U.S. Department of Homeland Security

United States Coast Guard

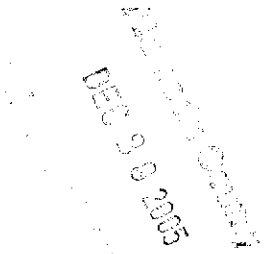
Civil Engineering Unit Oakland
United States Coast Guard

2000 Embarcadero, Suite 200
Oakland, CA 94606-5337
Staff Symbol: evd
Phone: 510-535-7239
FAX: 510-535-7288

R0493

5090
December, 22, 2005

Mr. Amir K. Gholami
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502



Dear Mr. Gholami:

Enclosure (1) is the information form you recently requested that we complete. Enclosure (2) is a copy of the Closure Report for the site. Enclosure (3) is a copy of some previous correspondence with your agency that might help you become familiar with this case.

We will be happy to provide any information that might help you resolve this long-pending case. For questions regarding this or other issues related to the site, please contact Mr. Joseph Sabel at 510-535-7239. Fax transmissions may be sent to 510-535-7288. Electronic mail may be sent to joseph.m.sabel@d11.uscg.mil.

Sincerely,

DAVE STALTERS
Chief, Environmental Division
U.S. Coast Guard
By direction of the Commanding Officer

Encl: (1) Alameda County form
(2) Closure Report
(3) Correspondence

U.S. Department of Transportation
United States Coast Guard

Civil Engineering Unit Oakland
United States Coast Guard

2000 Embarcadero, Suite 200
Oakland, CA 94606-5337
Staff Symbol: evd
Phone: 510-535-7239
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5090
January 28, 2002

Ms. Eva Chu
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Record ID RO0002443

Dear Ms. Chu:

In response to your letter of 16 January, there are not now, nor were there ever other owners of record of the subject property. For questions regarding this or other issues related to the site, please contact Mr. Joseph Sabel at 510-535-7239. Fax transmissions may be sent to 510-535-7288. Electronic mail may be sent to jsabel@d11.uscg.mil.

Sincerely,

Dave Stalters

DAVE STALTERS
Chief, Environmental Division
U.S. Coast Guard
By direction of the Commanding Officer

ENCLOSURE (3)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

Certified Mail # **7000 1670 0009 3787 4469**
January 16, 2002

Notice of Responsibility

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

Record ID: RO0002443
Coast Guard Island
Building 44
Alameda, CA 94501

SITE

Date First Reported: 1/16/2002
Substance: Waste Oil
Funding (Federal or State): F
Multiple RPs?: N

Joseph Sabel
US Coast Guard
2000 Embarcadero, Suite 200
Oakland, CA 94606-5337

Responsible Party (RP)
Property Owner

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified the US Coast Guard as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency within 20 calendar days of receipt of this notice which identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the State Water Resources Control Board. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please FAX your request to the State Water Board at (916) 341-5808 or telephone (916) 341-5700.

Pursuant to section 25299.37(c) (7) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact Eva Chu, Hazardous Materials Specialist, at this office at (510) 567-6762 for further information about the site designation process.

Date: 1/17/02

Ariu Levi, Chief
Contract Project Director

Please Circle One (Add) Delete Change

Reason: New Case

c: Lori Casias, SWRCB
Eva Chu, Hazardous Materials Specialist

U.S. Department of Transportation
United States Coast Guard

Civil Engineering Unit Oakland
United States Coast Guard

2000 Embarcadero, Suite 200
Oakland, CA 94606-5337
Staff Symbol: evd
Phone: 510-535-7239
FAX: 510-535-7288

5090
January 11, 2002

Mr. Robert Weston
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

JAN 16 2002

Dear Mr. Weston:

Enclosure (1) is our final report, "Underground Storage Tank Removal at Building 44" at Integrated Support Command Alameda. Some contamination was detected. However, we believe that no additional action is either required or warranted and request closure.

For questions regarding this or other issues related to the site, please contact Mr. Joseph Sabel at 510-535-7239. Fax transmissions may be sent to 510-535-7288. Electronic mail may be sent to jsabel@d11.uscg.mil.

Sincerely,

Dave Stalters

DAVE STALTERS
Chief, Environmental Division
U.S. Coast Guard
By direction of the Commanding Officer

Encl: (1) Underground Storage Tank Removal at Building 44

Ala.ust.rpt.tocnty.doc

Joe Sabel.
510/535-7239

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

JOSEPH SABEL
2000 EMBARCADERO #200, OAKLAND, CA 94606-5337

RE:RO0002443 USCG BLDG 44 44 SPENCER ALAMEDA CA

Dear Mr.SABEL:

Please be advised that I have been recently assigned to oversee the above referenced site. Therefore, all documents, reports, and correspondences should be addressed to my attention. In fact, I have received numerous other "new cases", which I need to get familiar with and proceed forward as soon as practicable. In order to keep continuity and to reduce confusion, I will try to follow up on the work/guidelines previously requested by my colleague of this office.
However, to expedite this so called "familiarization" process, please fill out and submit to me the attached table as soon as possible. I would appreciate it if you could fill out the attached table with the latest information regarding concentrations, etc and send it to me via an email attachment. My email address is amir.gholami@acgov.org .

Site Address:

Depth to groundwater	UNK
Groundwater flow gradient and speed	UNK
Benzene (ppb)	ND
Toluene (ppb)	ND
Ethylbenzene (ppb)	ND
Xylene (ppb)	ND
MTBE (ppb)	ND
TPHg (ppb)	SEE PAGE 3-3
TPHd (ppb)	SEE PAGE 3-3
Solvents if any (ppb)	SEE PAGE 3-3
Heavy Metals if any	SEE PAGE 3-3
Well Screen levels (for each monitoring well)	
Date information collected for concentrations	
Plume Stability: increasing or decreasing or stable?	
Any"Active Remediation" occuring presently or past?	
Other Pertinent Information regarding this site, such as whether any of the following has been performed: the plume is defined (vertically & horizontally) in soil & GW, SCM ,Risk Assessment, ESL comparison for Soil /GW, Sensitive Receptor survey, Soil Vapor analysis, etc. What is left in soil/Gw presently? (Please use additional attachment(s) if necessary)	

ENCLOSURE (1)

Additionally please provide a hard copy of a **stand-alone document**, which includes a site conceptual model (SCM), which incorporates the following items:

- Summary Figures
    - Site vicinity map showing the site location and identification of any nearby sensitive receptors.
    - Plot plan showing all historical sampling locations. Differentiation between sample types (i.e. excavation soil samples, soil boring locations, monitoring wells, soil vapor sampling points, etc.) is required. This figure also needs to include any former and existing UST system components, delineation of excavation areas, areas targeted by active remediation, building locations, potential preferential pathways such as utilities, property boundaries and public right-of-way locations.
    - Depth-specific contaminant isoconcentration maps for soil and groundwater. If active remediation was performed, separate pre-remediation and post-remediation isoconcentration maps are required.
- Summary Tables
    - Table of all historical soil data. Sample ID, date, depth, and results for all analytes are required. Please refer to the Tri-Regional Guidelines to confirm that chemical analysis was performed for all relevant contaminants of concern (CoCs). Pre- and post-remediation concentrations should be clearly identified or presented in separate tables.
    - Table of all historical groundwater data. Chemical concentrations in monitoring well(s) concentrations along with depth to water should be tabulated.
    - The tables need to compare the detected CoC concentrations with the Regional Board's ESLs or other appropriate cleanup levels and to the water quality objectives identified in the Regional Board's Basin Plan.
- Complete set of all boring logs generated during site investigation.
- Geologic cross-sections showing soil borings, monitoring wells with screened intervals, UST locations, any preferential pathways, excavation boundaries, water table elevations (historical and current) and extent of residual contamination.

The submission of the above documents will help expedite the review of your case. If you have any questions, please call me at (510)-5676. Thank you very much for your cooperation.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist
C: A.Gholami,D.Drogos
files

U.S. Department of Transportation
United States Coast Guard

Civil Engineering Unit Oakland
United States Coast Guard

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5090
January 11, 2002

Mr. Robert Weston
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Dear Mr. Weston:

Enclosure (1) is our final report, "Underground Storage Tank Removal at Building 44" at Integrated Support Command Alameda. Some contamination was detected. However, we believe that no additional action is either required or warranted and request closure.

For questions regarding this or other issues related to the site, please contact Mr. Joseph Sabel at 510-535-7239. Fax transmissions may be sent to 510-535-7288. Electronic mail may be sent to jsabel@d11.uscg.mil.

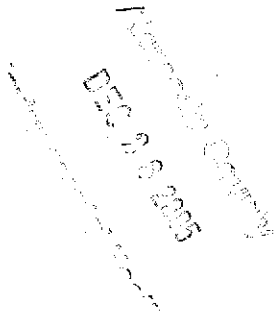
Sincerely,

DAVE STALTERS
Chief, Environmental Division
U.S. Coast Guard
By direction of the Commanding Officer

Encl: (1) Underground Storage Tank Removal at Building 44

Ala.ust.rpt.tocnty.doc

TETRA TECH, INC.
180 Howard Street, Suite 250
San Francisco, CA 94105-1617
Telephone (415) 974-1221
(510) 286-0152
FAX (415) 974-5914



January 8, 2002

Joe Sabel

US Coast Guard - Civil Engineering Unit
2000 Embarcadero, Suite 200
Oakland, CA 94606-5337

Subject: Final Closure Report for the Underground Storage Tank Removal at the Building 44 Site at the Integrated Support Command, Alameda, California

Dear Joe:

Tetra Tech is pleased to submit four copies of our Final Closure Report for the Underground Storage Tank Removal at the Building 44 Site at the Integrated Support Command in Alameda, California. This final report is being submitted with no changes from the draft report, based on your phone conversation with me on Tuesday, January 8, 2002. As previously stated, our regulatory points of contact on this project have been Mr. Robert Weston at the Alameda County Health Agency, and Chuck Headly at the Regional Water Quality Control Board. We recommend distributing copies of this final closure document to them at your convenience.

If you have any questions, or need additional copies of this document, please call Gary Floyd, Dick Brunner, or me at (415) 974-1221.

Sincerely,

Bradley S. Hall
Associate Director

Enclosures

cc: G. Floyd, Tt (letter only)
D. Brunner, Tt (letter only)
File

Final Closure Report

UNDERGROUND STORAGE TANK REMOVAL AT BUILDING 44 UNITED STATES COAST GUARD INTEGRATED SUPPORT COMMAND

ALAMEDA, CALIFORNIA

January 2002

Prepared for:

United States Coast Guard
Civil Engineering Unit
2000 Embarcadero, Suite 200
Oakland, CA 94606-5337

Prepared by:

Tetra Tech, Inc.
180 Howard Street, Suite 250
San Francisco, CA 94105-1617

TC # 11979-06

Final Closure Report

UNDERGROUND STORAGE TANK REMOVAL AT BUILDING 44 UNITED STATES COAST GUARD INTEGRATED SUPPORT COMMAND ALAMEDA, CALIFORNIA

WORK ORDER: DTCG88-01-N-6XB410
CONTRACT: DTCG88-00-D-6AL052

January 2002

Prepared for:

United States Coast Guard
Civil Engineering Unit
2000 Embarcadero, Suite 200
Oakland, CA 94606-5337

Prepared by:

Tetra Tech, Inc.
180 Howard Street, Suite 250
San Francisco, CA 94105-1617

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Full Phrase
bgs	below ground surface
ISC	Integrated Support Command
LEL	lower explosive limits
SOW	scope of work
SVOCs	semi-volatile organic compounds
TPHd	total petroleum hydrocarbons diesel
TPHg	total petroleum hydrocarbons gasoline
TPHo&g	total petroleum hydrocarbons oil & grease
USCG	United States Coast Guard
UST	underground storage tank
VOCs	volatile organic compounds

EXECUTIVE SUMMARY

The Building 44 site at the US Coast Guard (USCG) Integrated Support Command is a facility that stores oily water and waste oil, separates the water from the waste oil, and stages the waste oil for off-site disposal. Although this facility continues to operate, the 10,000-gallon underground storage tank (UST) at this facility, which stored the water and oil, was no longer used because it could have been leaking due to the malfunctioning of its leak detection monitoring system. Therefore, the USCG contracted Tetra Tech, Inc., to remove and dispose of the UST and to assess potential environmental issues regarding leaks from the tank.

The UST was cleaned out of all oil, water, and sludge then was decontaminated, removed from the ground, and disposed of off-site. The tank was in good condition, with no visible holes or leaks. All associated piping and the leak detection system were removed to the extent practical, or they were plugged and left in place.

The excavation to remove the tank was approximately ten feet deep. Groundwater filled the excavation to a depth of nine feet below the ground surface. The groundwater level in the excavation was stable over a 30-hour period, which included a high and a low tide that bracketed the water level in the excavation. Therefore, the groundwater in the bottom of the excavation did not appear to be in good communication with surface water in the adjacent bay.

Four soil samples were collected from stained areas beneath the tank, and four samples were collected from the gravel fill that was excavated from around the tank and stockpiled on-site. The soil samples contained low concentrations of total petroleum hydrocarbon as gasoline (TPHg), as diesel (TPHd), and as oil and grease (TPHo&g). Six volatile organic compounds (VOCs) and one semivolatile organic compound (SVOCs) were found in the

soil sample with the greatest concentrations of TPHo&g. Low concentrations of four metals were detected in these soil samples at levels that appear to be ubiquitous or at background levels. The gravel samples also contained concentrations of TPHg, TPHd, and TPHo&g but at lower concentrations than the soil samples. The gravel samples did not contain any VOCs or SVOCs and contained similar concentrations of the four metals.

All of the TPHg and TPHd results were qualified as concentrations of hydrocarbons that did not match the gasoline and diesel standards. The VOCs and SVOCs that were found were not the typical gasoline and diesel constituents, supporting the premise that these compounds were not the result of gasoline or diesel releases.

A water sample collected from the groundwater that filled the bottom of the excavation contained low concentrations of TPHg, TPHd, and TPHo&g. Similar to the soil and gravel results, these TPHg and TPHd concentrations were qualified as not matching the gasoline and diesel standards. Also, no VOCs or SVOCs were detected in the groundwater sample. Three of the four metals found in the soil samples were also found in the groundwater sample. The concentrations of these metals were low.

The sidewalls of the excavation were unstable and began to collapse and undermine the adjacent pavement at the site. Although the analytical results had not been reported, the USCG decided to backfill the excavation with the gravel fill that was removed from around the tank to abate any further structural damage to the site and to avert the potential collapse of Building 44. Neither the soil in the excavation nor the gravel was visibly contaminated with waste oil. The balance of the excavation was backfilled with imported gravel and was compacted to support an asphalt cover. The asphalt parking lot and adjacent concrete curbs, gutters, and sidewalks were restored to their original condition. This surface covers the former excavation and greatly reduces the potential for surface water to leach though the gravel and soils at the site.

Conclusions

The UST at the Building 44 site and the environmental issues related to this tank are recommended for closure. The tank was properly removed and disposed of off-site. The analytical data shows low concentrations of hydrocarbons that do not appear to be gasoline or diesel, low concentrations of a few VOCs and one SVOC, and low concentrations of four metals were left in the excavation. Also, low concentrations of hydrocarbons and metals, with no VOCs and no SVOCs, were found in the groundwater in the excavation. Concentrations of these analytes do not appear to be of environmental concern. Also, the groundwater beneath the former excavation does not appear to be in direct communication with the water in the adjacent bay. Furthermore, the asphalt and concrete cap over the former excavation prevents infiltration of surface water at the site to leach and mobilize the residual analytes that were left in place.

Tetra Tech recommends that the facility at Building 44 continue its operations of waste minimization and disposal of oily waste and waste oil. The operation permit should be amended to show that this operations will continue without the UST as part of the system.

SECTION 1
INTRODUCTION

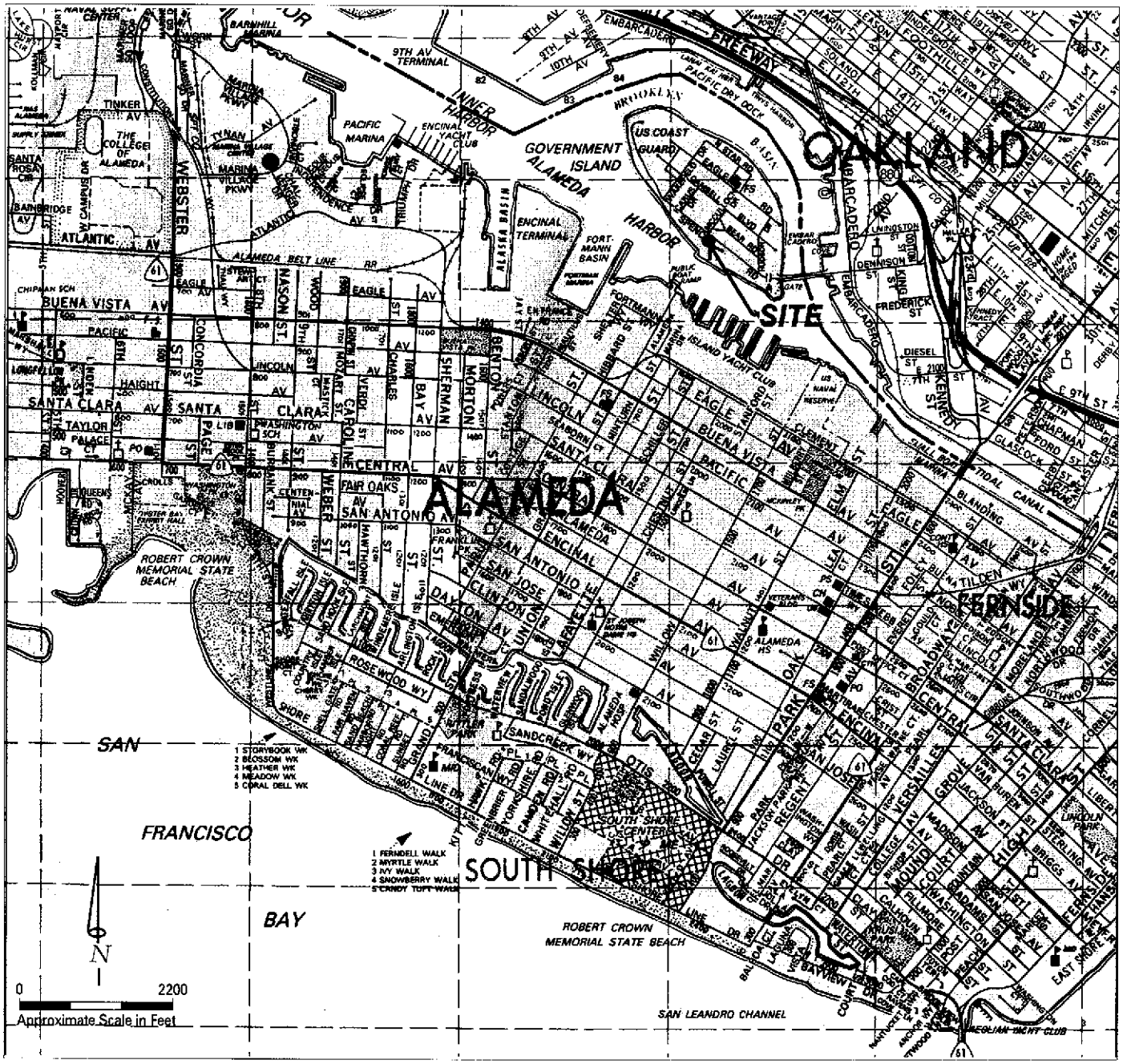
This report presents the activities performed and the results of the soil sampling conducted during the removal of an underground storage tank (UST) at the United States Coast Guard (USCG) Integrated Support Command (ISC) Alameda (site) in Alameda, California (Figure 1). Tetra Tech conducted the work for the USCG in accordance with scope of work (SOW) PSN 33-001100 (US Coast Guard) under work order DTCG88-01-N-6XB410 to contract DTCG88-00-D-6AL052 between Tetra Tech and the USCG. The work described in this report was conducted to facilitate closure for the UST at the site.

1.1 SITE DESCRIPTION AND BACKGROUND

The site is within ISC, at the intersection of McCullough Drive and Spencer Road on the southwest side of Government Island (Figure 1). On the east side of Building 44 (Figure 2) there was a 10,000-gallon double-walled fiberglass UST that was installed in 1985. The USCG indicated that the tank may be inside a vault; this was not confirmed by the construction drawing, which indicated that the tank was held by a concrete slab on the bottom of the excavation. According to Jimmy DeeLittle of the USCG, the tank was floating on groundwater when installed in 1985.

Initially, the oily-water UST received bilge water and oily water from the USCG ships through underground pipelines that ran to the piers. Oily water and waste oil were periodically pumped out of the tank and disposed of off-site. At some later time, an oil/water separator was installed, which decanted most of the water for disposal to the sanitary sewer system before the waste oil was disposed of. Later still, the pipelines to the docks were taken out of service, and oily wastewater and waste oil was transported to the UST by tanker trucks. The separation process and off-site disposal procedure remained the same. Most recently, the monitoring system that detects potential leaks in the tank failed. The UST was taken out of service because of this system's failure. The USCG decided that the costs and risks of maintaining this oily-

water UST were not justified and that the UST, the associated piping, and associated monitoring system should be removed and disposed of off-site.



