
300 um	#50	9		
150 um	#100	7		
75 um	#200	5.2	2-9	0-12

SAND EQUIVALENT
(California Test No.217)

Sand Equivalent	:	43
Specified Minimum SE	:	25

DURABILITY INDEX
(California Test No. 229)

Durability of Coarse Fraction	: 70
Durability of Fine Fraction	: 38
Durability Index	: 38
Specified Minimum Durability Index	: 35

SIGNET
Testing Labs

LAB NO.: A4604
DATE: 8/2/96

HVEEM STABILOMETER TEST
(California Test No. 301)

Test No.	Exud. Press. psi	Pct. Moist.	Dry Density pcf	Expans. Press. psf	'R' Value
1	205	7.1	141.7	0	83
2	392	6.2	142.7	0	85
3	706	5.4	143.4	0	88
	300	6.5	142.3	0	84

Specified Minimum R-Value at 300 psi : 78

MOISTURE VS. DRY DENSITY
(ASTM D1557)

Maximum Dry Density	:	147.5 lbs./cu.ft.
Optimum Moisture Content	:	6.5 %
Signet Curve No.	:	5834

Listed requirements are for Class 2 Aggregate Base per Section 26, State of California Standard Specifications. Test results meet requirements.

Respectfully submitted,

William Rodriguez
NICET Cert. No. 86887

cc: Joe Evans
wt/wt
std/4600/4604-rpt

AGGREGATE BASE ROCK
FIELD DENSITY TESTS

KLEINFELDER

DAILY FIELD REPORT

Client Received Copy of this Report: ☑ Yes ☐ No

Page 1 of 1

File Number	Project Name	Location	Technician/Engineer
4/0-3031-01	ALAMEDA FEDERAL CENTER	ALAMEDA, CA	ROGER P. HANSEN
Date	**Client**	**Contractor/Representative**	**Time Arrived**
1-6-97	CAL, INC.	ROBERT BARRY w/ CAL	9:30 AM.
Daily Field Report Number	**Source of Fill**	**Gauge Number / Mileage**	**Time Departed**
	☐ NATIVE ☑ IMPORT AB II	6170	12:30 PM.
Reviewed By	**Location of Fill**	**Results Reported To**	**Travel Time (hours)**
	PARKING LOT	ROBERT	2.5
Date Reviewed	**Specified Compaction**	**Weather**	**Total Time (hours)** (May not include minimum)
	95%	SUNNY - COOL - BREEZY	5.5

Test Number	Test Location	Probe Depth (inches)	Test Elevation (feet)	Lab Max. Dry Density (lbs/cu ft)	Test Dry Density (lbs/cu ft)	Test Moisture %	% Of Max. Dry Density	Comments
1	PARKING AREA	8"	AB SECTION	143.3 / 62%	129.2	7.6	90	FOR CONTRACTOR
2	↓	↓	↓	↓	124.5	9.6	87	INFORMATION
3	↓	↓	↓	↓	123.0	8.5	86	ONLY
4	↓	6"	↓	↓	129.5	8.1	90	↓

Any unresolved test (date/number):

Observations/Remarks: MET W/ ROBERT BARRY, CAL FOREMAN. OBSERVED CONTRACTOR HAS FILTER FABRIC & WAS IN PROCESS OF PLACING & COMPACTING AB II FOR PARKING AREA @ THE WEST END OF S. CRESSY DR. PREPARED DFR & WAITED TO TEST THE AB. PROVIDED DENSITY TESTS FOR "CONTRACTOR INFORMATION ONLY." AREA HAS YET TO BE COMPLETED TO FULL SECTION DEPTH. REQUESTED BY ROBERT TO RETURN TOMORROW BETWEEN 12:30 - 1 PM. ALSO OBSERVED & POINTED OUT TO ROBERT AN AREA ALONG THE EAST SIDE OF THE AB SECTION AREA WHICH WAS PUMPING & UNSTABLE.

1. Test results, pass/fail indications, and/or recommendations (if applicable) provided herein have not been reviewed by supervisory staff and, therefore, should be considered preliminary and subject to change.
2. Tests were conducted in general accordance with generally accepted testing procedures practiced within the site area at the time tests were performed.

Roger P. Hansen

KLEINFELDER REPRESENTATIVE

☐ Continued on next page.

WHITE COPY—OFFICE YELLOW COPY—FIELD PINK COPY—CLIENT 7/90

KLEINFELDER

DAILY FIELD REPORT

		Client Received ☑ Yes ☐ No Copy of this Report	Page 1 of 1
File Number 40-3031-01	Project Name ALAMEDA FEDERAL CENTER	Location ALAMEDA, CA	Technician/Engineer R. E. HAULEN
Date 1-7-97	Client CAL, INC.	Contractor/Representative ROBERT BARRY w/ CAL	Time Arrived 12:55 pm.
Daily Field Report Number	Source of Fill ☐ NATIVE ☑ IMPORT AB II	Gauge Number / Mileage 6170	Time Departed 1:45 pm.
Reviewed By	Location of Fill PARKING AREA	Results Reported To ROBERT	Travel Time (hours) 2.5
Date Reviewed	Specified Compaction 95%	Weather SUNNY - MILD - CALM	Total Time (hours) 3.5 (May not include minimum)

Test Number	Test Location	Probe Depth (inches)	Test Elevation (feet)	Lab Max. Dry Density (lbs/cu ft)	Test Dry Density (lbs/cu ft)	Test Moisture %	% Of Max. Dry Density	Comments
5	NW CORNER	8"	AB II S.C.	143.3/62%	144.2	8.2	100	
6	NW AREA				140.0	6.4	98	
7	N. SIDE @ CENTER				137.7	8.2	96	
8	CENTER				139.5	7.2	97	
9	SW AREA				138.5	8.7	97	
10	SE AREA				140.0	6.8	98	
11	NE AREA				138.7	6.7	97	

Any unresolved test (date/number): _____

Observations/Remarks: ON SITE BY THE REQUEST OF THE CONTRACTOR, ROBERT w/ CAL. PERFORMED DENSITY THROUGHOUT AREA BACKFILL OVER TANKS WHICH WERE REMOVED. AREA APPEARS TO BE STABLE & TEST RESULTS INDICATE COMPLIANCE W/ JOB SPECS. INFORM ROBERT OF DIF RESULTS.

1. Test results, pass/fail indications, and/or recommendations (if applicable) provided herein have not been reviewed by supervisory staff and, therefore, should be considered preliminary and subject to change.
2. Tests were conducted in general accordance with generally accepted testing procedures practiced within the site area at the time tests were performed.

Ryan P. Haulen
KLEINFELDER REPRESENTATIVE

☐ Continued on next page.

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Notes