Source: Thomas Brothers, 1993

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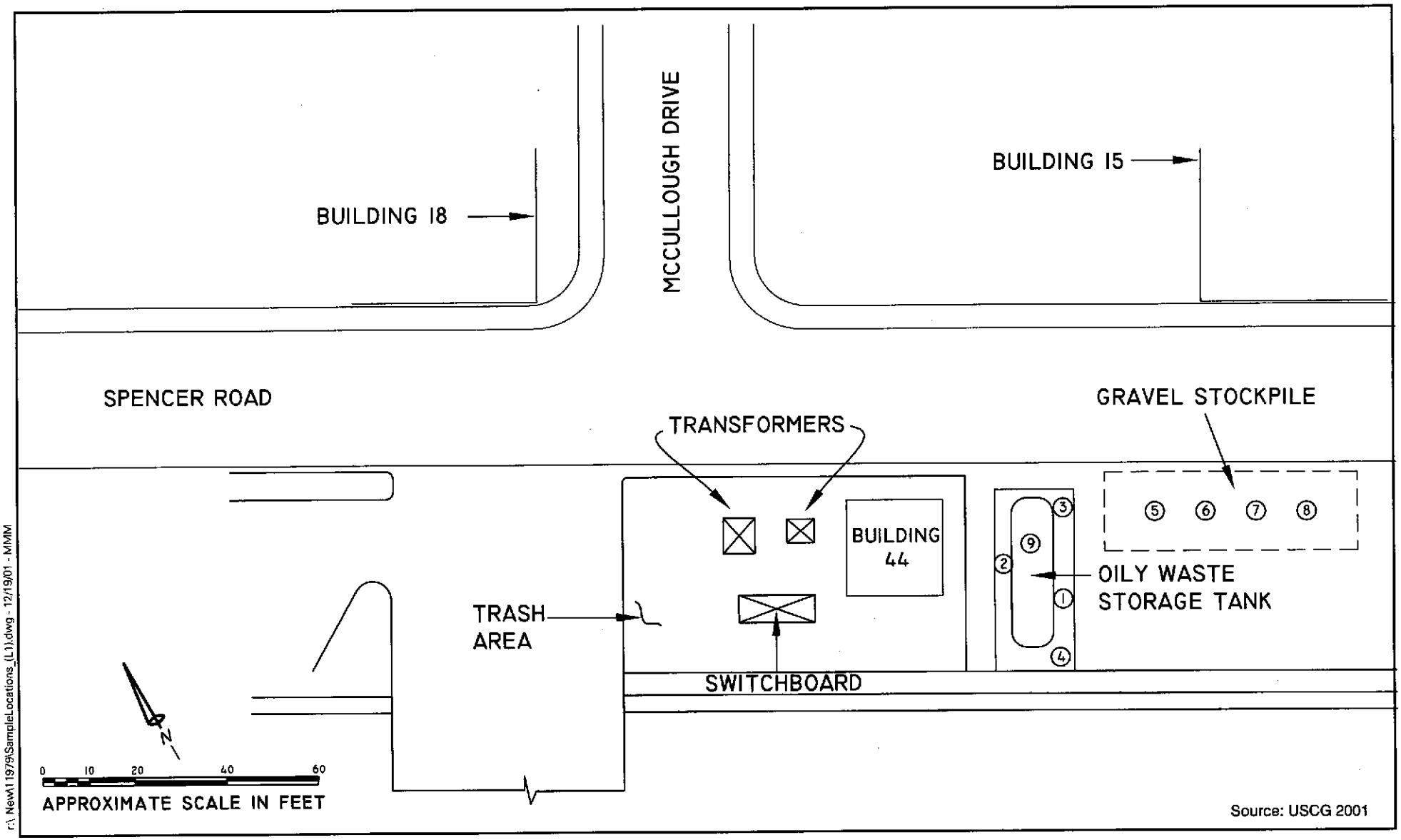
Site Location Map

Building 44 UST Removal
Alameda, California

Tetra Tech, Inc.

Figure 1



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Site Plan with Sample Locations

Building 44 UST Removal
Alameda, California

Tetra Tech, Inc.

Figure 2

The construction drawings indicate that the depth to the bottom of the tank was approximately twelve feet below grade.

1.2 PHYSIOGRAPHIC AND HYDROGEOLOGIC SETTING

The topography is generally flat because it is a parking lot. The site lies at an elevation of approximately 11 feet above mean sea level.

The shallow geology in the vicinity of the site is reported to consist of sandy clay with silt (fill), underlain by a silty clay (bay mud). Groundwater was encountered at 11 feet below ground surface (bgs) (USGS 1969).

1.3 PURPOSE

The purpose, as described in the scope of work, was to remove the UST and any associated product piping, to permanently cap the oily-water piping from the pier, to assess the potential presence of petroleum hydrocarbons beneath the UST or product piping, to document the activities and findings in a report for regulatory closure.

SECTION 2
TANK REMOVAL METHODOLOGY

2.1 PRE-FIELD ACTIVITIES

Permitting

FOSS Environmental Services (FOSS), a state-licensed contractor, obtained all the necessary permits from the local agencies before removing the UST. Specifically, the Alameda County Health Department issued a UST closer permit and the Bay Area Air Quality Management District issued an air quality permit. Copies of permits for the tank and hazardous waste disposal can be found in Appendix A.

2.2 UST REMOVAL

Tetra Tech hired FOSS for tank removal, which began on November 13, 2001, and finished on December 12, 2001. Further, Ransome Company was hired to lay the asphalt and to pour concrete. Cleinfelder Consulting performed the compaction testing, and Cruz Brothers Locators marked the on-site utilities.

2.2.1 Site Preparation

Utility Location

FOSS contacted Cruz Brothers Locators before beginning work at the site to identify the utility lines in the vicinity of the area. On Tuesday, November 13, 2001, Cruz Brothers clearly marked all utilities in the project area, around the excavation and in its vicinity.

Spill Protection

During operations, spill protection was implemented in the immediate area of the site. The area above the UST was protected with plastic sheeting surrounded by a boom to prevent accidental spillage into the gutter and sewage system (Photo 3). Oil absorbing fiber was placed as an additional

protection above the sewage system. The site was fenced in, extending from Building 44 to most of the parking lot.

Pea gravel excavated from the UST was temporarily stockpiled to the south of the excavation on protective plastic sheeting surrounded by a boom on all sides. It then was covered with more plastic sheeting to prevent rain intrusion. The extent of the stockpile was about 15 feet by 92 feet and the height was estimated to be three feet six inches (Photo 15).

2.2.2 Removed Underground Utilities

Because the leak detection system failed, connecting wiring, sensors, and piping between the UST and Building 44 had to be detached and removed.

A low voltage monitoring cable in a one-inch galvanized steel conduit had to be disconnected in Building 44 before piping from the building to the tank could be removed. Further, the USCG removed one liquid sensor for the secondary containment and one that measured the liquid level in the tank. Both sensors were located above the tank and were retrieved from the manholes.

One 2½-inch galvanized steel pipe was removed. This pipe was draining from Building 44 at a quarter inch per foot toward the UST and was connected to the pier oily waste line. After the pipe was drained into the tank, it was triple high-pressure washed until no more residual oily water was observed. Two 2½-inch galvanized steel venting pipes, running from the tank underneath the sidewalk and up the northeastern site of Building 44, were cut and pulled (Photo 5). The cleaned piping was disposed of with other garbage, such as plastic sheeting. The ends of the piping exiting Building 44 were permanently capped (Photo 30), and the bilge water pipe coming from the pier was permanently sealed off. It was not possible to thread the pipe and cap it because it was too soft, so it was sealed with epoxy instead. When epoxy cures it expands and hardens..

2.2.3 Tank Removal

The UST was removed due to a failure of the monitoring system. The tank was approximately 20 feet southeast of Building 44. Photos one and two in Appendix B show the location of the UST before excavation began.

The concrete layer above the UST was removed using a backhoe (Photo 4). It was separated into concrete and metal rods and disposed of at a regular dumpsite as nonhazardous solid waste. The pea gravel surrounding the tank was excavated to approximately seven feet six inches deep, 16 feet wide, and 40-feet long. The pea gravel was temporarily stockpiled to the southeast of the excavation (Photo 15) and was reused as fill material after tank closure (Photo 26).

The manhole was opened to ventilate the UST before a worker was allowed to entered it for cleaning. Lower explosive limits (LEL) and oxygen values were measured, and no combustible gases, carbon monoxide, nor hydrogen sulfide were detected. The manhole was left open and the air in the tank was continuously monitored; no change in LEL or oxygen levels were observed for one hour.

A worker entered the UST wearing level B protective gear, which included a full-face mask supplied by outside air of about 65 pressure units and a yellow rubber rain suit as protection from the oil. The worker used a high-pressure washer and detergent to clean the tank from the inside. A spotter observed the tank cleaning from above during the two hours that the cleaning took.

After the tank was cleaned, approximately 700 gallons of oily water, 200 to 300 gallons of sandy sludge, and 500 gallons of wastewater were removed from the tank using a pump attached to a wastewater truck. The oily water and sandy sludge were disposed of as hazardous waste. According to the hazardous waste manifest, 1,500 gallons of oily water were generated. Hazardous waste manifests can be found in Appendix A.

The straps that tied the tank to a 12-inch by 54-inch by 6-inch concrete slab on the bottom of the excavation were cut, which caused the tank, that was floating on a pocket of groundwater, to move up. The approximately 4,000-pound tank was then connected to a chain, which was attached to the arm of the backhoe (Photo 8). The tank was pulled out of the excavation in one piece and was deposited to the southeast of the excavation (Photo 9). The tank itself did not appear to have any indentations or holes and was completely intact when Tetra Tech inspected it, although there was a black oily sheen on the water (photos 11, 12, and 13). The 10,000-gallon UST was eight feet in diameter and approximately 30 feet long. During excavation there were no stains or leaks around the piping, although there were oily spots around the manhole. The lid was not bolted to the manhole, and there was a gap of approximately two inches between it and the manhole (Photos 6, 7, and 10). It is possible that oily water occasionally leaked from the tank at this spot. Workers cut the tank into sections, using gasoline-powered all-purpose saws (Photos 17 and 18). The segments were disposed of as 40 cubic yards of nonhazardous solid waste (Appendix A). Because the tank destruction permit does not show an identification number for the tank, the hazardous waste tank closure certification does not include an identification number (Appendix A).

Groundwater was observed only in the northeastern side of the excavation. The southwestern side was filled with more soil because the sidewalls gave in and soil fell into the excavation (Photo 14). The depth from the top of the excavation to the shallowest groundwater was approximately seven feet six inches after the tank removal. During this time high tide in the adjacent bay

was about eight feet below the sidewalk. During the next two working days the excavation stayed open, and no significant change in the groundwater table was observed, even though the tides were changing rapidly. Therefore, the groundwater level in the excavation was observed not to depend on tidal influence, although the bay is immediately adjacent to the site.

The sidewalls were unstable and were collapsing into the excavation (Photo 13, 14, 16, 20). There was no over-excavation because the Project Manager, Joe Sabel from the USCG Civil Engineering Unit Oakland, was concerned about the influence of over-excavation on the stability of the adjacent Building 44.

2.2.4 Backfill

Mr. Sabel requested that the excavation be backfilled immediately due to expected rain over the weekend. He was concerned that the rain might wash out the already eroding material underneath the sidewalk on the northwestern side of the excavation, which could have put Building 44 at risk.

The hold down straps that kept the tank in its position were left in the excavation hole because they were tied to a concrete slab and, because no over-excavation was planned.

The excavation pit was refilled with the pea gravel that had been excavated from it. Approximately 100 tons of additional gravel had to be used to fill the excavation completely and to ensure proper compaction of the subsurface before it was repaved.

Before filling and compaction started, two layers of geotextile fabric were placed between the pea gravel and the additional gravel to properly compact the materials. A water-permeable geotextile layer prevents migration of fine particles. If fine particles from the top fill layer were to migrate downward, the compaction would be disturbed and the surface paving could sink in. The fill was compacted in layers of approximately one foot. A compaction tester from Cleinfelder Consulting took samples of the fill material on-site.

2.2.5 Restoration

Due to the vibration caused by the compaction process, the northeastern end of the excavation was undermined and needed to be removed (Photo 29). Ransome Company, a subcontractor of FOSS, poured the concrete gutter in the northeast (Photo 32 and 34) and the concrete curb on the southwestern side of the excavation (Photo 33). Further, they removed the partially destroyed asphalt on all sides of the excavation pit before applying new asphalt. Ransome Company finished the blacktop of the parking lot (Photo 38). FOSS cleaned the site, disposed of the last debris, and removed the fencing. The parking lot was restored to its former condition (Photo 39).

2.2.6 Sampling Procedure

Soil, pea gravel, and a water sample were taken at the request of the Alameda County Health Agency. The native soil encountered was clay with some gray stains. All soil and gravel sampling was biased toward those stained areas, as directed by the on-site regulator. However, the larger part of the clay looked clean. Soil samples were collected from the bottom of the excavation to assess if leaks or spills from the tank had affected the subsurface soils. The gravel samples from the stockpile of excavated material were sampled to assess if the gravel could be reused as fill material. The groundwater sample collected from the excavation was taken to assess if the leaks or spills from the tank had affected the groundwater.

Four soil samples were collected from the bottom of the excavation pit, and four samples were collected from the excavated gravel stockpile (Figure 2). Soil samples were taken by inserting a three-inch brass sleeve into the soil, which was brought up from the bottom of the excavation by the backhoe bucket. Two three-inch brass sleeves were filled at each of the four locations at the excavation, sealed with Teflon tape, closed with plastic end caps, and sealed with cohesive silicon tape. Both metal sleeves were labeled with the same sample ID number, stored in a cooler on ice, and submitted to the laboratory for analysis on a 24-hour turnaround time.

The gravel samples were taken by digging an approximately one-foot deep hole in the stockpile and filling an eight-ounce glass jar with a still moist sample of the pea gravel previously excavated from the UST site. The stockpile was located to the southeast of the excavation pit (Photo 15).

One water sample was collected in the excavation pit where previously no water was removed. The water sample was taken by using a nondisposable bailer that had been decontaminated and cleaned. Water was collected from the bottom of the excavation from about nine feet bgs.

The location IDs from Figure 2 correspond to the sample IDs in Table 2-1, taken from the laboratory data sheets in Appendix C, and their respective geographic location.

Table 2-1
Location and Sample IDs
USCG ISC Alameda

Location ID	Sample ID	Depth in feet	Geographic Location
1	SAL111501S	8	Southeastern side at bottom of the excavation
2	SAL111501N	8	Northwestern side at bottom of the excavation

3	SAL111501E	8	Eastern corner at bottom of the excavation
4	SAL111501W	8	Southern corner at bottom of the excavation
5	GAL1115011	1	Northwestern end of stockpile
6	GAL1115012	1	Northwestern end of stockpile
7	GAL1115013	1	Northwestern end of stockpile
8	GAL1115014	1	Northwestern end of stockpile
9	WAL111501	9	Bottom of the excavation after the tank was removed

SECTION 3
LABORATORY ANALYSIS

3.1 ANALYTICAL METHODS

Field samples collected during the investigation were submitted to Chromolab, a laboratory that is certified under California's Environmental Laboratory Accreditation Program. Chromolab provides full-service analytical testing within its laboratory network, including inorganic and organic analyses, in addition to specialty chemical determinations. Chromolab analyzed the soil, gravel, and water samples collected during the investigation for the analyses described in Table 3-1.

Table 3-1
Project Analyses
USCG ISC Alameda

Total petroleum hydrocarbons as gasoline (TPHg)	USEPA 8015 Modified
Total petroleum hydrocarbons as diesel TPHd)	USEPA 8015 Modified
Oil and grease (TPHo&g)	USEPA 5520 D&E
Benzene, toluene, ethylbenzene, xylene (BTEX)	USEPA 8260
Oxygenates	USEPA 8260
Chlorinated hydrocarbons (VOCs)	USEPA 8260
Semivolatile organic compounds (SVOCs)	USEPA 8270
Metals(Cd, Cr, Pb, Zn, Ni)	USEPA 6010

3.2 ANALYTICAL RESULTS

A summary of the detected analytes in the soil and gravel samples is presented in Table 3-2, and a summary of the detected analytes in the

groundwater sample is presented in Table 3-3. All of the analytical results for the soil, gravel, and groundwater samples, as well as the laboratory's QA/QC data, are presented in the laboratory reports in Appendix C.

Table 3-2
Summary of Detected Analytes in Soil Samples
Underground Storage Tank Removal at Building 44
US Coast Guard Integrated Support Command
Alameda, California

				TPH results			VOCs						SVOC	Metals			
Sample ID	Location ID	Sample Date	Depth	TPH-gasoline	TPH-diesel	Oil & Grease	1,2,4-Trimethylbenzene	1,1,2-Trichloroethane	n-Butylbenzene	Naphthalene	p-Isopropyltoluene	sec-Butylbenzene	2-Methylnaphthalene	Chromium	Lead	Nickel	Zinc
			(feet)	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SAL111501-S	1	11/15/2001	8	290 g	140 ndp	1,800	1,700	6,000	2,300	3,000	960	990	1.8	28	16	21	53
SAL111501-N	2	11/15/2001	8	11 g	210 ndp	<50	9.4	<5	<5	<10	<5	<5	<0.067	39	20	68	57
SAL111501-E	3	11/15/2001	8	48 g	42 ndp	130	<250	<250	<250	<250	<250	<250	<0.067	29	11	48	43
SAL111501-W	4	11/15/2001	8	<0.005	<1	<50	<5	<5	<5	<10	<5	<5	<0.067	21	8.8	22	32
GAL111501-1	5	11/15/2001	1	<0.005	2.5 ndp	<50	<5	<5	<5	<10	<5	<5	<0.067	8.2	6.5	15	30
GAL111501-2	6	11/15/2001	1	<0.005	1.3 ndp	72	<5	<5	<5	<10	<5	<5	<0.067	10	7.1	16	44
GAL111501-3	7	11/15/2001	1	38 g	1 ndp	180	<5	<5	<5	<10	<5	<5	<0.067	10	12	19	46
GAL111501-4	8	11/15/2001	1	<0.005	1.2 ndp	<50	<5	<5	<5	<10	<5	<5	<0.067	4	<5	26	34
Analyses				8	8	8	8	8	8	8	8	8	8	8	8	8	8
Detections				4	7	4	2	1	1	1	1	1	1	8	7	8	8

Note: The sample depths were measured from the top of the open excavation and/or from surface of gravel stockpile.
g = Hydrocarbon reported in the gasoline range does not match laboratories gasoline standard.
ndp = Hydrocarbon reported does not match the pattern of laboratories diesel standard.

Table 3-3
Summary of Detected Analytes in Water Sample
Underground Storage Tank Removal at Building 44
US Coast Guard Integrated Support Command
Alameda, California

				TPH results			Metals			
Sample ID	Location ID	Sample Date	Depth	TPH-gasoline	TPH-diesel	Oil & Grease	Chromium	Lead	Nickel	Zinc
			(feet)	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l
WAL111501	9	11/15/2001	9	190 g	100,000 ndp	41	0.08	<0.01	0.14	0.86
Analyses				1	1	1	1	1	1	1
Detections				1	1	1	1	0	1	1

Note: The sample depth was measured from the top of the open excavation.
g = Hydrocarbon reported in the gasoline range does not match laboratories gasoline standard.
ndp = Hydrocarbon reported does not match the pattern of laboratories diesel standard.

3.2.1 Analytical Results in Soil and Gravel Samples

Petroleum Hydrocarbons

TPHg was detected in four of the eight soil and gravel samples, at concentrations ranging from 11 mg/kg to 290 mg/kg. The laboratory characterized all of these gasoline results as hydrocarbons in the gasoline range, but they did not "match" the gasoline standard. According to the laboratory Project Manager, the results in the gasoline range of hydrocarbons more closely matched the standards for kerosene or jet fuel, or they could be weathered gasoline. The sample with the greatest concentrations of TPHg was SAL111501-S, which was collected at a depth of eight feet bgs from the visibly stained soil beneath the UST's manhole cover.

TPHd was detected in seven of the eight soil and gravel samples, at concentrations ranging from 1 mg/kg to 210 mg/kg. The laboratory characterized all of these diesel results as hydrocarbons in the diesel range, but they did not match the diesel standard. The sample with the greatest concentrations of TPHd was SAL111501-N, which was collected from a depth of eight feet bgs, at the bottom of the northwest wall of the excavation.

TPHo&g was detected in four of the eight soil and gravel samples, at concentrations ranging from 72 mg/kg to 1,800 mg/kg. Three of the four samples that contained detectable concentrations of TPHo&g were the same samples that contained concentrations of TPHg and TPHd. The sample with the greatest concentrations of TPHo&g (SAL111501-S) is the same sample with the greatest concentrations of TPHg.

Soil sample SAL111501-S contained the greatest concentration of TPHg (290 mg/kg), the second greatest concentration of TPHd (140 mg/kg), and the greatest concentration of TPHo&g (1,800 mg/kg). This sample was collected from a depth of eight feet bgs from a visibly stained area beneath the UST's manhole. The area was relatively small and appeared to be the worst contamination in the excavation.

VOCs and SVOCs

Seven VOCs and SVOCs were detected in one of the eight soil and gravel samples, and one of these VOCs was detected in a second soil sample. Soil sample SAL111501-S contained the VOCs 1,2,4-trimethylbenzene (1,700 micrograms per kilogram [µg/kg]), 1,1,2-trichloroethane (6,000 µg/kg), n-butylbenzene (2,3000 µg/kg), naphthalene (3,000 µg/kg), p-isopropyltoluene (960 µg/kg), sec-butylbenzene (990 µg/kg), and the SVOC 2-methylnaphthalene (1.8 mg/kg). These VOCs and SVOCs were found in the same soil sample that contained the greatest concentrations of TPHg and TPHo&g and appears to be the worst contamination in the excavation. However, this contamination does not match the gasoline or diesel standards, and the VOCs and SVOCs that were found in this sample are not the

hazardous constituents commonly associated with gasoline, such as MTBE and BTEX. Therefore, the isolated contaminated soil evaluated by sample SAL111501-S appears to contain detectable concentrations of petroleum hydrocarbon products, VOCs, and SVOCs but does not appear to be from releases of gasoline or diesel.

Soil sample SAL111501-N contained the VOCs 1,2,4-trimethylbenzene at 9.4 µg/kg. This soil sample also contained the greatest concentrations of TPHd; however, this sample was qualified as not matching the diesel standard and did not contain the common diesel VOC and SVOC constituents that make up diesel.

Metals

The three metals chromium, nickel, and zinc were detected in all eight soil and gravel samples, and lead was detected in seven of these samples. Chromium was found at concentrations of 4 mg/kg to 39 mg/kg; lead was found at concentrations of 7.1 mg/kg to 20 mg/kg; nickel was found at concentrations of 15 mg/kg to 68 mg/kg, and zinc was found at concentrations of 30 mg/kg to 57 mg/kg. The soil sample SAL111501-N, which contained the greatest concentrations of these four metals, is also the sample that contains the greatest concentrations of TPHd.

3.2.2 Analytical Results in the Groundwater Sample

Petroleum Hydrocarbons

The groundwater sample WAL111501 contained TPHg (190 µg/l), TPHd (100,000 µg/l), and TPHo&g (41 mg/l). Similar to the soil sample results, the TPHg and TPHd concentrations were qualified as hydrocarbons in the respective range of the reported analyte, but did not match the analyte standards. This groundwater sample was collected from the bottom of the excavation, at a depth of approximately nine feet bgs. This water does not appear to be in direct communication with the water in the adjacent bay because the tidal changes in the bay did not appear to affect the elevation of the groundwater in the excavation.

VOCs and SVOCs

The groundwater sample WAL111501 did not contain any detectable concentrations of VOCs and SVOCs. These results support the premise that the TPHg and TPHd concentrations found in the groundwater are not gasoline or diesel, even though they are reported as hydrocarbons in the range of these analytes.

Metals

The groundwater sample WAL111501 contained concentrations of chromium (0.08 mg/l), nickel (0.14 µg/l), and zinc (0.86 µg/l). The

concentrations of these metals are low and do not appear to be of environmental concern.

3.3 LABORATORY QA/QC

As part of the QA/QC program implemented during this project, Chromolab was required to perform the appropriate QA/QC procedures for each analytical method used in accordance with standard USEPA protocols. Chromolab determined the accuracy of the analytical data by assessing the recovery of surrogate and spike compounds (MS/MSD and LCS). The laboratory added surrogate compounds to each sample for organic compound analysis and reported the percent recovery with the sample results. Samples in which surrogate recoveries were outside the laboratory-established control limits were reanalyzed. All corrective action taken for samples requiring reanalysis were reported with sample results.

MS/MSD and LCS spike compound recoveries were reported with sample results. If spike compound recoveries are outside control limits, then sample reanalysis was required. All required reanalysis were performed within method recommended holding times.

SECTION 4
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

4.1 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The UST at Building 44 at the US Coast Guard Installation Support Command in Alameda was successfully removed and disposed of off-site. The following findings and conclusions are relevant to this removal action.

The 10,000-gallon, double-walled, fiberglass oily water and waste oil UST at Building 44 was successfully decontaminated and removed from the excavation and was temporarily placed in a staging area at the site. Approximately 200 to 300 gallons of sludge, 700 gallons of oily water, and 500 gallons of spent pressure washer water were removed from the tank and disposed of off-site as hazardous waste. In addition, all of the associated transfer piping and leak detection monitoring system have either been removed from the site or have been plugged.

Inspections of the tank showed that it was in good condition, with no visible holes or leaks. The collar on the manhole that secures it to the tank was missing several bolts, allowing for a two-inch gap between the manhole and the tank. Soil staining in the gravel fill around the manhole indicated that oily water and waste oil may have leaked from this gap while these substances were being transferred into or out of the tank. The decontaminated tank was disposed of by cutting it into sections on-site and disposing of the sections off-site as a nonhazardous waste.

Very little soil staining was observed in the excavation. Only small isolated areas, such as the one beneath the tank's manhole, were stained with waste oil. These areas were sampled and analyzed for total petroleum products, VOC and SVOC constituents of petroleum products, and metals that are commonly associated with waste oil. The results of these analyses showed

maximum concentrations of TPHg (290 mg/kg/) and TPHo&g (1,800 mg/kg) in the sample collected beneath the manhole (location ID 1) and a maximum concentration of TPHd (210 mg/kg) in the sample collected from the northwest side of the excavation (location ID 2). Although the California Regional Water Quality Control Board benchmark for TPHg in soil is 100 mg/kg, the sample that contained a concentration of TPHg exceeding this benchmark does not appear to be from a gasoline release because the TPHg result did not match the gasoline standard, and the VOCs detected in this sample were not the common gasoline constituents, such as MTBE and BTEX. Furthermore, this was a high biased sample collected from a small stained area and is not representative of all of the soil and gravel fill in the excavation.

Groundwater was observed in the excavation at a depth of approximately seven feet six inches bgs. A sample of this water contained TPHg (190 µg/l), TPHd (100,000 µg/l), and TPHo&g (41 µg/l). Similar to the soil sample results, the TPHg and TPHd concentrations reportedly did not match the standards for these analytes. The sample also contained detectable concentrations of chromium (0.08 mg/l), nickel (0.14 µg/l), and zinc (0.86 µg/l). No VOCs or SVOCs were found in this groundwater sample, further supporting the premise that the TPH concentration in the water is not from gasoline and diesel releases.

The excavation was open for approximately 36 hours with no apparent fluctuation in the water level, indicating that the high and low tides in the adjacent bay were not in good communication with the groundwater in the excavation. Therefore, the hydrocarbon and metal concentrations found in the groundwater in the bottom of the excavation do not appear to be in good communication with the water in the bay.

The soils in the excavation were sandy and silty and had a tendency to slump into the open excavation. Because this slumping began to undermine the paving and to encroach on the Building 44 foundation, the open excavation was backfilled with the gravel that was removed from the excavation to structurally stabilize the sidewalls. The excavation was backfilled before the analytical results of the soil samples collected from the excavation or of the gravel samples collected from the stockpile were known. Subsequent analytical data shows that low concentrations of petroleum hydrocarbons, VOCs, SVOCs, and metals were either left in place or were backfilled into the excavation. These potential contaminants do not appear to be gasoline or diesel and do not contain the common petroleum hydrocarbons constituents of environmental concern, such as MTBE and BTEX. Furthermore the concentrations of these potential contaminants do not appear to be at high levels of environmental concern. In addition, the concentrations of these analytes do not appear to be in communication with the waters of the bay. Therefore, the soil and gravel in the former UST excavation do not appear to be of environmental concern and do not appear to require remedial actions.

After the excavation was backfilled and compacted with additional gravel to the level of the bottom the existing pavement, new asphalt paving and concrete curbs were installed where they had been removed. This surface reclamation returned the site to its original use as a parking area and covered the previous excavation with an impermeable cap. The cap prohibits most of the surface stormwater from leaching through the former excavation and greatly reduces the potential leaching of the residual hydrocarbons, VOCs, SVOCs, and metals. Therefore, the potential analytes of concern that were in the former excavation are not likely to migrate through the soil or into the groundwater beneath the excavation.

Recommendations

The former oily water and waste oil tank at Building 44 has been removed and disposed of off-site. Also, all associated piping and monitoring systems have been decommissioned. Therefore, Tetra Tech recommends the UST portion of the oily water and waste oil treatment and disposal system at Building 44 for closure and that the treatment system records be updated to show this change. We further recommend that the remaining oil/water separator and disposal treatment system at Building 44 continue to operate under the existing treatment and disposal permit.

Based on the field observation, the analytical results, and the findings and conclusions of this data, the concentrations of analytes of concern in the soil and groundwater in the former excavation do not appear to be of environmental concern. Furthermore, the former excavation has been capped, reducing the likely migration of the residual analytes. Therefore, Tetra Tech recommends the Building 44 site for closure, with regard to the concentrations of the analytes found in the subsurface, with no additional remedial action.

SECTION 5
REFERENCES

US Coast Guard. *Specification to Remove Oily-Water Underground Storage Tank at ISC Alameda PSN 33-001100.*

US Geological Survey (USGS). 1969. *Arial and Engineering Geology of the Oakland East Quadrangle, California by Dorothy Radbruch.*

APPENDIX A

PERMITS AND MANIFESTS

APPENDIX A

PERMITS AND MANIFESTS

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. CA7690390037	Manifest Doc. No.	2. Page 1 of 1

3. Generator's Name and Mailing Address U.S. COAST GUARD
2000 EMBARCADERO SUITE 200
OAKLAND, CA. 94606-

4. Generator's Phone (510) 437-5775

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
FOSS ENVIROMENTAL	CAR000080114	(510) 749-1390
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
FORWARD LANFILL 9999 SOUTH AUSTIN RD MANTECA, CA. 95336		

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS WASTE, SOLID (DECON. 10K TANK FIBREGLASS AS DEBRIE	2	BN	40	CY3
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
PROFILE APPROVAL # 1391

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
24 EMERGENCY RESPONCE
FOSS ENVIROMENTAL SERVICES
(510) 749-1390

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
GLENN T. SALANGA	[signature]	11	19	01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JALIL WHITFIELD	[signature]	11	19	01

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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
[signature]	[signature]	11	20	01

GENERATOR / TRANSPORTER / FACILITY

12-BLS-C5 Rev. 12/99

TRANSPORTER #1

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS WASTE

HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

Page ___ of ___

I. FACILITY IDENTIFICATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3 U.S. COAST GUARD	FACILITY ID# 0 1 0 0 0 0 5 4 2 0 2 1
TANK OWNER NAME 740 U.S COAST GUARD Island	
TANK OWNER ADDRESS 741 ALAMEDA, CA	
TANK OWNER CITY 742	STATE CA 743 ZIP CODE 94501 744

II. TANK CLOSURE INFORMATION

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor			Concentration of Oxygen		
		Top	Center	Bottom	Top	Center	Bottom
1	NONE 745	Ø 746a	Ø 746b	Ø 746c	20.9 747a	20.9 747b	20.9 747c
2	748	749a	749b	749c	750a	750b	750c
3	751	752a	752b	752c	753a	753b	753c

III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER
Aaron Grijalva

NAME OF CERTIFIER (Print) 754
AARON GRIJALVA

TITLE OF CERTIFIER 755
ASSISTANT PROJECT MANAGER

ADDRESS 756
1605 FERRY POINT

CITY 757
ALAMEDA

PHONE 758 (510) 749-4128

DATE 759
11-15-01

CERTIFICATION TIME
0930

STATUS OR AFFILIATION OF CERTIFYING PERSON

Certifier is a representative of the CUPA, authorized agency, or LIA: 760

☐ Yes ☒ No

Name of CUPA, authorized agency, or LIA: 761

If certifier is other than CUPA / LIA check appropriate box below: 762

- ☐ a. Certified Industrial Hygienist (CIH)
- ☐ b. Certified Safety Professional (CSP)
- ☐ c. Certified Marine Chemist (CMC)
- ☐ d. Registered Environmental Health Specialist (REHS)
- ☐ e. Professional Engineer (PE)
- ☐ f. Class II Registered Environmental Assessor
- ☒ g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS 763

(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.) ☐ Yes ☒ No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC: 764

USE APPROPRIATE PPE

A copy of this certificate shall accompany the tank to the recycling / disposal facility and be provided to the CUPA. If there is no CUPA, copies shall be submitted to the LIA and authorized agency; owner / operator of the tank system; removal contractor; and the recycling / disposal facility.

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch writer.

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.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
CA1679019037	12153		

3. Generator's Name and Mailing Address: UNITED STATES COAST GUARD
INTEGRATED SUPPORT COMMAND BLDG # 44
2000 EMBARCADERO SUITE 200 ALAMEDA, CA. 94501

4. Generator's Phone: (510) 535-7239 Att.: JOE SABLE

A. State Manifest Document Number: 98362531

5. Transporter 1 Company Name: FOSS ENVIROMENTAL
6. US EPA ID Number: CAR000030114

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address: CLEARWATER ENVIROMENTAL
5002 ARCHER ST.
ALVISO, CA. 95002
10. US EPA ID Number: CAL000016173

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, LIQUID (OILY WATER)	001	TT	01500	G
b.				
c.				
d.				

E. Additional Descriptions for Materials Listed Above
F. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information: USE APPROPIATE PERSONAL PROTECTIVE GEAR
24 HR EMERGENCY CONTACT
FOSS ENVIROMENTAL (510) 749-1390 JOB # A1933

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.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
GLENN T. SAVAGE		11	13	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	11	15	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (4/97)
EPA 8700—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
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. / Manifest Document No.: CA7640390023 78469
2. Page 1 of
Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: 20478469

3. Generator's Name and Mailing Address: Commanding Officer ... / ... / Alameda CA ...
4. Generator's Phone: ... 437 5775

B. State Generator's ID

5. Transporter 1 Company Name: Ress Environmental
6. US EPA ID Number: CAR000039114
C. State Transporter's ID [Reserved]
D. Transporter's Phone: 510 749-1390

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID [Reserved]
F. Transporter's Phone

9. Designated Facility Name and Site Address: Crosby + Overton Inc. / 1630 W. 17th St. / Long Beach, CA 90813
10. US EPA ID Number: CAD028409019
G. State Facility's ID: CAD028409019
H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. Non-RCRA Hazardous Waste Solid (Oily Debris)	0030	M	00750	P	State 352; EPA/Other None
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above: (1a) 36615 (3x55) HaZERG(171)
K. Handling Codes for Wastes Listed Above: a. / b. / c. / d.

15. Special Handling Instructions and Additional Information: Use approved PPE
24 Hour Emergency Response Ress Environmental
510 749-1390
Job ... 1999 ... 1999-09

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: Jimmy ... | Signature: [signature] | Month Day Year: 11 27 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

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: Benjamin J H Armenta | Signature: [signature] | Month Day Year: 11 29 01

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (1/99)
EPA 8700—22

Green: TRANSPORTER RETAINS

APPENDIX B

PHOTO DOCUMENTATION

Photo 1. Overview of UST tank site before excavation towards northwest. The tank site is located on parking lot in front of Building 44. The bay is located to the left of Building 44.

Photo 2. Overview of UST tank site before excavation towards southwest. The bay is located behind Building 44.

Photo 3. Set up for confined space entry into underground storage tank for cleaning.

Photo 4. Removal of concrete from surface after high-pressure cleaning of tank before begin of excavation.

Photo 5. Excavated pea gravel being transported to stockpile while exposing bilge and vent piping located above tank. View towards east

Photo 6. View towards east showing piping and unsealed tank access. Dark stains visible on side of tank due to missing bolts in lid of manhole.

Photo 7. Detail of manhole from previous picture. Note the approximately 2-inch gap between hole and cover.

Photo 8. Tank being pulled after cutting of piping.

Photo 9. Tank was being removed in one complete piece from excavation.

Photo 10. Detail of unbolted tank access for pipelines.

Photo 11. Southern side of tank.

Photo 12. Northern side of tank.

Photo 13. Northeastern and northwest sides of excavation hole after tank was pulled. Shallow groundwater intrusion into excavation.

Photo 14. Northwestern and southwest sides of excavation. No water intrusion observed although immediately adjacent to bay.

Photo 15. Eastern view of stockpile of excavated pea gravel. Material was excavated from east side to west side. Pea gravel was stored respectively from north to south side of parking lot.

Photo 16. Curb on southwestern side fell into excavation.

Photo 17. Beginning of tank destruction.

Photo 18. Completion of tank destruction.

Photo 19. Northeast facing view of pit.

Photo 20. Undermined asphalt is falling into excavation pit.

Photo 21. Location of soil sample taken at southern end of excavation (Location ID 4, Figure 2).

Photo 22. Location of soil sample taken at southeastern central end of excavation (Location ID 1, Figure 2).

Photo 23. Location of soil sample taken at eastern end of excavation (Location ID 3, Figure 2).

Photo 24. Location of soil sample taken at northwestern end of excavation (Location ID 2, Figure 2).

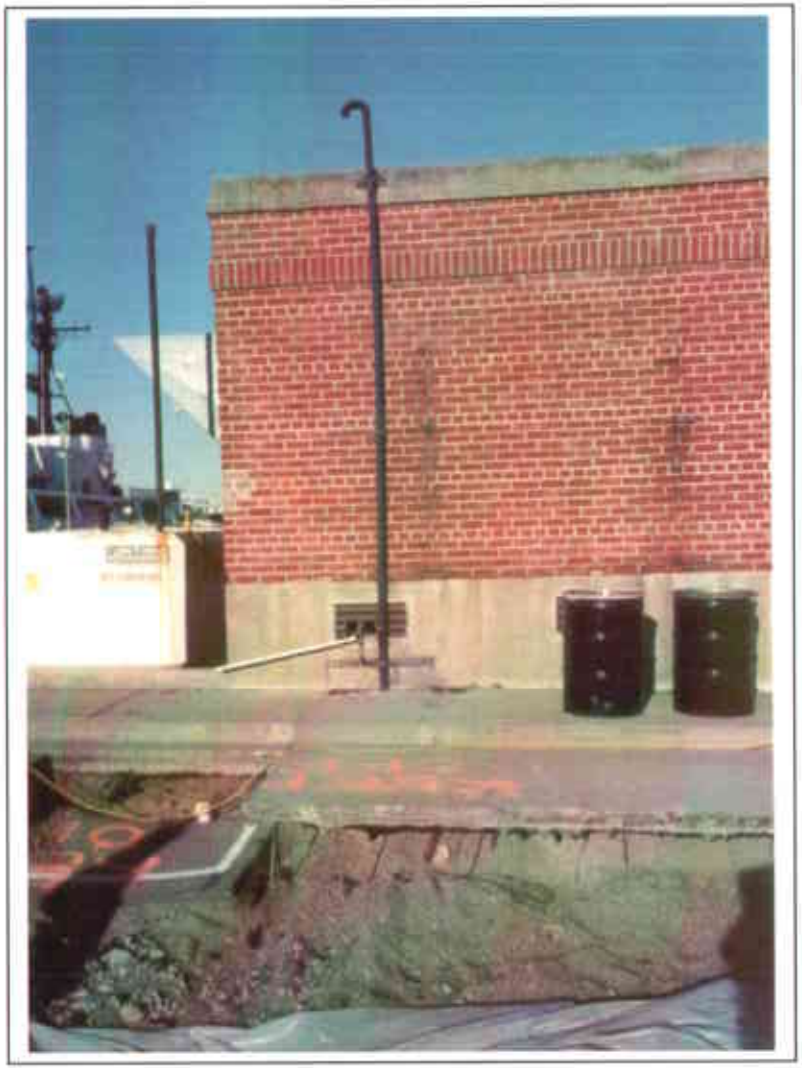

Photo 25. Location of removed piping. Black marks at the wall indicate former location of piping.

Photo 26. Grading of pea gravel.

Photo 27. Geotextile fabric above pea gravel. The gravel rock layer will be compressed on top of it.

Photo 28. Gravel rock compaction process.

Photo 29. Detail of undermined gutter on east side of excavation due to vibration from compaction process.

Photo 30. Detail of capped oily waste pipeline leading from Building 44 to tank. Located on southwest side of Building 44.

Photo 31. Compacted excavation area.

Photo 32. Removal of undermined concrete gutter on northeastern side of excavation pit.

Photo 33. Preparation for pouring of new curb.

Photo 34. Removal of undermined gutter before repouring with concrete.

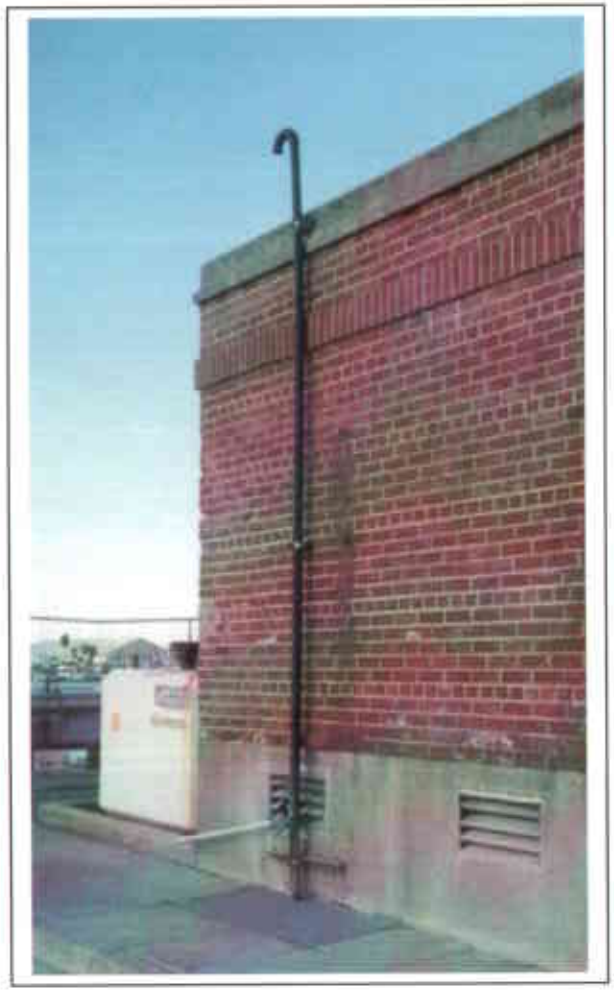

Photo 35. Filled in holes on side walk where piping had been removed. Southeast side of Building 44.

Photo 36. New curb on southwestern side of excavation.

Photo 37. New gutter on northeastern side of excavation.

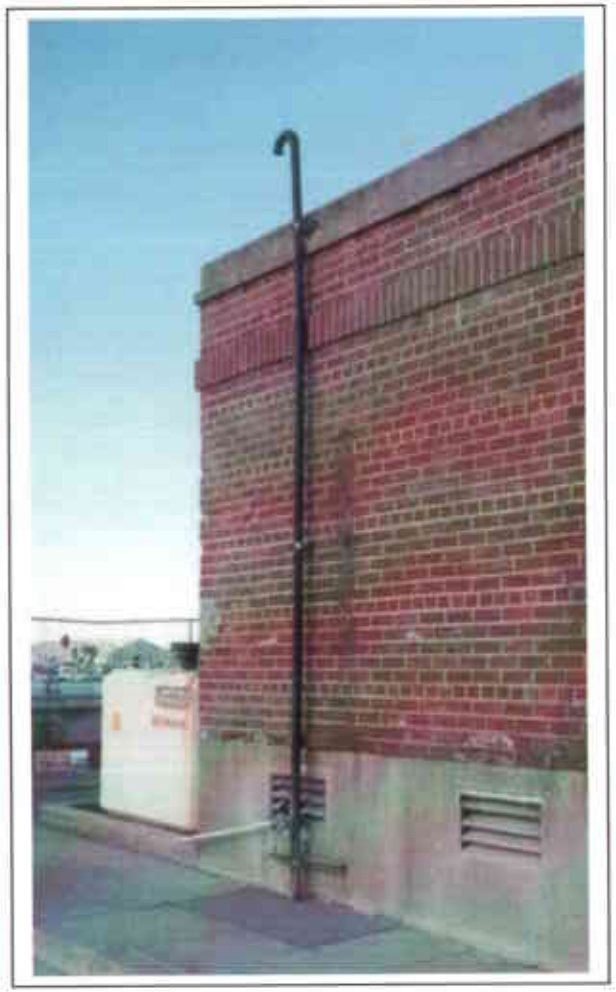

Photo 35. Filled in holes on side walk where piping had been removed. Southeast side of Building 44.

Photo 36. New curb on southwestern side of excavation.

Photo 37. New gutter on northeastern side of excavation.

Photo 38. Application of asphalt.

Photo 39. Overview of site after completion of tank closure.

APPENDIX C

LABORATORY REPORTS

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-E	Soil	11/15/2001 11:35	4
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-3	Soil	11/15/2001 12:45	8
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/20-02.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	41	1.0	mg/L	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**SAL111501-S**	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	1800	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**SAL111501-N**	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	SAL111501-E	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	130	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**SAL111501-W**	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**GAL111501-1**	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	GAL111501-2	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	72	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**GAL111501-3**	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	180	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 1664

Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**GAL111501-4**	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 08:52
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Oil & Grease (Total) by EPA 1664

Batch QC report

Test Method: 1664 Prep Method: 1664

Method Blank **Soil** **QC Batch # 2001/11/20-01.23**

MB: 2001/11/20-01.23-001 Date Extracted: 11/20/2001

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Oil & Grease (Total) by EPA 1664

Batch QC report

Test Method: 1664 Prep Method: 1664

Method Blank **Water** **QC Batch # 2001/11/20-02.23**

MB: 2001/11/20-02.23-001 Date Extracted: 11/20/2001

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Oil & Grease (total)	ND	1	mg/L	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Oil & Grease (Total) by EPA 1664

Batch QC report

Test Method: 1664 Prep Method: 1664

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/11/20-01.23**

LCS: 2001/11/20-01.23-002 Extracted: 11/20/2001 Analyzed: 11/20/2001

LCSD: 2001/11/20-01.23-003 Extracted: 11/20/2001 Analyzed: 11/20/2001

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (total)	776	798	800	800	97.0	99.8	2.8	80-120	20		

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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www.chromalab.com

CA DHS ELAP#1094

Oil & Grease (Total) by EPA 1664

Batch QC report

Test Method: 1664 Prep Method: 1664

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/11/20-02.23**

LCS: 2001/11/20-02.23-002 Extracted: 11/20/2001 Analyzed: 11/20/2001

LCSD: 2001/11/20-02.23-003 Extracted: 11/20/2001 Analyzed: 11/20/2001

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (total)	36.0	36.0	40.0	40.0	90.0	90.0	0.0	80-120	20		

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 1664
Prep Method: 1664

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/20-02.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	41	1.0	mg/L	1.00	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Oil & Grease (Total) by EPA 1664

Batch QC report

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Test Method: 1664 Prep Method: 1664

Method Blank **Water** **QC Batch # 2001/11/20-02.23**

MB: 2001/11/20-02.23-001 Date Extracted: 11/20/2001

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Oil & Grease (total)	ND	1	mg/L	11/20/2001	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Oil & Grease (Total) by EPA 1664

Batch QC report

Test Method: 1664 Prep Method: 1664

Laboratory Control Spike (LCS/LCSD)		**Water**	**QC Batch # 2001/11/20-02.23**
LCS:	2001/11/20-02.23-002	Extracted: 11/20/2001	Analyzed: 11/20/2001
LCSD:	2001/11/20-02.23-003	Extracted: 11/20/2001	Analyzed: 11/20/2001

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (total)	36.0	36.0	40.0	40.0	90.0	90.0	0.0	80-120	20		

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-3	Soil	11/15/2001 12:45	8
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8260B

Prep Method: 5035

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**SAL111501-N**	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:46
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Acetone	ND	50	ug/Kg	1.00	11/16/2001 15:46	
Benzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Bromobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Bromochloromethane	ND	20	ug/Kg	1.00	11/16/2001 15:46	
Bromoform	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Bromomethane	ND	10	ug/Kg	1.00	11/16/2001 15:46	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	11/16/2001 15:46	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Carbon disulfide	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Chlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Chloroethane	ND	10	ug/Kg	1.00	11/16/2001 15:46	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	11/16/2001 15:46	
Chloroform	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Chloromethane	ND	10	ug/Kg	1.00	11/16/2001 15:46	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,3-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
2,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	11/16/2001 15:46	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	1.00	11/16/2001 15:46	
Dibromomethane	ND	10	ug/Kg	1.00	11/16/2001 15:46	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	11/16/2001 15:46	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	SAL111501-N	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:46
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Ethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
2-Hexanone	ND	50	ug/Kg	1.00	11/16/2001 15:46	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Methylene chloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	11/16/2001 15:46	
Naphthalene	ND	10	ug/Kg	1.00	11/16/2001 15:46	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Styrene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Toluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Trichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,2,4-Trimethylbenzene	9.4	5.0	ug/Kg	1.00	11/16/2001 15:46	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Vinyl acetate	ND	50	ug/Kg	1.00	11/16/2001 15:46	
Vinyl chloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Total xylenes	ND	5.0	ug/Kg	1.00	11/16/2001 15:46	
Surrogate(s)						
4-Bromofluorobenzene	87.3	74-121	%	1.00	11/16/2001 15:46	
1,2-Dichloroethane-d4	93.2	70-121	%	1.00	11/16/2001 15:46	
Toluene-d8	92.6	81-117	%	1.00	11/16/2001 15:46	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	**SAL111501-W**	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 14:34
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Acetone	ND	50	ug/Kg	1.00	11/16/2001 14:34	
Benzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Bromobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Bromochloromethane	ND	20	ug/Kg	1.00	11/16/2001 14:34	
Bromoform	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Bromomethane	ND	10	ug/Kg	1.00	11/16/2001 14:34	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	11/16/2001 14:34	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Carbon disulfide	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Chlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Chloroethane	ND	10	ug/Kg	1.00	11/16/2001 14:34	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	11/16/2001 14:34	
Chloroform	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Chloromethane	ND	10	ug/Kg	1.00	11/16/2001 14:34	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,3-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
2,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	11/16/2001 14:34	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	1.00	11/16/2001 14:34	
Dibromomethane	ND	10	ug/Kg	1.00	11/16/2001 14:34	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	11/16/2001 14:34	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF

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Test Method: 8260B

Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	SAL111501-W	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 14:34
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Ethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
2-Hexanone	ND	50	ug/Kg	1.00	11/16/2001 14:34	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Methylene chloride	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	11/16/2001 14:34	
Naphthalene	ND	10	ug/Kg	1.00	11/16/2001 14:34	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Styrene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Toluene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Trichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Vinyl acetate	ND	50	ug/Kg	1.00	11/16/2001 14:34	
Vinyl chloride	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Total xylenes	ND	5.0	ug/Kg	1.00	11/16/2001 14:34	
Surrogate(s)						
4-Bromofluorobenzene	98.7	74-121	%	1.00	11/16/2001 14:34	
1,2-Dichloroethane-d4	94.8	70-121	%	1.00	11/16/2001 14:34	
Toluene-d8	93.0	81-117	%	1.00	11/16/2001 14:34	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	GAL111501-1	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:10
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Acetone	ND	50	ug/Kg	1.00	11/16/2001 15:10	
Benzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Bromobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Bromochloromethane	ND	20	ug/Kg	1.00	11/16/2001 15:10	
Bromoform	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Bromomethane	ND	10	ug/Kg	1.00	11/16/2001 15:10	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	11/16/2001 15:10	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Carbon disulfide	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Chlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Chloroethane	ND	10	ug/Kg	1.00	11/16/2001 15:10	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	11/16/2001 15:10	
Chloroform	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Chloromethane	ND	10	ug/Kg	1.00	11/16/2001 15:10	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,3-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
2,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	11/16/2001 15:10	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	1.00	11/16/2001 15:10	
Dibromomethane	ND	10	ug/Kg	1.00	11/16/2001 15:10	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	11/16/2001 15:10	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF

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Test Method: 8260B

Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	GAL111501-1	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:10
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Ethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
2-Hexanone	ND	50	ug/Kg	1.00	11/16/2001 15:10	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Methylene chloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	11/16/2001 15:10	
Naphthalene	ND	10	ug/Kg	1.00	11/16/2001 15:10	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Styrene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Toluene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Trichloroethene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Vinyl acetate	ND	50	ug/Kg	1.00	11/16/2001 15:10	
Vinyl chloride	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Total xylenes	ND	5.0	ug/Kg	1.00	11/16/2001 15:10	
Surrogate(s)						
4-Bromofluorobenzene	99.4	74-121	%	1.00	11/16/2001 15:10	
1,2-Dichloroethane-d4	91.8	70-121	%	1.00	11/16/2001 15:10	
Toluene-d8	93.5	81-117	%	1.00	11/16/2001 15:10	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	**GAL111501-2**	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 13:45
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Acetone	ND	50	ug/Kg	1.00	11/19/2001 13:45	
Benzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Bromobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Bromochloromethane	ND	20	ug/Kg	1.00	11/19/2001 13:45	
Bromoform	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Bromomethane	ND	10	ug/Kg	1.00	11/19/2001 13:45	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	11/19/2001 13:45	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Carbon disulfide	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Chlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Chloroethane	ND	10	ug/Kg	1.00	11/19/2001 13:45	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	11/19/2001 13:45	
Chloroform	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Chloromethane	ND	10	ug/Kg	1.00	11/19/2001 13:45	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,3-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
2,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	11/19/2001 13:45	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	1.00	11/19/2001 13:45	
Dibromomethane	ND	10	ug/Kg	1.00	11/19/2001 13:45	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	11/19/2001 13:45	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8260B

Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	GAL111501-2	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 13:45
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Ethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
2-Hexanone	ND	50	ug/Kg	1.00	11/19/2001 13:45	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Methylene chloride	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	11/19/2001 13:45	
Naphthalene	ND	10	ug/Kg	1.00	11/19/2001 13:45	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Styrene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Toluene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Trichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Vinyl acetate	ND	50	ug/Kg	1.00	11/19/2001 13:45	
Vinyl chloride	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Total xylenes	ND	5.0	ug/Kg	1.00	11/19/2001 13:45	
Surrogate(s)						
4-Bromofluorobenzene	100.6	74-121	%	1.00	11/19/2001 13:45	
1,2-Dichloroethane-d4	91.0	70-121	%	1.00	11/19/2001 13:45	
Toluene-d8	95.2	81-117	%	1.00	11/19/2001 13:45	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	**GAL111501-3**	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 18:11
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.06
Matrix:	Soil		

Sample/Analysis Flag: rl,lm (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Acetone	ND	200	ug/Kg	4.00	11/19/2001 18:11	
Benzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Bromodichloromethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Bromobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Bromochloromethane	ND	79	ug/Kg	4.00	11/19/2001 18:11	
Bromoform	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Bromomethane	ND	40	ug/Kg	4.00	11/19/2001 18:11	
2-Butanone(MEK)	ND	200	ug/Kg	4.00	11/19/2001 18:11	
n-Butylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
sec-Butylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
tert-Butylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Carbon disulfide	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Carbon tetrachloride	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Chlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Chloroethane	ND	40	ug/Kg	4.00	11/19/2001 18:11	
2-Chloroethylvinyl ether	ND	200	ug/Kg	4.00	11/19/2001 18:11	
Chloroform	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Chloromethane	ND	40	ug/Kg	4.00	11/19/2001 18:11	
2-Chlorotoluene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
4-Chlorotoluene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Dibromochloromethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2-Dichlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,3-Dichlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,4-Dichlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,3-Dichloropropane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
2,2-Dichloropropane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1-Dichloropropene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2-Dibromo-3-chloropropane	ND	200	ug/Kg	4.00	11/19/2001 18:11	
1,2-Dibromoethane (EDB)	ND	40	ug/Kg	4.00	11/19/2001 18:11	
Dibromomethane	ND	40	ug/Kg	4.00	11/19/2001 18:11	
Dichlorodifluoromethane	ND	40	ug/Kg	4.00	11/19/2001 18:11	
1,1-Dichloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2-Dichloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1-Dichloroethene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
cis-1,2-Dichloroethene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
trans-1,2-Dichloroethene	ND	20	ug/Kg	4.00	11/19/2001 18:11	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID: **GAL111501-3**
Project: 11979-03
Alameda UST Removal
Sampled: 11/15/2001 12:45
Matrix: Soil
Sample/Analysis Flag: ri,lm (See Legend & Note section)

Lab Sample ID: 2001-11-0323-008
Received: 11/15/2001 14:45
Extracted: 11/19/2001 18:11
QC-Batch: 2001/11/19-01.06

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
1,2-Dichloropropane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
cis-1,3-Dichloropropene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
trans-1,3-Dichloropropene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Ethylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Hexachlorobutadiene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
2-Hexanone	ND	200	ug/Kg	4.00	11/19/2001 18:11	
Isopropylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
p-Isopropyltoluene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Methylene chloride	ND	20	ug/Kg	4.00	11/19/2001 18:11	
4-Methyl-2-pentanone (MIBK)	ND	200	ug/Kg	4.00	11/19/2001 18:11	
Naphthalene	ND	40	ug/Kg	4.00	11/19/2001 18:11	
n-Propylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Styrene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1,1,2-Tetrachloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1,2,2-Tetrachloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Tetrachloroethene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Toluene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2,3-Trichlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2,4-Trichlorobenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1,1-Trichloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,1,2-Trichloroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Trichloroethene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Trichlorofluoromethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Trichlorotrifluoroethane	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,2,4-Trimethylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
1,3,5-Trimethylbenzene	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Vinyl acetate	ND	200	ug/Kg	4.00	11/19/2001 18:11	
Vinyl chloride	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Total xylenes	ND	20	ug/Kg	4.00	11/19/2001 18:11	
Surrogate(s)						
4-Bromofluorobenzene	88.3	74-121	%	1.00	11/19/2001 18:11	
1,2-Dichloroethane-d4	94.3	70-121	%	1.00	11/19/2001 18:11	
Toluene-d8	93.7	81-117	%	1.00	11/19/2001 18:11	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF
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Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	GAL111501-4	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 18:47
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Acetone	ND	50	ug/Kg	1.00	11/19/2001 18:47	
Benzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Bromobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Bromochloromethane	ND	20	ug/Kg	1.00	11/19/2001 18:47	
Bromoform	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Bromomethane	ND	10	ug/Kg	1.00	11/19/2001 18:47	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	11/19/2001 18:47	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Carbon disulfide	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Chlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Chloroethane	ND	10	ug/Kg	1.00	11/19/2001 18:47	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	11/19/2001 18:47	
Chloroform	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Chloromethane	ND	10	ug/Kg	1.00	11/19/2001 18:47	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,3-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
2,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	11/19/2001 18:47	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	1.00	11/19/2001 18:47	
Dibromomethane	ND	10	ug/Kg	1.00	11/19/2001 18:47	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	11/19/2001 18:47	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile OrganicCompounds by 8260B

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8260B

Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	GAL111501-4	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 18:47
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Ethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
2-Hexanone	ND	50	ug/Kg	1.00	11/19/2001 18:47	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Methylene chloride	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	11/19/2001 18:47	
Naphthalene	ND	10	ug/Kg	1.00	11/19/2001 18:47	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Styrene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Toluene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Trichloroethene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Vinyl acetate	ND	50	ug/Kg	1.00	11/19/2001 18:47	
Vinyl chloride	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Total xylenes	ND	5.0	ug/Kg	1.00	11/19/2001 18:47	
Surrogate(s)						
4-Bromofluorobenzene	95.3	74-121	%	1.00	11/19/2001 18:47	
1,2-Dichloroethane-d4	87.7	70-121	%	1.00	11/19/2001 18:47	
Toluene-d8	89.9	81-117	%	1.00	11/19/2001 18:47	

Submission #: 2001-11-0323

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Volatile OrganicCompounds by 8260B

Batch QC report

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www.chromalab.com

CA DHS ELAP#1094

Test Method: 8260B Prep Method: 5035

Method Blank **Soil** **QC Batch # 2001/11/16-01.06**

MB: 2001/11/16-01.06-004 Date Extracted: 11/16/2001 12:15

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	11/16/2001 12:15	
Acetone	ND	50	ug/Kg	11/16/2001 12:15	
Benzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Bromodichloromethane	ND	5.0	ug/Kg	11/16/2001 12:15	
Bromobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Bromochloromethane	ND	20	ug/Kg	11/16/2001 12:15	
Bromoform	ND	5.0	ug/Kg	11/16/2001 12:15	
Bromomethane	ND	10	ug/Kg	11/16/2001 12:15	
2-Butanone(MEK)	ND	50	ug/Kg	11/16/2001 12:15	
n-Butylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
sec-Butylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
tert-Butylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Carbon disulfide	ND	5.0	ug/Kg	11/16/2001 12:15	
Carbon tetrachloride	ND	5.0	ug/Kg	11/16/2001 12:15	
Chlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Chloroethane	ND	10	ug/Kg	11/16/2001 12:15	
2-Chloroethylvinyl ether	ND	50	ug/Kg	11/16/2001 12:15	
Chloroform	ND	5.0	ug/Kg	11/16/2001 12:15	
Chloromethane	ND	10	ug/Kg	11/16/2001 12:15	
2-Chlorotoluene	ND	5.0	ug/Kg	11/16/2001 12:15	
4-Chlorotoluene	ND	5.0	ug/Kg	11/16/2001 12:15	
Dibromochloromethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,3-Dichloropropane	ND	5.0	ug/Kg	11/16/2001 12:15	
2,2-Dichloropropane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1-Dichloropropene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	11/16/2001 12:15	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	11/16/2001 12:15	
Dibromomethane	ND	10	ug/Kg	11/16/2001 12:15	
Dichlorodifluoromethane	ND	10	ug/Kg	11/16/2001 12:15	
1,1-Dichloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2-Dichloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1-Dichloroethene	ND	5.0	ug/Kg	11/16/2001 12:15	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	11/16/2001 12:15	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2-Dichloropropane	ND	5.0	ug/Kg	11/16/2001 12:15	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	11/16/2001 12:15	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	11/16/2001 12:15	
Ethylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank Soil **QC Batch # 2001/11/16-01.06**

MB: 2001/11/16-01.06-004 Date Extracted: 11/16/2001 12:15

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Hexachlorobutadiene	ND	5.0	ug/Kg	11/16/2001 12:15	
2-Hexanone	ND	50	ug/Kg	11/16/2001 12:15	
Isopropylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
p-Isopropyltoluene	ND	5.0	ug/Kg	11/16/2001 12:15	
Methylene chloride	ND	5.0	ug/Kg	11/16/2001 12:15	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	11/16/2001 12:15	
Naphthalene	ND	10	ug/Kg	11/16/2001 12:15	
n-Propylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Styrene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
Tetrachloroethene	ND	5.0	ug/Kg	11/16/2001 12:15	
Toluene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
Trichloroethene	ND	5.0	ug/Kg	11/16/2001 12:15	
Trichlorofluoromethane	ND	5.0	ug/Kg	11/16/2001 12:15	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	11/16/2001 12:15	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	11/16/2001 12:15	
Vinyl acetate	ND	50	ug/Kg	11/16/2001 12:15	
Vinyl chloride	ND	5.0	ug/Kg	11/16/2001 12:15	
Total xylenes	ND	5.0	ug/Kg	11/16/2001 12:15	
Surrogate(s)					
4-Bromofluorobenzene	99.1	74-121	%	11/16/2001 12:15	
1,2-Dichloroethane-d4	91.6	70-121	%	11/16/2001 12:15	
Toluene-d8	92.6	81-117	%	11/16/2001 12:15	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank	**Soil**	**QC Batch # 2001/11/19-01.06**
MB: 2001/11/19-01.06-004		Date Extracted: 11/19/2001 12:51

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	11/19/2001 12:51	
Acetone	ND	50	ug/Kg	11/19/2001 12:51	
Benzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Bromodichloromethane	ND	5.0	ug/Kg	11/19/2001 12:51	
Bromobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Bromochloromethane	ND	20	ug/Kg	11/19/2001 12:51	
Bromoform	ND	5.0	ug/Kg	11/19/2001 12:51	
Bromomethane	ND	10	ug/Kg	11/19/2001 12:51	
2-Butanone(MEK)	ND	50	ug/Kg	11/19/2001 12:51	
n-Butylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
sec-Butylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
tert-Butylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Carbon disulfide	ND	5.0	ug/Kg	11/19/2001 12:51	
Carbon tetrachloride	ND	5.0	ug/Kg	11/19/2001 12:51	
Chlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Chloroethane	ND	10	ug/Kg	11/19/2001 12:51	
2-Chloroethylvinyl ether	ND	50	ug/Kg	11/19/2001 12:51	
Chloroform	ND	5.0	ug/Kg	11/19/2001 12:51	
Chloromethane	ND	10	ug/Kg	11/19/2001 12:51	
2-Chlorotoluene	ND	5.0	ug/Kg	11/19/2001 12:51	
4-Chlorotoluene	ND	5.0	ug/Kg	11/19/2001 12:51	
Dibromochloromethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,3-Dichloropropane	ND	5.0	ug/Kg	11/19/2001 12:51	
2,2-Dichloropropane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1-Dichloropropene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	11/19/2001 12:51	
1,2-Dibromoethane (EDB)	ND	10	ug/Kg	11/19/2001 12:51	
Dibromomethane	ND	10	ug/Kg	11/19/2001 12:51	
Dichlorodifluoromethane	ND	10	ug/Kg	11/19/2001 12:51	
1,1-Dichloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2-Dichloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1-Dichloroethene	ND	5.0	ug/Kg	11/19/2001 12:51	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	11/19/2001 12:51	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2-Dichloropropane	ND	5.0	ug/Kg	11/19/2001 12:51	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	11/19/2001 12:51	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	11/19/2001 12:51	
Ethylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank **Soil** **QC Batch # 2001/11/19-01.06**

MB: 2001/11/19-01.06-004 Date Extracted: 11/19/2001 12:51

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Hexachlorobutadiene	ND	5.0	ug/Kg	11/19/2001 12:51	
2-Hexanone	ND	50	ug/Kg	11/19/2001 12:51	
Isopropylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
p-Isopropyltoluene	ND	5.0	ug/Kg	11/19/2001 12:51	
Methylene chloride	ND	5.0	ug/Kg	11/19/2001 12:51	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	11/19/2001 12:51	
Naphthalene	ND	10	ug/Kg	11/19/2001 12:51	
n-Propylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Styrene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
Tetrachloroethene	ND	5.0	ug/Kg	11/19/2001 12:51	
Toluene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
Trichloroethene	ND	5.0	ug/Kg	11/19/2001 12:51	
Trichlorofluoromethane	ND	5.0	ug/Kg	11/19/2001 12:51	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	11/19/2001 12:51	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	11/19/2001 12:51	
Vinyl acetate	ND	50	ug/Kg	11/19/2001 12:51	
Vinyl chloride	ND	5.0	ug/Kg	11/19/2001 12:51	
Total xylenes	ND	5.0	ug/Kg	11/19/2001 12:51	
Surrogate(s)					
4-Bromofluorobenzene	99.0	74-121	%	11/19/2001 12:51	
1,2-Dichloroethane-d4	92.0	70-121	%	11/19/2001 12:51	
Toluene-d8	93.7	81-117	%	11/19/2001 12:51	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/11/16-01.06**

LCS: 2001/11/16-01.06-002 Extracted: 11/16/2001 11:16 Analyzed: 11/16/2001 11:16

LCSD: 2001/11/16-01.06-003 Extracted: 11/16/2001 11:46 Analyzed: 11/16/2001 11:46

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	106	104	100.0	100.0	106.0	104.0	1.9	69-129	20		
Chlorobenzene	111	107	100.0	100.0	111.0	107.0	3.7	61-121	20		
1,1-Dichloroethene	104	102	100.0	100.0	104.0	102.0	1.9	65-125	20		
Toluene	108	106	100.0	100.0	108.0	106.0	1.9	70-130	20		
Trichloroethene	103	100	100.0	100.0	103.0	100.0	3.0	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	480	491	500	500	96.0	98.2		74-121			
1,2-Dichloroethane-d4	409	452	500	500	81.8	90.4		70-121			
Toluene-d8	439	446	500	500	87.8	89.2		81-117			

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/11/19-01.06**

LCS: 2001/11/19-01.06-002 Extracted: 11/19/2001 11:43 Analyzed: 11/19/2001 11:43

LCSD: 2001/11/19-01.06-003 Extracted: 11/19/2001 12:15 Analyzed: 11/19/2001 12:15

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	94.9	98.5	100.0	100.0	94.9	98.5	3.7	69-129	20		
Chlorobenzene	97.8	103	100.0	100.0	97.8	103.0	5.2	61-121	20		
1,1-Dichloroethene	91.6	93.4	100.0	100.0	91.6	93.4	1.9	65-125	20		
Toluene	96.8	99.8	100.0	100.0	96.8	99.8	3.1	70-130	20		
Trichloroethene	90.3	93.6	100.0	100.0	90.3	93.6	3.6	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	502	500	500	500	100.4	100.0		74-121			
1,2-Dichloroethane-d4	440	443	500	500	88.0	88.6		70-121			
Toluene-d8	459	462	500	500	91.8	92.4		81-117			

Submission #: 2001-11-0323

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Volatile OrganicCompounds by 8260B

Batch QC Report

Test Method: 8260B Prep Method: 5035

Matrix Spike (MS / MSD)	**Soil**	**QC Batch # 2001/11/19-01.06**	
Sample ID: **GAL111501-2 >> MS**		Lab ID:	2001-11-0323-007
MS: 2001/11/19-01.06-006	Extracted: 11/19/2001 14:21	Analyzed:	11/19/2001 14:21
		Dilution:	1
MSD: 2001/11/19-01.06-007	Extracted: 11/19/2001 14:56	Analyzed:	11/19/2001 14:56
		Dilution:	1

Compound	Conc. [ug/Kg]			Exp.Conc.		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Benzene	101	105	ND	99.8	99.8	101.	105.2	3.9	69-129	20		
Chlorobenzene	106	108	ND	99.8	99.8	106.	108.2	1.9	61-121	20		
1,1-Dichloroethene	99.0	99.9	ND	99.8	99.8	99.2	100.1	0.9	65-125	20		
Toluene	104	106	ND	99.8	99.8	104.	106.2	1.9	70-130	20		
Trichloroethene	96.9	99.5	ND	99.8	99.8	97.1	99.7	2.6	74-134	20		
Surrogate(s)												
4-Bromofluorobenz	508	512		500	500	101.	102.4		74-121			
1,2-Dichloroethane	460	467		500	500	92.1	93.3		70-121			
Toluene-d8	463	470		500	500	92.7	93.9		81-117			

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CA DHS ELAP#1094

Volatile OrganicCompounds by 8260B

Legend & Notes

Test Method: 8260B Prep Method: 5035

Analysis Flags

lm

Reporting limits raised due to high level of non-target analyte materials.

Analysis Flags

rl

Reporting limits raised due to reduced sample size.

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-E	Soil	11/15/2001 11:35	4
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-3	Soil	11/15/2001 12:45	8
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8260B

Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	SAL111501-S	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/28/2001 14:24
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/28-02.27
Matrix:	Soil		

Sample/Analysis Flag: Im (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	25	ug/Kg	5.00	11/28/2001 14:24	
Methyl tert-butyl ether (MTBE)	ND	25	ug/Kg	5.00	11/28/2001 14:24	
Di-isopropyl Ether (DIPE)	ND	50	ug/Kg	5.00	11/28/2001 14:24	
Ethyl tert-butyl ether (ETBE)	ND	25	ug/Kg	5.00	11/28/2001 14:24	
tert-Amyl methyl ether (TAME)	ND	25	ug/Kg	5.00	11/28/2001 14:24	
Surrogate(s)						
1,2-Dichloroethane-d4	110.3	70-121	%	1.00	11/28/2001 14:24	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**SAL111501-N**	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/28/2001 13:59
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/28-02.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/28/2001 13:59	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/28/2001 13:59	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/28/2001 13:59	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/28/2001 13:59	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/28/2001 13:59	
Surrogate(s)						
1,2-Dichloroethane-d4	116.6	70-121	%	1.00	11/28/2001 13:59	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	SAL111501-E	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/28/2001 15:08
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/28-02.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/28/2001 15:08	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/28/2001 15:08	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/28/2001 15:08	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/28/2001 15:08	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/28/2001 15:08	
Surrogate(s)						
1,2-Dichloroethane-d4	106.0	70-121	%	1.00	11/28/2001 15:08	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**SAL111501-W**	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 23:20
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/16-01.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/16/2001 23:20	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/16/2001 23:20	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/16/2001 23:20	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/16/2001 23:20	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/16/2001 23:20	
Surrogate(s)						
1,2-Dichloroethane-d4	113.9	70-121	%	1.00	11/16/2001 23:20	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8260B

Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	GAL111501-1	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 22:55
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/16/2001 22:55	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:55	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/16/2001 22:55	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:55	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/16/2001 22:55	
Surrogate(s)						
1,2-Dichloroethane-d4	112.4	70-121	%	1.00	11/16/2001 22:55	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**GAL111501-2**	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 22:31
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/16/2001 22:31	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:31	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/16/2001 22:31	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:31	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/16/2001 22:31	
Surrogate(s)						
1,2-Dichloroethane-d4	116.6	70-121	%	1.00	11/16/2001 22:31	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**GAL111501-3**	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 22:06
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/16/2001 22:06	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:06	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/16/2001 22:06	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/16/2001 22:06	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/16/2001 22:06	
Surrogate(s)						
1,2-Dichloroethane-d4	118.1	70-121	%	1.00	11/16/2001 22:06	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**GAL111501-4**	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 21:42
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-01.27
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	11/16/2001 21:42	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/16/2001 21:42	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/16/2001 21:42	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/16/2001 21:42	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/16/2001 21:42	
Surrogate(s)						
1,2-Dichloroethane-d4	115.3	70-121	%	1.00	11/16/2001 21:42	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC report

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CA DHS ELAP#1094

Test Method: 8260B Prep Method: 5030B

Method Blank	**Soil**	**QC Batch # 2001/11/28-02.27**
MB: 2001/11/28-02.27-009		Date Extracted: 11/28/2001 13:10

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	11/28/2001 13:10	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	11/28/2001 13:10	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	11/28/2001 13:10	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	11/28/2001 13:10	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	11/28/2001 13:10	
Surrogate(s)					
1,2-Dichloroethane-d4	119.4	70-121	%	11/28/2001 13:10	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5030B

Method Blank	**Soil**	**QC Batch # 2001/11/16-01.27**
MB: 2001/11/16-01.27-010		Date Extracted: 11/16/2001 14:56

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	11/16/2001 14:56	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	11/16/2001 14:56	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	11/16/2001 14:56	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	11/16/2001 14:56	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	11/16/2001 14:56	
Surrogate(s)					
1,2-Dichloroethane-d4	101.4	70-121	%	11/16/2001 14:56	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC report

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CA DHS ELAP#1094

Test Method: 8260B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD)			**Soil**	**QC Batch # 2001/11/16-01.27**	
LCS:	2001/11/16-01.27-004	Extracted:	11/16/2001 13:58	Analyzed:	11/16/2001 13:58
LCSD:	2001/11/16-01.27-005	Extracted:	11/16/2001 14:26	Analyzed:	11/16/2001 14:26

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
MTBE	40.5	40.0	50.0	50.0	81.0	80.0	1.2	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	506	520	500	500	101.2	104.0		76-114			

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5030B

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/28-02.27**
LCS:	2001/11/28-02.27-007	Extracted:	11/28/2001 12:26	Analyzed: 11/28/2001 12:26
LCSD:	2001/11/28-02.27-008	Extracted:	11/28/2001 12:49	Analyzed: 11/28/2001 12:49

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether	49.8	43.0	50.0	50.0	99.6	86.0	14.7	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	569	580	500	500	113.8	116.0		70-121			

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Legend & Notes

Test Method: 8260B Prep Method: 5030B

Analysis Flags

Im

Reporting limits raised due to high level of non-target analyte materials.

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

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CA DHS ELAP#1094

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Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 20:33
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/19-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	11/19/2001 20:33	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/L	1.00	11/19/2001 20:33	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	1.00	11/19/2001 20:33	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/L	1.00	11/19/2001 20:33	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/L	1.00	11/19/2001 20:33	
Surrogate(s)						
1,2-Dichloroethane-d4	108.9	76-114	%	1.00	11/19/2001 20:33	

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC report

Test Method: 8260B Prep Method: 5030B

Method Blank **Water** **QC Batch # 2001/11/19-01.27**

MB: 2001/11/19-01.27-004 Date Extracted: 11/19/2001 10:49

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	11/19/2001 10:49	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/L	11/19/2001 10:49	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/L	11/19/2001 10:49	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/L	11/19/2001 10:49	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/L	11/19/2001 10:49	
Surrogate(s)					
1,2-Dichloroethane-d4	91.7	76-114	%	11/19/2001 10:49	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Fuel Oxygenates by 8260B

Batch QC report

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CA DHS ELAP#1094

Test Method: 8260B Prep Method: 5030B

Laboratory Control Spike (LCS/LCSD)		Water	QC Batch # 2001/11/19-01.27
LCS:	2001/11/19-01.27-002	Extracted: 11/19/2001 09:57	Analyzed: 11/19/2001 09:57
LCSD:	2001/11/19-01.27-003	Extracted: 11/19/2001 10:25	Analyzed: 11/19/2001 10:25

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether	17.2	18.3	25.0	25.0	68.8	73.2	6.2	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	463	469	500	500	92.6	93.8		76-114			

Submission #: 2001-11-0323

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Fuel Oxygenates by 8260B

Batch QC Report

Test Method: 8260B Prep Method: 5030B

Matrix Spike (MS / MSD)	**Water**		**QC Batch # 2001/11/19-01.27**
Sample ID: **WAL111501 >> MS**		Lab ID:	2001-11-0323-001
MS: 2001/11/19-01.27-022	Extracted: 11/19/2001 19:44	Analyzed:	11/19/2001 19:44
		Dilution:	1
MSD: 2001/11/19-01.27-023	Extracted: 11/19/2001 20:08	Analyzed:	11/19/2001 20:08
		Dilution:	1

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Methyl tert-butyl	17.0	20.7	ND	25.0	25.0	68.0	82.8	19.6	65-165	20		
Surrogate(s)												
1,2-Dichloroethane	495	527		500	500	99.0	105.5		76-114			

Submission #: 2001-11-0323

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Volatile Organic Compounds by 8260B (Low Level)

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CA DHS ELAP#1094

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11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (Low Level)

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5030B

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CA DHS ELAP#1094

Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/27/2001 20:00
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/27-01.09
Matrix:	Water		
Sample/Analysis Flag:	lm (See Legend & Note section)		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	50	ug/L	10.00	11/27/2001 20:00	
Acetone	ND	500	ug/L	10.00	11/27/2001 20:00	
Benzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Bromodichloromethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Bromobenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
Bromochloromethane	ND	10	ug/L	10.00	11/27/2001 20:00	
Bromoform	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Bromomethane	ND	10	ug/L	10.00	11/27/2001 20:00	
2-Butanone(MEK)	ND	500	ug/L	10.00	11/27/2001 20:00	
n-Butylbenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
sec-Butylbenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
tert-Butylbenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
Carbon disulfide	ND	50	ug/L	10.00	11/27/2001 20:00	
Carbon tetrachloride	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Chlorobenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Chloroethane	ND	10	ug/L	10.00	11/27/2001 20:00	
2-Chloroethylvinyl ether	ND	50	ug/L	10.00	11/27/2001 20:00	
Chloroform	ND	10	ug/L	10.00	11/27/2001 20:00	
Chloromethane	ND	10	ug/L	10.00	11/27/2001 20:00	
2-Chlorotoluene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
4-Chlorotoluene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Dibromochloromethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,2-Dichlorobenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,3-Dichlorobenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,4-Dichlorobenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,3-Dichloropropane	ND	10	ug/L	10.00	11/27/2001 20:00	
2,2-Dichloropropane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1-Dichloropropene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,2-Dibromo-3-chloropropane	ND	10	ug/L	10.00	11/27/2001 20:00	
1,2-Dibromoethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Dibromomethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Dichlorodifluoromethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1-Dichloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,2-Dichloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1-Dichloroethene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
cis-1,2-Dichloroethene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
trans-1,2-Dichloroethene	ND	5.0	ug/L	10.00	11/27/2001 20:00	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (Low Level)

Tetra Tech Inc SF
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CA DHS ELAP#1094

Test Method: 8260B
Prep Method: 5030B

Sample ID: WAL111501
Project: 11979-03
Alameda UST Removal
Sampled: 11/15/2001 10:30
Matrix: Water
Sample/Analysis Flag: Im (See Legend & Note section)

Lab Sample ID: 2001-11-0323-001
Received: 11/15/2001 14:45
Extracted: 11/27/2001 20:00
QC-Batch: 2001/11/27-01.09

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
1,2-Dichloropropane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
cis-1,3-Dichloropropene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
trans-1,3-Dichloropropene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Ethylbenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Hexachlorobutadiene	ND	10	ug/L	10.00	11/27/2001 20:00	
2-Hexanone	ND	500	ug/L	10.00	11/27/2001 20:00	
Isopropylbenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
p-Isopropyltoluene	ND	10	ug/L	10.00	11/27/2001 20:00	
Methylene chloride	ND	50	ug/L	10.00	11/27/2001 20:00	
4-Methyl-2-pentanone (MIBK)	ND	500	ug/L	10.00	11/27/2001 20:00	
Naphthalene	ND	10	ug/L	10.00	11/27/2001 20:00	
n-Propylbenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
Styrene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Tetrachloroethene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Toluene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,2,3-Trichlorobenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
1,2,4-Trichlorobenzene	ND	10	ug/L	10.00	11/27/2001 20:00	
1,1,1-Trichloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,1,2-Trichloroethane	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Trichloroethene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Trichlorofluoromethane	ND	10	ug/L	10.00	11/27/2001 20:00	
Trichlorotrifluoroethane	ND	10	ug/L	10.00	11/27/2001 20:00	
1,2,4-Trimethylbenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
1,3,5-Trimethylbenzene	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Vinyl acetate	ND	250	ug/L	10.00	11/27/2001 20:00	
Vinyl chloride	ND	5.0	ug/L	10.00	11/27/2001 20:00	
Total xylenes	ND	10	ug/L	10.00	11/27/2001 20:00	
Surrogate(s)						
4-Bromofluorobenzene	96.7	86-115	%	10.00	11/27/2001 20:00	
1,2-Dichloroethane-d4	90.3	76-114	%	10.00	11/27/2001 20:00	
Toluene-d8	100.7	88-110	%	10.00	11/27/2001 20:00	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

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CA DHS ELAP#1094

Test Method: 8260B Prep Method: 5030B

Method Blank **Water** **QC Batch # 2001/11/27-01.09**

MB: 2001/11/27-01.09-005 Date Extracted: 11/27/2001 15:16

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
MTBE	ND	5.0	ug/L	11/27/2001 15:16	
Acetone	ND	50	ug/L	11/27/2001 15:16	
Benzene	ND	0.5	ug/L	11/27/2001 15:16	
Bromodichloromethane	ND	0.5	ug/L	11/27/2001 15:16	
Bromobenzene	ND	1.0	ug/L	11/27/2001 15:16	
Bromochloromethane	ND	1.0	ug/L	11/27/2001 15:16	
Bromoform	ND	0.5	ug/L	11/27/2001 15:16	
Bromomethane	ND	1.0	ug/L	11/27/2001 15:16	
2-Butanone(MEK)	ND	50	ug/L	11/27/2001 15:16	
n-Butylbenzene	ND	1.0	ug/L	11/27/2001 15:16	
sec-Butylbenzene	ND	1.0	ug/L	11/27/2001 15:16	
tert-Butylbenzene	ND	1.0	ug/L	11/27/2001 15:16	
Carbon disulfide	ND	5.0	ug/L	11/27/2001 15:16	
Carbon tetrachloride	ND	0.5	ug/L	11/27/2001 15:16	
Chlorobenzene	ND	0.5	ug/L	11/27/2001 15:16	
Chloroethane	ND	1.0	ug/L	11/27/2001 15:16	
2-Chloroethylvinyl ether	ND	5.0	ug/L	11/27/2001 15:16	
Chloroform	ND	1.0	ug/L	11/27/2001 15:16	
Chloromethane	ND	1.0	ug/L	11/27/2001 15:16	
2-Chlorotoluene	ND	0.5	ug/L	11/27/2001 15:16	
4-Chlorotoluene	ND	0.5	ug/L	11/27/2001 15:16	
Dibromochloromethane	ND	0.5	ug/L	11/27/2001 15:16	
1,2-Dichlorobenzene	ND	0.5	ug/L	11/27/2001 15:16	
1,3-Dichlorobenzene	ND	0.5	ug/L	11/27/2001 15:16	
1,4-Dichlorobenzene	ND	0.5	ug/L	11/27/2001 15:16	
1,3-Dichloropropane	ND	1.0	ug/L	11/27/2001 15:16	
2,2-Dichloropropane	ND	0.5	ug/L	11/27/2001 15:16	
1,1-Dichloropropene	ND	0.5	ug/L	11/27/2001 15:16	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/27/2001 15:16	
1,2-Dibromoethane	ND	0.5	ug/L	11/27/2001 15:16	
Dibromomethane	ND	0.5	ug/L	11/27/2001 15:16	
Dichlorodifluoromethane	ND	0.5	ug/L	11/27/2001 15:16	
1,1-Dichloroethane	ND	0.5	ug/L	11/27/2001 15:16	
1,2-Dichloroethane	ND	0.5	ug/L	11/27/2001 15:16	
1,1-Dichloroethene	ND	0.5	ug/L	11/27/2001 15:16	
cis-1,2-Dichloroethene	ND	0.5	ug/L	11/27/2001 15:16	
trans-1,2-Dichloroethene	ND	0.5	ug/L	11/27/2001 15:16	
1,2-Dichloropropane	ND	0.5	ug/L	11/27/2001 15:16	
cis-1,3-Dichloropropene	ND	0.5	ug/L	11/27/2001 15:16	
trans-1,3-Dichloropropene	ND	0.5	ug/L	11/27/2001 15:16	
Ethylbenzene	ND	0.5	ug/L	11/27/2001 15:16	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

Test Method: 8260B Prep Method: 5030B

Method Blank **Water** **QC Batch # 2001/11/27-01.09**

MB: 2001/11/27-01.09-005 Date Extracted: 11/27/2001 15:16

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Hexachlorobutadiene	ND	1.0	ug/L	11/27/2001 15:16	
2-Hexanone	ND	50	ug/L	11/27/2001 15:16	
Isopropylbenzene	ND	0.5	ug/L	11/27/2001 15:16	
p-Isopropyltoluene	ND	1.0	ug/L	11/27/2001 15:16	
Methylene chloride	ND	5.0	ug/L	11/27/2001 15:16	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	11/27/2001 15:16	
Naphthalene	ND	1.0	ug/L	11/27/2001 15:16	
n-Propylbenzene	ND	1.0	ug/L	11/27/2001 15:16	
Styrene	ND	0.5	ug/L	11/27/2001 15:16	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/27/2001 15:16	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/27/2001 15:16	
Tetrachloroethene	ND	0.5	ug/L	11/27/2001 15:16	
Toluene	ND	0.5	ug/L	11/27/2001 15:16	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	11/27/2001 15:16	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	11/27/2001 15:16	
1,1,1-Trichloroethane	ND	0.5	ug/L	11/27/2001 15:16	
1,1,2-Trichloroethane	ND	0.5	ug/L	11/27/2001 15:16	
Trichloroethene	ND	0.5	ug/L	11/27/2001 15:16	
Trichlorofluoromethane	ND	1.0	ug/L	11/27/2001 15:16	
Trichlorotrifluoroethane	ND	1.0	ug/L	11/27/2001 15:16	
1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/27/2001 15:16	
1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/27/2001 15:16	
Vinyl acetate	ND	25	ug/L	11/27/2001 15:16	
Vinyl chloride	ND	0.5	ug/L	11/27/2001 15:16	
Total xylenes	ND	1.0	ug/L	11/27/2001 15:16	
Surrogate(s)					
4-Bromofluorobenzene	97.6	86-115	%	11/27/2001 15:16	
1,2-Dichloroethane-d4	78.8	76-114	%	11/27/2001 15:16	
Toluene-d8	98.8	88-110	%	11/27/2001 15:16	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

Test Method: 8260B Prep Method: 5030B

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2001/11/27-01.09	
LCS:	2001/11/27-01.09-003	Extracted:	11/27/2001 10:35	Analyzed:	11/27/2001 10:35
LCSD:	2001/11/27-01.09-004	Extracted:	11/27/2001 11:08	Analyzed:	11/27/2001 11:08

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	44.7	43.6	50.0	50.0	89.4	87.2	2.5	69-129	20		
Chlorobenzene	45.2	46.5	50.0	50.0	90.4	93.0	2.8	61-121	20		
1,1-Dichloroethene	34.9	35.5	50.0	50.0	69.8	71.0	1.7	65-125	20		
Toluene	43.4	44.4	50.0	50.0	86.8	88.8	2.3	70-130	20		
Trichloroethene	39.8	40.0	50.0	50.0	79.6	80.0	0.5	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	488	512	500	500	97.6	102.4		86-115			
1,2-Dichloroethane-d4	446	456	500	500	89.2	91.2		76-114			
Toluene-d8	476	484	500	500	95.2	96.8		88-110			

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC Report

Test Method: 8260B Prep Method: 5030B

Matrix Spike (MS / MSD)	**Water**	**QC Batch # 2001/11/27-01.09**	
Sample ID: **WAL111501 >> MS**		Lab ID:	2001-11-0323-001
MS: 2001/11/27-01.09-024	Extracted: 11/27/2001 20:26	Analyzed:	11/27/2001 20:26
		Dilution:	10
MSD: 2001/11/27-01.09-025	Extracted: 11/27/2001 20:51	Analyzed:	11/27/2001 20:51
		Dilution:	10

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Benzene	435	480	0.670	500	500	86.9	95.9	9.8	69-129	20		
Chlorobenzene	509	479	ND	500	500	101.	95.8	6.1	61-121	20		
1,1-Dichloroethene	371	397	0.630	500	500	74.1	79.3	6.8	65-125	20		
Toluene	430	451	3.44	500	500	85.3	89.5	4.8	70-130	20		
Trichloroethene	397	424	ND	500	500	79.4	84.8	6.6	74-134	20		
Surrogate(s)												
4-Bromofluorobenz	545	502		500	500	108.	100.4		86-115			
1,2-Dichloroethane	453	479		500	500	90.6	95.7		76-114			
Toluene-d8	480	483		500	500	95.9	96.7		88-110			

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Legend & Notes

Test Method: 8260B Prep Method: 5030B

Analysis Flags

lrn

Reporting limits raised due to high level of non-target analyte materials.

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (High Level)

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-E	Soil	11/15/2001 11:35	4

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (HIgh Level)

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CA DHS ELAP#1094

Test Method: 8260B
Prep Method: 5035

Sample ID:	SAL111501-S	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 17:40
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/19-01.07
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	2500	ug/Kg	200.00	11/20/2001 17:40	
Acetone	ND	25000	ug/Kg	200.00	11/20/2001 17:40	
Benzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Bromodichloromethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Bromoform	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Bromomethane	ND	500	ug/Kg	200.00	11/20/2001 17:40	
Carbon tetrachloride	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Chlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Chloroethane	ND	500	ug/Kg	200.00	11/20/2001 17:40	
2-Butanone(MEK)	ND	25000	ug/Kg	200.00	11/20/2001 17:40	
2-Chloroethylvinyl ether	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Chloroform	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Chloromethane	ND	500	ug/Kg	200.00	11/20/2001 17:40	
Dibromochloromethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,3-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,4-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,3-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
2,2-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2-Dibromo-3-chloropropane	ND	2500	ug/Kg	200.00	11/20/2001 17:40	
1,2-Dibromoethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Dibromomethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Dichlorodifluoromethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1-Dichloroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2-Dichloroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
cis-1,2-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
trans-1,2-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
cis-1,3-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
trans-1,3-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Ethylbenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Hexachlorobutadiene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
2-Hexanone	ND	25000	ug/Kg	200.00	11/20/2001 17:40	
Methylene chloride	ND	2500	ug/Kg	200.00	11/20/2001 17:40	
4-Methyl-2-pentanone (MIBK)	ND	25000	ug/Kg	200.00	11/20/2001 17:40	
Naphthalene	3000	250	ug/Kg	200.00	11/20/2001 17:40	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (High Level)

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5035

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CA DHS ELAP#1094

Sample ID:	SAL111501-S	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 17:40
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/19-01.07
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Styrene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Tetrachloroethene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Toluene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1,1-Trichloroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1,2-Trichloroethane	6000	250	ug/Kg	200.00	11/20/2001 17:40	
Trichloroethene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Vinyl acetate	ND	2500	ug/Kg	200.00	11/20/2001 17:40	
Vinyl chloride	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Total xylenes	ND	500	ug/Kg	200.00	11/20/2001 17:40	
Trichlorotrifluoroethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Carbon disulfide	ND	500	ug/Kg	200.00	11/20/2001 17:40	
Isopropylbenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Bromobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Bromochloromethane	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Trichlorofluoromethane	ND	1000	ug/Kg	200.00	11/20/2001 17:40	
1,2,3-Trichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2,4-Trichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
1,2,4-Trimethylbenzene	1700	250	ug/Kg	200.00	11/20/2001 17:40	
1,3,5-Trimethylbenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
2-Chlorotoluene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
4-Chlorotoluene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
n-Butylbenzene	2300	250	ug/Kg	200.00	11/20/2001 17:40	
n-Propylbenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
p-Isopropyltoluene	960	250	ug/Kg	200.00	11/20/2001 17:40	
sec-Butylbenzene	990	250	ug/Kg	200.00	11/20/2001 17:40	
tert-Butylbenzene	ND	250	ug/Kg	200.00	11/20/2001 17:40	
Surrogate(s)						
4-Bromofluorobenzene	107.2	74-121	%	200.00	11/20/2001 17:40	
1,2-Dichloroethane-d4	96.5	70-121	%	200.00	11/20/2001 17:40	
Toluene-d8	88.7	81-117	%	200.00	11/20/2001 17:40	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (High Level)

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5035

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	SAL111501-E	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 18:04
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/19-01.07
Matrix:	Soil		
Sample/Analysis Flag:	Im (See Legend & Note section)		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	2500	ug/Kg	200.00	11/20/2001 18:04	
Acetone	ND	25000	ug/Kg	200.00	11/20/2001 18:04	
Benzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Bromodichloromethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Bromoform	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Bromomethane	ND	500	ug/Kg	200.00	11/20/2001 18:04	
Carbon tetrachloride	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Chlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Chloroethane	ND	500	ug/Kg	200.00	11/20/2001 18:04	
2-Butanone(MEK)	ND	25000	ug/Kg	200.00	11/20/2001 18:04	
2-Chloroethylvinyl ether	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Chloroform	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Chloromethane	ND	500	ug/Kg	200.00	11/20/2001 18:04	
Dibromochloromethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,3-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,4-Dichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,3-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
2,2-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2-Dibromo-3-chloropropane	ND	2500	ug/Kg	200.00	11/20/2001 18:04	
1,2-Dibromoethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Dibromomethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Dichlorodifluoromethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1-Dichloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2-Dichloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
cis-1,2-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
trans-1,2-Dichloroethene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2-Dichloropropane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
cis-1,3-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
trans-1,3-Dichloropropene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Ethylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Hexachlorobutadiene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
2-Hexanone	ND	25000	ug/Kg	200.00	11/20/2001 18:04	
Methylene chloride	ND	2500	ug/Kg	200.00	11/20/2001 18:04	
4-Methyl-2-pentanone (MIBK)	ND	25000	ug/Kg	200.00	11/20/2001 18:04	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (High Level)

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8260B
Prep Method: 5035

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www.chromalab.com

CA DHS ELAP#1094

Sample ID: **SAL111501-E**
Project: 11979-03
Alameda UST Removal

Sampled: 11/15/2001 11:35
Matrix: Soil

Lab Sample ID: 2001-11-0323-004
Received: 11/15/2001 14:45

Extracted: 11/20/2001 18:04
QC-Batch: 2001/11/19-01.07

Sample/Analysis Flag: lm (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Styrene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Tetrachloroethene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Toluene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1,1-Trichloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1,2-Trichloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Trichloroethene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Vinyl acetate	ND	2500	ug/Kg	200.00	11/20/2001 18:04	
Vinyl chloride	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Total xylenes	ND	500	ug/Kg	200.00	11/20/2001 18:04	
Trichlorotrifluoroethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Carbon disulfide	ND	500	ug/Kg	200.00	11/20/2001 18:04	
Isopropylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Bromobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Bromochloromethane	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Trichlorofluoromethane	ND	1000	ug/Kg	200.00	11/20/2001 18:04	
1,2,3-Trichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2,4-Trichlorobenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,2,4-Trimethylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
1,3,5-Trimethylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
2-Chlorotoluene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
4-Chlorotoluene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
n-Butylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
n-Propylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
p-Isopropyltoluene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
sec-Butylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
tert-Butylbenzene	ND	250	ug/Kg	200.00	11/20/2001 18:04	
Surrogate(s)						
4-Bromofluorobenzene	88.9	74-121	%	200.00	11/20/2001 18:04	
1,2-Dichloroethane-d4	91.2	70-121	%	200.00	11/20/2001 18:04	
Toluene-d8	83.1	81-117	%	200.00	11/20/2001 18:04	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (High Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank Soil **QC Batch # 2001/11/19-01.07**

MB: 2001/11/19-01.07-011 Date Extracted: 11/20/2001 15:15

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
MTBE	ND	2500	ug/Kg	11/20/2001 15:15	
Acetone	ND	25000	ug/Kg	11/20/2001 15:15	
Benzene	ND	250	ug/Kg	11/20/2001 15:15	
Bromodichloromethane	ND	250	ug/Kg	11/20/2001 15:15	
Bromoform	ND	250	ug/Kg	11/20/2001 15:15	
Bromomethane	ND	500	ug/Kg	11/20/2001 15:15	
Carbon tetrachloride	ND	250	ug/Kg	11/20/2001 15:15	
Chlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
Chloroethane	ND	500	ug/Kg	11/20/2001 15:15	
2-Butanone(MEK)	ND	25000	ug/Kg	11/20/2001 15:15	
2-Chloroethylvinyl ether	ND	250	ug/Kg	11/20/2001 15:15	
Chloroform	ND	250	ug/Kg	11/20/2001 15:15	
Chloromethane	ND	500	ug/Kg	11/20/2001 15:15	
Dibromochloromethane	ND	250	ug/Kg	11/20/2001 15:15	
1,2-Dichlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,3-Dichlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,4-Dichlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,3-Dichloropropane	ND	250	ug/Kg	11/20/2001 15:15	
2,2-Dichloropropane	ND	250	ug/Kg	11/20/2001 15:15	
1,1-Dichloropropene	ND	250	ug/Kg	11/20/2001 15:15	
1,2-Dibromo-3-chloropropane	ND	2500	ug/Kg	11/20/2001 15:15	
1,2-Dibromoethane	ND	250	ug/Kg	11/20/2001 15:15	
Dibromomethane	ND	250	ug/Kg	11/20/2001 15:15	
Dichlorodifluoromethane	ND	250	ug/Kg	11/20/2001 15:15	
1,1-Dichloroethane	ND	250	ug/Kg	11/20/2001 15:15	
1,2-Dichloroethane	ND	250	ug/Kg	11/20/2001 15:15	
1,1-Dichloroethene	ND	250	ug/Kg	11/20/2001 15:15	
cis-1,2-Dichloroethene	ND	250	ug/Kg	11/20/2001 15:15	
trans-1,2-Dichloroethene	ND	250	ug/Kg	11/20/2001 15:15	
1,2-Dichloropropane	ND	250	ug/Kg	11/20/2001 15:15	
cis-1,3-Dichloropropene	ND	250	ug/Kg	11/20/2001 15:15	
trans-1,3-Dichloropropene	ND	250	ug/Kg	11/20/2001 15:15	
Ethylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
Hexachlorobutadiene	ND	250	ug/Kg	11/20/2001 15:15	
2-Hexanone	ND	25000	ug/Kg	11/20/2001 15:15	
Methylene chloride	ND	2500	ug/Kg	11/20/2001 15:15	
4-Methyl-2-pentanone (MIBK)	ND	25000	ug/Kg	11/20/2001 15:15	
Naphthalene	ND	250	ug/Kg	11/20/2001 15:15	
Styrene	ND	250	ug/Kg	11/20/2001 15:15	
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	11/20/2001 15:15	
Tetrachloroethene	ND	250	ug/Kg	11/20/2001 15:15	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (High Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank Soil **QC Batch # 2001/11/19-01.07**

MB: 2001/11/19-01.07-011 Date Extracted: 11/20/2001 15:15

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Toluene	ND	250	ug/Kg	11/20/2001 15:15	
1,1,1-Trichloroethane	ND	250	ug/Kg	11/20/2001 15:15	
1,1,2-Trichloroethane	ND	250	ug/Kg	11/20/2001 15:15	
Trichloroethene	ND	250	ug/Kg	11/20/2001 15:15	
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	11/20/2001 15:15	
Vinyl acetate	ND	2500	ug/Kg	11/20/2001 15:15	
Vinyl chloride	ND	250	ug/Kg	11/20/2001 15:15	
Total xylenes	ND	500	ug/Kg	11/20/2001 15:15	
Trichlorotrifluoroethane	ND	250	ug/Kg	11/20/2001 15:15	
Carbon disulfide	ND	500	ug/Kg	11/20/2001 15:15	
Isopropylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
Bromobenzene	ND	250	ug/Kg	11/20/2001 15:15	
Bromochloromethane	ND	250	ug/Kg	11/20/2001 15:15	
Trichlorofluoromethane	ND	1000	ug/Kg	11/20/2001 15:15	
1,2,3-Trichlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,2,4-Trichlorobenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,2,4-Trimethylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
1,3,5-Trimethylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
2-Chlorotoluene	ND	250	ug/Kg	11/20/2001 15:15	
4-Chlorotoluene	ND	250	ug/Kg	11/20/2001 15:15	
n-Butylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
n-Propylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
p-Isopropyltoluene	ND	250	ug/Kg	11/20/2001 15:15	
sec-Butylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
tert-Butylbenzene	ND	250	ug/Kg	11/20/2001 15:15	
Surrogate(s)					
4-Bromofluorobenzene	93.1	74-121	%	11/20/2001 15:15	
1,2-Dichloroethane-d4	98.9	70-121	%	11/20/2001 15:15	
Toluene-d8	91.6	81-117	%	11/20/2001 15:15	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (High Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/11/19-01.07**

LCS: 2001/11/19-01.07-003 Extracted: 11/20/2001 12:02 Analyzed: 11/20/2001 12:02

LCSD: 2001/11/19-01.07-004 Extracted: 11/20/2001 12:27 Analyzed: 11/20/2001 12:27

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	11600	11200	10000	10000	116.0	112.0	3.5	69-129	20		
Chlorobenzene	11400	11000	10000	10000	114.0	110.0	3.6	61-121	20		
1,1-Dichloroethene	7100	6900	10000	10000	71.0	69.0	2.9	65-125	20		
Toluene	11800	11100	10000	10000	118.0	111.0	6.1	70-130	20		
Trichloroethene	11400	10700	10000	10000	114.0	107.0	6.3	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	271	260	250	250	108.4	104.0		74-121			
1,2-Dichloroethane-d4	270	261	250	250	108.0	104.4		70-121			
Toluene-d8	258	249	250	250	103.2	99.6		81-117			

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (High Level)

Legend & Notes

Test Method: 8260B Prep Method: 5035

Analysis Flags

lm

Reporting limits raised due to high level of non-target analyte materials.

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-E	Soil	11/15/2001 11:35	4
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-3	Soil	11/15/2001 12:45	8
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	**SAL111501-S**	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2-Chlorophenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
1,3-Dichlorobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
1,4-Dichlorobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Benzyl alcohol	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
1,2-Dichlorobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2-Methylphenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Bis(2-chloroisopropyl) ether	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
4-Methylphenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
N-Nitroso-di-n-propylamine	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Hexachloroethane	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Nitrobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Isophorone	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2-Nitrophenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2,4-Dimethylphenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Bis(2-chloroethoxy) methane	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
2,4-Dichlorophenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Naphthalene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
4-Chloroaniline	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Hexachlorobutadiene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
4-Chloro-3-methylphenol	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
2-Methylnaphthalene	1.8	0.34	mg/Kg	5.00	11/26/2001 11:49	
Hexachlorocyclopentadiene	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
2,4,6-Trichlorophenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2,4,5-Trichlorophenol	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2-Chloronaphthalene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2-Nitroaniline	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
Dimethyl phthalate	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Acenaphthylene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
3-Nitroaniline	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Acenaphthene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2,4-Dinitrophenol	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
4-Nitrophenol	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
Dibenzofuran	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2,4-Dinitrotoluene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
2,6-Dinitrotoluene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	SAL111501-S	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
4-Chlorophenyl phenyl ether	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Fluorene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
4-Nitroaniline	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
2-Methyl-4,6-dinitrophenol	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
N-Nitrosodiphenylamine	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
4-Bromophenyl phenyl ether	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Hexachlorobenzene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Pentachlorophenol	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
Phenanthrene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Anthracene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Di-n-butyl phthalate	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Fluoranthene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Pyrene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Butyl benzyl phthalate	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
3,3-Dichlorobenzidine	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Benzo(a)anthracene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
bis(2-Ethylhexyl) phthalate	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
Chrysene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Di-n-octyl phthalate	ND	0.85	mg/Kg	5.00	11/26/2001 11:49	
Benzo(b)fluoranthene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Benzo(k)fluoranthene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Benzo(a)pyrene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Indeno(1,2,3-c,d)pyrene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Dibenzo(a,h)anthracene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Benzo(g,h,i)perylene	ND	0.34	mg/Kg	5.00	11/26/2001 11:49	
Benzoic acid	ND	1.7	mg/Kg	5.00	11/26/2001 11:49	
Surrogate(s)						
Nitrobenzene-d5	ND	23-120	%	5.00	11/26/2001 11:49	sl
2-Fluorobiphenyl	101.6	30-115	%	5.00	11/26/2001 11:49	
p-Terphenyl-d14	95.0	18-137	%	5.00	11/26/2001 11:49	
2-Fluorophenol	56.2	25-121	%	5.00	11/26/2001 11:49	
Phenol-d6	78.6	24-113	%	5.00	11/26/2001 11:49	
2,4,6-Tribromophenol	70.8	19-122	%	5.00	11/26/2001 11:49	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

STL Chromalab
1220 Quarry Lane
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Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	SAL111501-N	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Isophorone	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Naphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID: **SAL111501-N**
Project: 11979-03
Alameda UST Removal
Sampled: 11/15/2001 11:22
Matrix: Soil

Lab Sample ID: 2001-11-0323-003
Received: 11/15/2001 14:45
Extracted: 11/20/2001 14:26
QC-Batch: 2001/11/20-01.11

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Fluorene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
Chrysene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:25	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/22/2001 01:25	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/22/2001 01:25	
Surrogate(s)						
Nitrobenzene-d5	76.0	23-120	%	1.00	11/22/2001 01:25	
2-Fluorobiphenyl	102.6	30-115	%	1.00	11/22/2001 01:25	
p-Terphenyl-d14	95.6	18-137	%	1.00	11/22/2001 01:25	
2-Fluorophenol	80.6	25-121	%	1.00	11/22/2001 01:25	
Phenol-d6	85.3	24-113	%	1.00	11/22/2001 01:25	
2,4,6-Tribromophenol	118.0	19-122	%	1.00	11/22/2001 01:25	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	**SAL111501-E**	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Isophorone	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Naphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

STL Chromalab
1220 Quarry Lane
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	SAL111501-E	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Fluorene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
Chrysene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 01:54	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/22/2001 01:54	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/22/2001 01:54	
Surrogate(s)						
Nitrobenzene-d5	74.2	23-120	%	1.00	11/22/2001 01:54	
2-Fluorobiphenyl	103.5	30-115	%	1.00	11/22/2001 01:54	
p-Terphenyl-d14	92.8	18-137	%	1.00	11/22/2001 01:54	
2-Fluorophenol	79.9	25-121	%	1.00	11/22/2001 01:54	
Phenol-d6	85.8	24-113	%	1.00	11/22/2001 01:54	
2,4,6-Tribromophenol	117.7	19-122	%	1.00	11/22/2001 01:54	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	**SAL111501-W**	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Isophorone	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Naphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	SAL111501-W	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Fluorene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
Chrysene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:23	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/22/2001 02:23	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/22/2001 02:23	
Surrogate(s)						
Nitrobenzene-d5	68.2	23-120	%	1.00	11/22/2001 02:23	
2-Fluorobiphenyl	81.0	30-115	%	1.00	11/22/2001 02:23	
p-Terphenyl-d14	88.9	18-137	%	1.00	11/22/2001 02:23	
2-Fluorophenol	74.9	25-121	%	1.00	11/22/2001 02:23	
Phenol-d6	78.2	24-113	%	1.00	11/22/2001 02:23	
2,4,6-Tribromophenol	104.8	19-122	%	1.00	11/22/2001 02:23	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID:	GAL111501-1	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Isophorone	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Naphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
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1220 Quarry Lane
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Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID: GAL111501-1
Project: 11979-03
Alameda UST Removal

Sampled: 11/15/2001 12:45
Matrix: Soil

Lab Sample ID: 2001-11-0323-006
Received: 11/15/2001 14:45

Extracted: 11/20/2001 14:26
QC-Batch: 2001/11/20-01.11

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Fluorene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
Chrysene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 02:52	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/22/2001 02:52	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/22/2001 02:52	
Surrogate(s)						
Nitrobenzene-d5	66.7	23-120	%	1.00	11/22/2001 02:52	
2-Fluorobiphenyl	83.3	30-115	%	1.00	11/22/2001 02:52	
p-Terphenyl-d14	87.7	18-137	%	1.00	11/22/2001 02:52	
2-Fluorophenol	73.7	25-121	%	1.00	11/22/2001 02:52	
Phenol-d6	78.3	24-113	%	1.00	11/22/2001 02:52	
2,4,6-Tribromophenol	105.4	19-122	%	1.00	11/22/2001 02:52	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Tetra Tech Inc SF
Attn: Gary Floyd

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	GAL111501-2	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Isophorone	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Naphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	GAL111501-2	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Fluorene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
Chrysene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/22/2001 03:20	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/22/2001 03:20	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/22/2001 03:20	
Surrogate(s)						
Nitrobenzene-d5	60.2	23-120	%	1.00	11/22/2001 03:20	
2-Fluorobiphenyl	80.6	30-115	%	1.00	11/22/2001 03:20	
p-Terphenyl-d14	81.7	18-137	%	1.00	11/22/2001 03:20	
2-Fluorophenol	68.2	25-121	%	1.00	11/22/2001 03:20	
Phenol-d6	73.6	24-113	%	1.00	11/22/2001 03:20	
2,4,6-Tribromophenol	92.5	19-122	%	1.00	11/22/2001 03:20	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	GAL111501-3	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Isophorone	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Naphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	GAL111501-3	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Fluorene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
Chrysene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 12:49	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/26/2001 12:49	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/26/2001 12:49	
Surrogate(s)						
Nitrobenzene-d5	63.2	23-120	%	1.00	11/26/2001 12:49	
2-Fluorobiphenyl	100.5	30-115	%	1.00	11/26/2001 12:49	
p-Terphenyl-d14	85.2	18-137	%	1.00	11/26/2001 12:49	
2-Fluorophenol	67.6	25-121	%	1.00	11/26/2001 12:49	
Phenol-d6	79.3	24-113	%	1.00	11/26/2001 12:49	
2,4,6-Tribromophenol	94.0	19-122	%	1.00	11/26/2001 12:49	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	**GAL111501-4**	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2-Methylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
4-Methylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Hexachloroethane	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Nitrobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Isophorone	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Naphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
4-Chloroaniline	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Acenaphthylene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Acenaphthene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
Dibenzofuran	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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CA DHS ELAP#1094

Test Method: 8270C
Prep Method: 3550B/8270C

Sample ID:	GAL111501-4	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:26
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.11
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Fluorene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
Phenanthrene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
Chrysene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	11/26/2001 19:06	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	11/26/2001 19:06	
Benzoic acid	ND	0.33	mg/Kg	1.00	11/26/2001 19:06	
Surrogate(s)						
Nitrobenzene-d5	80.2	23-120	%	1.00	11/26/2001 19:06	
2-Fluorobiphenyl	85.2	30-115	%	1.00	11/26/2001 19:06	
p-Terphenyl-d14	86.7	18-137	%	1.00	11/26/2001 19:06	
2-Fluorophenol	72.8	25-121	%	1.00	11/26/2001 19:06	
Phenol-d6	77.7	24-113	%	1.00	11/26/2001 19:06	
2,4,6-Tribromophenol	91.3	19-122	%	1.00	11/26/2001 19:06	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

Test Method: 8270C

Prep Method: 3550B/827 0C

Method Blank | **Soil** | **QC Batch # 2001/11/20-01.11**

MB: 2001/11/20-01.11-004 | Date Extracted: 11/20/2001 14:26

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	11/21/2001 17:16	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	11/21/2001 17:16	
2-Chlorophenol	ND	0.067	mg/Kg	11/21/2001 17:16	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
Benzyl alcohol	ND	0.17	mg/Kg	11/21/2001 17:16	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
2-Methylphenol	ND	0.067	mg/Kg	11/21/2001 17:16	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	11/21/2001 17:16	
4-Methylphenol	ND	0.067	mg/Kg	11/21/2001 17:16	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	11/21/2001 17:16	
Hexachloroethane	ND	0.067	mg/Kg	11/21/2001 17:16	
Nitrobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
Isophorone	ND	0.067	mg/Kg	11/21/2001 17:16	
2-Nitrophenol	ND	0.067	mg/Kg	11/21/2001 17:16	
2,4-Dimethylphenol	ND	0.067	mg/Kg	11/21/2001 17:16	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	11/21/2001 17:16	
2,4-Dichlorophenol	ND	0.067	mg/Kg	11/21/2001 17:16	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
Naphthalene	ND	0.067	mg/Kg	11/21/2001 17:16	
4-Chloroaniline	ND	0.067	mg/Kg	11/21/2001 17:16	
Hexachlorobutadiene	ND	0.067	mg/Kg	11/21/2001 17:16	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	11/21/2001 17:16	
2-Methylnaphthalene	ND	0.067	mg/Kg	11/21/2001 17:16	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	11/21/2001 17:16	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	11/21/2001 17:16	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	11/21/2001 17:16	
2-Chloronaphthalene	ND	0.067	mg/Kg	11/21/2001 17:16	
2-Nitroaniline	ND	0.33	mg/Kg	11/21/2001 17:16	
Dimethyl phthalate	ND	0.17	mg/Kg	11/21/2001 17:16	
Acenaphthylene	ND	0.067	mg/Kg	11/21/2001 17:16	
3-Nitroaniline	ND	0.067	mg/Kg	11/21/2001 17:16	
Acenaphthene	ND	0.067	mg/Kg	11/21/2001 17:16	
2,4-Dinitrophenol	ND	0.33	mg/Kg	11/21/2001 17:16	
4-Nitrophenol	ND	0.33	mg/Kg	11/21/2001 17:16	
Dibenzofuran	ND	0.067	mg/Kg	11/21/2001 17:16	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	11/21/2001 17:16	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	11/21/2001 17:16	
Diethyl phthalate	ND	0.17	mg/Kg	11/21/2001 17:16	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	11/21/2001 17:16	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

Test Method: 8270C

Prep Method: 3550B/8270C

Method Blank | **Soil** | **QC Batch # 2001/11/20-01.11**

MB: 2001/11/20-01.11-004

Date Extracted: 11/20/2001 14:26

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Fluorene	ND	0.067	mg/Kg	11/21/2001 17:16	
4-Nitroaniline	ND	0.33	mg/Kg	11/21/2001 17:16	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	11/21/2001 17:16	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	11/21/2001 17:16	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	11/21/2001 17:16	
Hexachlorobenzene	ND	0.067	mg/Kg	11/21/2001 17:16	
Pentachlorophenol	ND	0.33	mg/Kg	11/21/2001 17:16	
Phenanthrene	ND	0.067	mg/Kg	11/21/2001 17:16	
Anthracene	ND	0.067	mg/Kg	11/21/2001 17:16	
Di-n-butyl phthalate	ND	0.17	mg/Kg	11/21/2001 17:16	
Fluoranthene	ND	0.067	mg/Kg	11/21/2001 17:16	
Pyrene	ND	0.067	mg/Kg	11/21/2001 17:16	
Butyl benzyl phthalate	ND	0.17	mg/Kg	11/21/2001 17:16	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	11/21/2001 17:16	
Benzo(a)anthracene	ND	0.067	mg/Kg	11/21/2001 17:16	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	11/21/2001 17:16	
Chrysene	ND	0.067	mg/Kg	11/21/2001 17:16	
Di-n-octyl phthalate	ND	0.17	mg/Kg	11/21/2001 17:16	
Benzo(b)fluoranthene	ND	0.067	mg/Kg	11/21/2001 17:16	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	11/21/2001 17:16	
Benzo(a)pyrene	ND	0.067	mg/Kg	11/21/2001 17:16	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	11/21/2001 17:16	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	11/21/2001 17:16	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	11/21/2001 17:16	
Benzoic acid	ND	0.33	mg/Kg	11/21/2001 17:16	
Surrogate(s)					
Nitrobenzene-d5	67.6	23-120	%	11/21/2001 17:16	
2-Fluorobiphenyl	80.0	30-115	%	11/21/2001 17:16	
p-Terphenyl-d14	84.0	18-137	%	11/21/2001 17:16	
2-Fluorophenol	74.0	25-121	%	11/21/2001 17:16	
Phenol-d6	78.6	24-113	%	11/21/2001 17:16	
2,4,6-Tribromophenol	95.2	19-122	%	11/21/2001 17:16	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

STL Chromalab
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CA DHS ELAP#1094

Test Method: 8270C Prep Method: 3550B/8270C

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/20-01.11**
LCS:	2001/11/20-01.11-002	Extracted:	11/20/2001 14:26	Analyzed: 11/21/2001 17:44
LCSD:	2001/11/20-01.11-003	Extracted:	11/20/2001 14:26	Analyzed: 11/21/2001 18:13

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Phenol	1.43	1.42	2.00	2.00	71.5	71.0	0.7	20-90	35		
2-Chlorophenol	1.42	1.42	2.00	2.00	71.0	71.0	0.0	27-123	35		
1,4-Dichlorobenzene	0.640	0.680	0.998	0.999	64.1	68.1	6.1	28-104	30		
N-Nitroso-di-n-propylami	0.700	0.710	0.998	0.999	70.1	71.1	1.4	25-114	39		
1,2,4-Trichlorobenzene	0.680	0.680	0.998	0.999	68.1	68.1	0.0	38-107	35		
4-Chloro-3-methylphenol	1.48	1.40	2.00	2.00	74.0	70.0	5.6	26-103	33		
Acenaphthene	0.800	0.770	0.998	0.999	80.2	77.1	3.9	49-102	30		
4-Nitrophenol	1.82	1.60	2.00	2.00	91.0	80.0	12.9	17-109	35		
2,4-Dinitrotoluene	1.000	0.950	0.998	0.999	100.2	95.1	5.2	39-139	38		
Pentachlorophenol	1.72	1.66	2.00	2.00	86.0	83.0	3.6	11-114	35		
Pyrene	0.770	0.850	0.998	0.999	77.2	85.1	9.7	25-117	35		
Surrogate(s)											
Nitrobenzene-d5	15.6	15.4	25	25	62.4	61.6		23-120			
2-Fluorobiphenyl	22.1	20.3	25	25	88.4	81.2		30-115			
p-Terphenyl-d14	20.2	21.9	25	25	80.8	87.6		18-137			
2-Fluorophenol	31.8	32.4	50	50	63.6	64.8		25-121			
Phenol-d6	38.0	38.9	50	50	76.0	77.8		24-113			
2,4,6-Tribromophenol	49.3	46.5	50	50	98.6	93.0		19-122			

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

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CA DHS ELAP#1094

Semi-volatile analysis by GC/MS - EPA8270C

Legend & Notes

Test Method: 8270C Prep Method: 3550B/8270C

Analyte Flags

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

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www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8270C

Prep Method: 3510C/8270C

Sample ID:	WAL111501	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:01
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/16-02.11
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2-Chlorophenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
1,3-Dichlorobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
1,4-Dichlorobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Benzyl alcohol	ND	5.0	ug/L	1.00	11/19/2001 10:53	
1,2-Dichlorobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2-Methylphenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	1.00	11/19/2001 10:53	
4-Methylphenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Hexachloroethane	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Nitrobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Isophorone	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2-Nitrophenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2,4-Dimethylphenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	1.00	11/19/2001 10:53	
2,4-Dichlorophenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Naphthalene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
4-Chloroaniline	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Hexachlorobutadiene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
4-Chloro-3-methylphenol	ND	5.0	ug/L	1.00	11/19/2001 10:53	
2-Methylnaphthalene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Hexachlorocyclopentadiene	ND	5.0	ug/L	1.00	11/19/2001 10:53	
2,4,6-Trichlorophenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2,4,5-Trichlorophenol	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2-Chloronaphthalene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2-Nitroaniline	ND	10	ug/L	1.00	11/19/2001 10:53	
Dimethyl phthalate	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Acenaphthylene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
3-Nitroaniline	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Acenaphthene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2,4-Dinitrophenol	ND	10	ug/L	1.00	11/19/2001 10:53	
4-Nitrophenol	ND	10	ug/L	1.00	11/19/2001 10:53	
Dibenzofuran	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2,4-Dinitrotoluene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
2,6-Dinitrotoluene	ND	5.0	ug/L	1.00	11/19/2001 10:53	

Submission #: 2001-11-0323

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Semi-volatile analysis by GC/MS - EPA8270C

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www.chromalab.com

CA DHS ELAP#1094

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8270C
Prep Method: 3510C/8270C

Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:01
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/16-02.11
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diethyl phthalate	ND	5.0	ug/L	1.00	11/19/2001 10:53	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Fluorene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
4-Nitroaniline	ND	10	ug/L	1.00	11/19/2001 10:53	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	1.00	11/19/2001 10:53	
N-Nitrosodiphenylamine	ND	2.0	ug/L	1.00	11/19/2001 10:53	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Hexachlorobenzene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Pentachlorophenol	ND	10	ug/L	1.00	11/19/2001 10:53	
Phenanthrene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Anthracene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Di-n-butyl phthalate	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Fluoranthene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Pyrene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Butyl benzyl phthalate	ND	5.0	ug/L	1.00	11/19/2001 10:53	
3,3-Dichlorobenzidine	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Benzo(a)anthracene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	1.00	11/19/2001 10:53	
Chrysene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Di-n-octyl phthalate	ND	5.0	ug/L	1.00	11/19/2001 10:53	
Benzo(b)fluoranthene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Benzo(k)fluoranthene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Benzo(a)pyrene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Benzo(g,h,i)perylene	ND	2.0	ug/L	1.00	11/19/2001 10:53	
Benzoic acid	ND	10	ug/L	1.00	11/19/2001 10:53	
Surrogate(s)						
Nitrobenzene-d5	0.0	35-114	%	1.00	11/19/2001 10:53	sl
2-Fluorobiphenyl	53.1	43-116	%	1.00	11/19/2001 10:53	
p-Terphenyl-d14	70.8	33-141	%	1.00	11/19/2001 10:53	
2-Fluorophenol	25.3	25-100	%	1.00	11/19/2001 10:53	
Phenol-d6	14.6	10-110	%	1.00	11/19/2001 10:53	
2,4,6-Tribromophenol	114.1	10-123	%	1.00	11/19/2001 10:53	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

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CA DHS ELAP#1094

Test Method: 8270C

Prep Method: 3510C/8270C

Method Blank | **Water** | **QC Batch # 2001/11/16-02.11**

MB: 2001/11/16-02.11-001 | Date Extracted: 11/16/2001 15:01

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Phenol	ND	2.0	ug/L	11/19/2001 07:31	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	11/19/2001 07:31	
2-Chlorophenol	ND	2.0	ug/L	11/19/2001 07:31	
1,3-Dichlorobenzene	ND	2.0	ug/L	11/19/2001 07:31	
1,4-Dichlorobenzene	ND	2.0	ug/L	11/19/2001 07:31	
Benzyl alcohol	ND	5.0	ug/L	11/19/2001 07:31	
1,2-Dichlorobenzene	ND	2.0	ug/L	11/19/2001 07:31	
2-Methylphenol	ND	2.0	ug/L	11/19/2001 07:31	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	11/19/2001 07:31	
4-Methylphenol	ND	2.0	ug/L	11/19/2001 07:31	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	11/19/2001 07:31	
Hexachloroethane	ND	2.0	ug/L	11/19/2001 07:31	
Nitrobenzene	ND	2.0	ug/L	11/19/2001 07:31	
Isophorone	ND	2.0	ug/L	11/19/2001 07:31	
2-Nitrophenol	ND	2.0	ug/L	11/19/2001 07:31	
2,4-Dimethylphenol	ND	2.0	ug/L	11/19/2001 07:31	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	11/19/2001 07:31	
2,4-Dichlorophenol	ND	2.0	ug/L	11/19/2001 07:31	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	11/19/2001 07:31	
Naphthalene	ND	2.0	ug/L	11/19/2001 07:31	
4-Chloroaniline	ND	2.0	ug/L	11/19/2001 07:31	
Hexachlorobutadiene	ND	2.0	ug/L	11/19/2001 07:31	
4-Chloro-3-methylphenol	ND	5.0	ug/L	11/19/2001 07:31	
2-Methylnaphthalene	ND	2.0	ug/L	11/19/2001 07:31	
Hexachlorocyclopentadiene	ND	5.0	ug/L	11/19/2001 07:31	
2,4,6-Trichlorophenol	ND	2.0	ug/L	11/19/2001 07:31	
2,4,5-Trichlorophenol	ND	2.0	ug/L	11/19/2001 07:31	
2-Chloronaphthalene	ND	2.0	ug/L	11/19/2001 07:31	
2-Nitroaniline	ND	10	ug/L	11/19/2001 07:31	
Dimethyl phthalate	ND	5.0	ug/L	11/19/2001 07:31	
Acenaphthylene	ND	2.0	ug/L	11/19/2001 07:31	
3-Nitroaniline	ND	2.0	ug/L	11/19/2001 07:31	
Acenaphthene	ND	2.0	ug/L	11/19/2001 07:31	
2,4-Dinitrophenol	ND	10	ug/L	11/19/2001 07:31	
4-Nitrophenol	ND	10	ug/L	11/19/2001 07:31	
Dibenzofuran	ND	2.0	ug/L	11/19/2001 07:31	
2,4-Dinitrotoluene	ND	2.0	ug/L	11/19/2001 07:31	
2,6-Dinitrotoluene	ND	5.0	ug/L	11/19/2001 07:31	
Diethyl phthalate	ND	5.0	ug/L	11/19/2001 07:31	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	11/19/2001 07:31	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

Test Method: 8270C

Prep Method: 3510C/827 0C

Method Blank | **Water** | **QC Batch # 2001/11/16-02.11**

MB: 2001/11/16-02.11-001 | Date Extracted: 11/16/2001 15:01

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Fluorene	ND	2.0	ug/L	11/19/2001 07:31	
4-Nitroaniline	ND	10	ug/L	11/19/2001 07:31	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	11/19/2001 07:31	
N-Nitrosodiphenylamine	ND	2.0	ug/L	11/19/2001 07:31	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	11/19/2001 07:31	
Hexachlorobenzene	ND	2.0	ug/L	11/19/2001 07:31	
Pentachlorophenol	ND	10	ug/L	11/19/2001 07:31	
Phenanthrene	ND	2.0	ug/L	11/19/2001 07:31	
Anthracene	ND	2.0	ug/L	11/19/2001 07:31	
Di-n-butyl phthalate	ND	5.0	ug/L	11/19/2001 07:31	
Fluoranthene	ND	2.0	ug/L	11/19/2001 07:31	
Pyrene	ND	2.0	ug/L	11/19/2001 07:31	
Butyl benzyl phthalate	ND	5.0	ug/L	11/19/2001 07:31	
3,3-Dichlorobenzidine	ND	5.0	ug/L	11/19/2001 07:31	
Benzo(a)anthracene	ND	2.0	ug/L	11/19/2001 07:31	
bis(2-Ethylhexyl) phthalate	ND	10.0	ug/L	11/19/2001 07:31	
Chrysene	ND	2.0	ug/L	11/19/2001 07:31	
Di-n-octyl phthalate	ND	5.0	ug/L	11/19/2001 07:31	
Benzo(b)fluoranthene	ND	2.0	ug/L	11/19/2001 07:31	
Benzo(k)fluoranthene	ND	2.0	ug/L	11/19/2001 07:31	
Benzo(a)pyrene	ND	2.0	ug/L	11/19/2001 07:31	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	11/19/2001 07:31	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	11/19/2001 07:31	
Benzo(g,h,i)perylene	ND	2.0	ug/L	11/19/2001 07:31	
Benzoic acid	ND	10	ug/L	11/19/2001 07:31	
Surrogate(s)					
Nitrobenzene-d5	50.0	35-114	%	11/19/2001 07:31	
2-Fluorobiphenyl	56.8	43-116	%	11/19/2001 07:31	
p-Terphenyl-d14	54.8	33-141	%	11/19/2001 07:31	
2-Fluorophenol	31.4	25-100	%	11/19/2001 07:31	
Phenol-d6	19.4	10-110	%	11/19/2001 07:31	
2,4,6-Tribromophenol	64.8	10-123	%	11/19/2001 07:31	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Semi-volatile analysis by GC/MS - EPA8270C

Batch QC report

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CA DHS ELAP#1094

Test Method: 8270C

Prep Method: 3510C/8270 C

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/11/16-02.11**

LCS: 2001/11/16-02.11-002 Extracted: 11/16/2001 15:01 Analyzed: 11/20/2001 13:25

LCSD: 2001/11/16-02.11-003 Extracted: 11/16/2001 15:01 Analyzed: 11/19/2001 08:29

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Phenol	12.2	12.7	60.0	60.0	20.3	21.2	4.3	12-89	35		
2-Chlorophenol	29.7	30.5	60.0	60.0	49.5	50.8	2.6	23-134	25		
1,4-Dichlorobenzene	16.0	15.7	30.0	30.0	53.3	52.3	1.9	36-97	30		
N-Nitroso-di-n-propylami	15.7	16.5	30.0	30.0	52.3	55.0	5.0	10-130	34		
1,2,4-Trichlorobenzene	15.7	15.4	30.0	30.0	52.3	51.3	1.9	44-142	35		
4-Chloro-3-methylphenol	32.9	31.3	60.0	60.0	54.8	52.2	4.9	22-147	31		
Acenaphthene	16.8	16.8	30.0	30.0	56.0	56.0	0.0	56-118	30		
4-Nitrophenol	10.9	12.0	60.0	60.0	18.2	20.0	9.4	1-132	35		
2,4-Dinitrotoluene	19.2	20.1	30.0	30.0	64.0	67.0	4.6	39-139	35		
Pentachlorophenol	37.5	37.2	60.0	60.0	62.5	62.0	0.8	45-125	35		
Pyrene	16.9	17.0	30.0	30.0	56.3	56.7	0.7	52-115	35		
Surrogate(s)											
Nitrobenzene-d5	11.9	11.4	25	25	47.6	45.6		35-114			
2-Fluorobiphenyl	14.8	14.5	25	25	59.2	58.0		43-116			
p-Terphenyl-d14	15.0	14.8	25	25	60.0	59.2		33-141			
2-Fluorophenol	13.7	14.3	50	50	27.4	28.6		25-100			
Phenol-d6	9.20	9.51	50	50	18.4	19.0		10-110			
2,4,6-Tribromophenol	12.2	33.4	50	50	24.4	66.8		10-123			

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Semi-volatile analysis by GC/MS - EPA8270C

Legend & Notes

Test Method: 8270C Prep Method: 3510C/8270C

Analyte Flags

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-E	Soil	11/15/2001 11:35	4
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-3	Soil	11/15/2001 12:45	8
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	WAL111501	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 16:14
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/16-04.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	100000	5000	ug/L	100.00	11/20/2001 11:24	ndp
Surrogate(s)						
o-Terphenyl	NA	60-130	%	100.00	11/20/2001 11:24	sd

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	SAL111501-S	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	140	1.0	mg/Kg	1.00	11/19/2001 20:46	ndp
Surrogate(s)						
o-Terphenyl	91.5	60-130	%	1.00	11/19/2001 20:46	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	SAL111501-N	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	210	1.0	mg/Kg	1.00	11/19/2001 21:24	ndp
Surrogate(s)						
o-Terphenyl	93.9	60-130	%	1.00	11/19/2001 21:24	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	**SAL111501-E**	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	42	1.0	mg/Kg	1.00	11/19/2001 22:01	ndp
Surrogate(s)						
o-Terphenyl	88.1	60-130	%	1.00	11/19/2001 22:01	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	**SAL111501-W**	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	11/19/2001 22:39	
Surrogate(s)						
o-Terphenyl	85.2	60-130	%	1.00	11/19/2001 22:39	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	**GAL111501-1**	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	2.5	1.0	mg/Kg	1.00	11/19/2001 23:17	ndp
Surrogate(s)						
o-Terphenyl	87.6	60-130	%	1.00	11/19/2001 23:17	

Submission #: 2001-11-0323

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Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	GAL111501-2	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1.3	1.0	mg/Kg	1.00	11/19/2001 23:55	ndp
Surrogate(s)						
o-Terphenyl	91.3	60-130	%	1.00	11/19/2001 23:55	

Submission #: 2001-11-0323

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Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	GAL111501-3	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	100	1.0	mg/Kg	1.00	11/20/2001 00:32	ndp
Surrogate(s)						
o-Terphenyl	94.9	60-130	%	1.00	11/20/2001 00:32	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Diesel

Tetra Tech Inc SF
Attn: Gary Floyd

Test Method: 8015M
Prep Method: 3510/8015M
3550/8015M

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CA DHS ELAP#1094

Sample ID:	**GAL111501-4**	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 15:31
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/16-08.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1.2	1.0	mg/Kg	1.00	11/20/2001 01:10	ndp
Surrogate(s)						
o-Terphenyl	90.1	60-130	%	1.00	11/20/2001 01:10	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Diesel

Batch QC report

Test Method: 8015M

Prep Method: 3510/8015 M

Method Blank | **Water** | **QC Batch # 2001/11/16-04.10**

MB: 2001/11/16-04.10-001

Date Extracted: 11/16/2001 16:14

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	11/19/2001 10:03	
Surrogate(s)					
o-Terphenyl	104.0	60-130	%	11/19/2001 10:03	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Diesel

Batch QC report

Test Method: 8015M

Prep Method: 3550/8015 M

Method Blank | **Soil** | **QC Batch # 2001/11/16-08.10**

MB: 2001/11/16-08.10-001

Date Extracted: 11/16/2001 15:31

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	11/19/2001 14:26	
Surrogate(s)					
o-Terphenyl	83.0	60-130	%	11/19/2001 14:26	

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CA DHS ELAP#1094

Diesel

Batch QC report

Test Method: 8015M Prep Method: 3510/8015M

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/11/16-04.10**

LCS: 2001/11/16-04.10-002 Extracted: 11/16/2001 16:14 Analyzed: 11/19/2001 10:40

LCSD: 2001/11/16-04.10-003 Extracted: 11/16/2001 16:14 Analyzed: 11/19/2001 11:18

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	1040	1060	1250	1250	83.2	84.8	1.9	60-130	25		
Surrogate(s)											
o-Terphenyl	20.7	21.0	20.0	20.0	103.5	105.0		60-130	0		

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Diesel

Batch QC report

Test Method: 8015M Prep Method: 3550/8015M

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/16-08.10**
LCS:	2001/11/16-08.10-002	Extracted:	11/16/2001 15:31	Analyzed: 11/19/2001 15:04
LCSD:	2001/11/16-08.10-003	Extracted:	11/16/2001 15:31	Analyzed: 11/19/2001 15:42

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	32.4	32.2	41.7	41.7	77.7	77.2	0.6	60-130	25		
Surrogate(s)											
o-Terphenyl	18.8	18.4	20.0	20.0	94.0	92.0		60-130	0		

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Diesel

Batch QC Report

Test Method: 8015M Prep Method: 3550/8015M

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2001/11/16-08.10**

Sample ID: **GAL111501-1 >> MS** Lab ID: 2001-11-0323-006

MS: 2001/11/16-08.10-004 Extracted: 11/16/2001 15:31 Analyzed: 11/19/2001 16:20
Dilution: 1

MSD: 2001/11/16-08.10-005 Extracted: 11/16/2001 15:31 Analyzed: 11/19/2001 16:58
Dilution: 1

Compound	Conc. [mg/Kg]			Exp.Conc.		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Diesel	32.8	33.7	2.51	41.4	41.6	73.2	75.0	2.4	60-130	25		
Surrogate(s)												
o-Terphenyl	18.7	18.5		20.0	20.0	93.5	92.5		60-130	0		

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CA DHS ELAP#1094

Diesel

Legend & Notes

Test Method: 8015M

Prep Method: 3510/8015M
3550/8015M

Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Analyte Flags

sd

Surrogate recovery not reportable due to required dilution.

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WAL111501	Water	11/15/2001 10:30	1
SAL111501-W	Soil	11/15/2001 11:44	5
GAL111501-1	Soil	11/15/2001 12:45	6
GAL111501-2	Soil	11/15/2001 12:45	7
GAL111501-4	Soil	11/15/2001 12:45	9

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030
5035

Sample ID:	**WAL111501**	Lab Sample ID:	2001-11-0323-001
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 10:45
Sampled:	11/15/2001 10:30	QC-Batch:	2001/11/20-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	190	50	ug/L	1.00	11/20/2001 10:45	g
Benzene	ND	0.50	ug/L	1.00	11/20/2001 10:45	
Toluene	ND	0.50	ug/L	1.00	11/20/2001 10:45	
Ethyl benzene	ND	0.50	ug/L	1.00	11/20/2001 10:45	
Xylene(s)	ND	0.50	ug/L	1.00	11/20/2001 10:45	
Surrogate(s)						
Trifluorotoluene	92.3	58-124	%	1.00	11/20/2001 10:45	
4-Bromofluorobenzene-FID	68.2	50-150	%	1.00	11/20/2001 10:45	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030
5035

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CA DHS ELAP#1094

Sample ID:	SAL111501-W	Lab Sample ID:	2001-11-0323-005
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 13:30
Sampled:	11/15/2001 11:44	QC-Batch:	2001/11/19-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/19/2001 13:30	
Benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:30	
Toluene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:30	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:30	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/19/2001 13:30	
Surrogate(s)						
Trifluorotoluene	79.4	53-125	%	1.00	11/19/2001 13:30	
4-Bromofluorobenzene-FID	72.1	58-124	%	1.00	11/19/2001 13:30	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030
5035

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CA DHS ELAP#1094

Sample ID:	**GAL111501-1**	Lab Sample ID:	2001-11-0323-006
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 13:56
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/19/2001 13:56	
Benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:56	
Toluene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:56	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 13:56	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/19/2001 13:56	
Surrogate(s)						
Trifluorotoluene	91.5	53-125	%	1.00	11/19/2001 13:56	
4-Bromofluorobenzene-FID	82.1	58-124	%	1.00	11/19/2001 13:56	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030
5035

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CA DHS ELAP#1094

Sample ID:	**GAL111501-2**	Lab Sample ID:	2001-11-0323-007
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/20/2001 14:08
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/20-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/20/2001 14:08	
Benzene	ND	0.0050	mg/Kg	1.00	11/20/2001 14:08	
Toluene	ND	0.0050	mg/Kg	1.00	11/20/2001 14:08	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/20/2001 14:08	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/20/2001 14:08	
Surrogate(s)						
Trifluorotoluene	83.6	53-125	%	1.00	11/20/2001 14:08	
4-Bromofluorobenzene-FID	68.4	58-124	%	1.00	11/20/2001 14:08	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Tetra Tech Inc SF

Attn: Gary Floyd

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www.chromalab.com

CA DHS ELAP#1094

Test Method: 8021B
8015M

Prep Method: 5030
5035

Sample ID:	**GAL111501-4**	Lab Sample ID:	2001-11-0323-009
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 15:15
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/19/2001 15:15	
Benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 15:15	
Toluene	ND	0.0050	mg/Kg	1.00	11/19/2001 15:15	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/19/2001 15:15	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/19/2001 15:15	
Surrogate(s)						
Trifluorotoluene	88.2	53-125	%	1.00	11/19/2001 15:15	
4-Bromofluorobenzene-FID	92.1	58-124	%	1.00	11/19/2001 15:15	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5035

Method Blank | **Soil** | **QC Batch # 2001/11/19-01.04**

MB: 2001/11/19-01.04-006 | Date Extracted: 11/19/2001 09:53

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/19/2001 09:53	
Benzene	ND	0.0050	mg/Kg	11/19/2001 09:53	
Toluene	ND	0.0050	mg/Kg	11/19/2001 09:53	
Ethyl benzene	ND	0.0050	mg/Kg	11/19/2001 09:53	
Xylene(s)	ND	0.0050	mg/Kg	11/19/2001 09:53	
Surrogate(s)					
Trifluorotoluene	55.6	53-125	%	11/19/2001 09:53	
Trifluorotoluene-FID	56.0	53-125	%	11/19/2001 09:53	

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5035

Method Blank | **Soil** | **QC Batch # 2001/11/20-01.04**

MB: 2001/11/20-01.04-005 | Date Extracted: 11/20/2001 09:17

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/20/2001 09:17	
Benzene	ND	0.0050	mg/Kg	11/20/2001 09:17	
Toluene	ND	0.0050	mg/Kg	11/20/2001 09:17	
Ethyl benzene	ND	0.0050	mg/Kg	11/20/2001 09:17	
Xylene(s)	ND	0.0050	mg/Kg	11/20/2001 09:17	
Surrogate(s)					
Trifluorotoluene	73.7	53-125	%	11/20/2001 09:17	
4-Bromofluorobenzene-FID	79.2	58-124	%	11/20/2001 09:17	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Batch QC report

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CA DHS ELAP#1094

Test Method: 8015M
8021B

Prep Method: 5030

Method Blank **Water** **QC Batch # 2001/11/20-01.01**

MB: 2001/11/20-01.01-003 Date Extracted: 11/20/2001 08:07

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/20/2001 08:07	
Benzene	ND	0.5	ug/L	11/20/2001 08:07	
Toluene	ND	0.5	ug/L	11/20/2001 08:07	
Ethyl benzene	ND	0.5	ug/L	11/20/2001 08:07	
Xylene(s)	ND	0.5	ug/L	11/20/2001 08:07	
Surrogate(s)					
Trifluorotoluene	105.2	58-124	%	11/20/2001 08:07	
4-Bromofluorobenzene-FID	78.7	50-150	%	11/20/2001 08:07	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Batch QC report

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CA DHS ELAP#1094

Test Method: 8021B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/11/19-01.04	
LCS:	2001/11/19-01.04-007	Extracted:	11/19/2001 10:20	Analyzed:	11/19/2001 10:20
LCSD:	2001/11/19-01.04-008	Extracted:	11/19/2001 10:46	Analyzed:	11/19/2001 10:46

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	0.100	0.0945	0.1000	0.1000	100.0	94.5	5.7	77-123	35		
Toluene	0.0953	0.0931	0.1000	0.1000	95.3	93.1	2.3	78-122	35		
Ethyl benzene	0.0930	0.0915	0.1000	0.1000	93.0	91.5	1.6	70-130	35		
Xylene(s)	0.290	0.286	0.300	0.300	96.7	95.3	1.5	75-125	35		
Surrogate(s)											
Trifluorotoluene	478	447	500	500	95.6	89.4		53-125			

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Batch QC report

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CA DHS ELAP#1094

Test Method: 8015M Prep Method: 5030

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/19-01.04**
LCS:	2001/11/19-01.04-013	Extracted:	11/19/2001 12:57	Analyzed: 11/19/2001 12:57
LCSD:	2001/11/19-01.04-010	Extracted:	11/19/2001 11:39	Analyzed: 11/19/2001 11:39

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.405	0.453	0.500	0.500	81.0	90.6	11.2	75-125	35		
Surrogate(s)											
4-Bromofluorobenzene-	461	497	500	500	92.2	99.4		58-124			

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Batch QC report

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CA DHS ELAP#1094

Test Method: 8021B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/20-01.04**
LCS:	2001/11/20-01.04-006	Extracted:	11/20/2001 09:43	Analyzed: 11/20/2001 09:43
LCSD:	2001/11/20-01.04-007	Extracted:	11/20/2001 10:09	Analyzed: 11/20/2001 10:09

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	0.106	0.0961	0.1000	0.1000	106.0	96.1	9.8	77-123	35		
Toluene	0.102	0.0943	0.1000	0.1000	102.0	94.3	7.8	78-122	35		
Ethyl benzene	0.0995	0.0930	0.1000	0.1000	99.5	93.0	6.8	70-130	35		
Xylene(s)	0.316	0.293	0.300	0.300	105.3	97.7	7.5	75-125	35		
Surrogate(s)											
Trifluorotoluene	500	459	500	500	100.0	91.8		53-125			

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8015M Prep Method: 5035

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/20-01.04**
LCS:	2001/11/20-01.04-008	Extracted:	11/20/2001 10:36	Analyzed: 11/20/2001 10:36
LCSD:	2001/11/20-01.04-009	Extracted:	11/20/2001 11:04	Analyzed: 11/20/2001 11:04

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.434	0.412	0.500	0.500	86.8	82.4	5.2	75-125	35		
Surrogate(s)											
4-Bromofluorobenzene-	489	451	500	500	97.8	90.2		58-124			

Submission #: 2001-11-0323

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Gas/BTEX by 8015M/8021

Batch QC report

Test Method: 8021B Prep Method: 5030

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2001/11/20-01.01	
LCS:	2001/11/20-01.01-004	Extracted:	11/20/2001 08:37	Analyzed:	11/20/2001 08:37
LCSD:	2001/11/20-01.01-005	Extracted:	11/20/2001 09:07	Analyzed:	11/20/2001 09:07

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	103	105	100.0	100.0	103.0	105.0	1.9	77-123	20		
Toluene	105	108	100.0	100.0	105.0	108.0	2.8	78-122	20		
Ethyl benzene	105	107	100.0	100.0	105.0	107.0	1.9	70-130	20		
Xylene(s)	327	320	300	300	109.0	106.7	2.1	75-125	20		
Surrogate(s)											
Trifluorotoluene	564	596	500	500	112.8	119.2		58-124			

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX by 8015M/8021

Batch QC report

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CA DHS ELAP#1094

Test Method: 8015M Prep Method: 5030

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2001/11/20-01.01
LCS:	2001/11/20-01.01-006	Extracted:	11/20/2001 09:37	Analyzed: 11/20/2001 09:37
LCSD:	2001/11/20-01.01-007	Extracted:	11/20/2001 10:07	Analyzed: 11/20/2001 10:07

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	511	504	500	500	102.2	100.8	1.4	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-	364	360	500	500	72.8	72.0		50-150			

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CA DHS ELAP#1094

Gas/BTEX by 8015M/8021

Legend & Notes

Test Method:	8015M 8021B	Prep Method:	5030 5035

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX Compounds (High Level)

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CA DHS ELAP#1094

Tetra Tech Inc SF	✉ 180 Howard Street San Francisco, CA 94105
Attn: Gary Floyd	Phone: (415) 974-1221 Fax: (415) 974-5914
11979-03	Project: Alameda UST Removal

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SAL111501-S	Soil	11/15/2001 11:11	2
SAL111501-N	Soil	11/15/2001 11:22	3
SAL111501-E	Soil	11/15/2001 11:35	4
GAL111501-3	Soil	11/15/2001 12:45	8

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX Compounds (High Level)

Tetra Tech Inc SF

Attn: Gary Floyd

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CA DHS ELAP#1094

Test Method: 8021B
8015M

Prep Method: 5030

Sample ID:	**SAL111501-S**	Lab Sample ID:	2001-11-0323-002
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 08:00
Sampled:	11/15/2001 11:11	QC-Batch:	2001/11/16-05.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	290	10	mg/Kg	1.00	11/16/2001 19:03	g
Benzene	ND	0.62	mg/Kg	1.00	11/16/2001 19:03	
Toluene	ND	0.62	mg/Kg	1.00	11/16/2001 19:03	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/16/2001 19:03	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/16/2001 19:03	
Surrogate(s)						
Trifluorotoluene	63.4	53-125	%	1.00	11/16/2001 19:03	
Trifluorotoluene-FID	109.5	53-125	%	1.00	11/16/2001 19:03	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX Compounds (High Level)

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030

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CA DHS ELAP#1094

Sample ID:	**SAL111501-N**	Lab Sample ID:	2001-11-0323-003
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 08:00
Sampled:	11/15/2001 11:22	QC-Batch:	2001/11/16-05.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	11	10	mg/Kg	1.00	11/20/2001 12:50	g
Benzene	ND	0.62	mg/Kg	1.00	11/20/2001 12:50	
Toluene	ND	0.62	mg/Kg	1.00	11/20/2001 12:50	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/20/2001 12:50	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/20/2001 12:50	
Surrogate(s)						
Trifluorotoluene	99.1	53-125	%	1.00	11/20/2001 12:50	
4-Bromofluorobenzene-FID	86.4	58-124	%	1.00	11/20/2001 12:50	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX Compounds (High Level)

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B 8015M

Prep Method: 5030

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CA DHS ELAP#1094

Sample ID:	SAL111501-E	Lab Sample ID:	2001-11-0323-004
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/16/2001 08:00
Sampled:	11/15/2001 11:35	QC-Batch:	2001/11/16-05.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	48	10	mg/Kg	1.00	11/16/2001 19:55	g
Benzene	ND	0.62	mg/Kg	1.00	11/16/2001 19:55	
Toluene	ND	0.62	mg/Kg	1.00	11/16/2001 19:55	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/16/2001 19:55	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/16/2001 19:55	
Surrogate(s)						
Trifluorotoluene	63.5	53-125	%	1.00	11/16/2001 19:55	
4-Bromofluorobenzene-FID	79.2	58-124	%	1.00	11/16/2001 19:55	

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

Gas/BTEX Compounds (High Level)

Tetra Tech Inc SF

Attn: Gary Floyd

Test Method: 8021B
8015M

Prep Method: 5030

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CA DHS ELAP#1094

Sample ID:	**GAL111501-3**	Lab Sample ID:	2001-11-0323-008
Project:	11979-03 Alameda UST Removal	Received:	11/15/2001 14:45
		Extracted:	11/19/2001 08:00
Sampled:	11/15/2001 12:45	QC-Batch:	2001/11/19-05.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	38	10	mg/Kg	1.00	11/19/2001 15:42	g
Benzene	ND	0.62	mg/Kg	1.00	11/19/2001 15:42	
Toluene	ND	0.62	mg/Kg	1.00	11/19/2001 15:42	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/19/2001 15:42	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/19/2001 15:42	
Surrogate(s)						
Trifluorotoluene	125.4	53-125	%	1.00	11/19/2001 15:42	sh
4-Bromofluorobenzene-FID	133.7	58-124	%	1.00	11/19/2001 15:42	sh

Submission #: 2001-11-0323

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CA DHS ELAP#1094

Gas/BTEX Compounds (High Level)

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5030

Method Blank | **Soil** | **QC Batch # 2001/11/16-05.04**

MB: 2001/11/16-05.04-001 | Date Extracted: 11/16/2001 08:00

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	11/20/2001 11:07	
Benzene	ND	0.62	mg/Kg	11/20/2001 11:07	
Toluene	ND	0.62	mg/Kg	11/20/2001 11:07	
Ethyl benzene	ND	0.62	mg/Kg	11/20/2001 11:07	
Xylene(s)	ND	0.62	mg/Kg	11/20/2001 11:07	
Surrogate(s)					
Trifluorotoluene	103.2	53-125	%	11/20/2001 11:07	
4-Bromofluorobenzene-FID	102.2	58-124	%	11/20/2001 11:07	

Submission #: 2001-11-0323

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Gas/BTEX Compounds (High Level)

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5030

Method Blank | **Soil** | **QC Batch # 2001/11/19-05.04**

MB: 2001/11/19-05.04-001 | Date Extracted: 11/19/2001 08:00

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	11/20/2001 11:31	
Benzene	ND	0.62	mg/Kg	11/20/2001 11:31	
Toluene	ND	0.62	mg/Kg	11/20/2001 11:31	
Ethyl benzene	ND	0.62	mg/Kg	11/20/2001 11:31	
Xylene(s)	ND	0.62	mg/Kg	11/20/2001 11:31	
Surrogate(s)					
Trifluorotoluene	88.8	53-125	%	11/20/2001 11:31	
4-Bromofluorobenzene-FID	91.0	58-124	%	11/20/2001 11:31	

Submission #: 2001-11-0323

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Gas/BTEX Compounds (High Level)

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5030

Laboratory Control Spike (LCS/LCSD)		**Soil**		**QC Batch # 2001/11/16-05.04**
LCS:	2001/11/16-05.04-002	Extracted:	11/16/2001 08:00	Analyzed: 11/20/2001 11:41
LCSD:	2001/11/16-05.04-003	Extracted:	11/16/2001 08:00	Analyzed: 11/20/2001 12:14

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.576	0.556	0.625	0.625	92.2	89.0	3.5	75-125	35		
Benzene	0.134	0.129	0.125	0.125	107.2	103.2	3.8	77-123	35		
Toluene	0.133	0.126	0.125	0.125	106.4	100.8	5.4	78-122	35		
Ethyl benzene	0.137	0.132	0.125	0.125	109.6	105.6	3.7	70-130	35		
Xylene(s)	0.388	0.372	0.375	0.375	103.5	99.2	4.2	75-125	35		
Surrogate(s)											
Trifluorotoluene	514	495	500	500	102.8	99.0		53-125	0		
4-Bromofluorobenzene-	450	435	500	500	90.0	87.0		58-124	0		

Submission #: 2001-11-0323

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Gas/BTEX Compounds (High Level)

Batch QC report

Test Method: 8015M
8021B

Prep Method: 5030

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/11/19-05.04**

LCS: 2001/11/19-05.04-002 Extracted: 11/19/2001 08:00 Analyzed: 11/20/2001 11:57

LCSD: 2001/11/19-05.04-003 Extracted: 11/19/2001 08:00 Analyzed: 11/20/2001 12:23

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.562	0.562	0.625	0.625	89.9	89.9	0.0	75-125	35		
Benzene	0.137	0.134	0.125	0.125	109.6	107.2	2.2	77-123	35		
Toluene	0.138	0.133	0.125	0.125	110.4	106.4	3.7	78-122	35		
Ethyl benzene	0.141	0.135	0.125	0.125	112.8	108.0	4.3	70-130	35		
Xylene(s)	0.359	0.343	0.375	0.375	95.7	91.5	4.5	75-125	35		
Surrogate(s)											
Trifluorotoluene	527	527	500	500	105.4	105.4		53-125	0		
4-Bromofluorobenzene-	433	449	500	500	86.6	89.8		58-124	0		

SEVERN TRENT SERVICES

STL Chromalab
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Gas/BTEX Compounds (High Level)

Legend & Notes

Test Method: 8015M
8021B

Prep Method: 5030

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Analyte Flags

sh

Surrogate recovery was higher than QC limit due to matrix interference.

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M324-13

Date: 11/21/01

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Project: 2001-11-0323

PO#

Date Rec'd: 11/20/01
Date Started: 11/20/01
Date Completed: 11/21/01

Date Sampled: 11/15/01
Time:
Sampler:

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
SAL111501-S	M203614	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	28	mg/Kg
		5.0	6010B	Lead	16	mg/Kg
		2.0	6010B	Zinc	53	mg/Kg
		2.0	6010B	Nickel	21	mg/Kg
SAL111501-N	M203615	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	39	mg/Kg
		5.0	6010B	Lead	20	mg/Kg
		2.0	6010B	Zinc	57	mg/Kg
		2.0	6010B	Nickel	68	mg/Kg
SAL111501-E	M203616	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	29	mg/Kg
		5.0	6010B	Lead	11	mg/Kg
		2.0	6010B	Zinc	43	mg/Kg
		2.0	6010B	Nickel	48	mg/Kg
SAL111501-W	M203617	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	21	mg/Kg
		5.0	6010B	Lead	8.8	mg/Kg
		2.0	6010B	Zinc	32	mg/Kg
		2.0	6010B	Nickel	22	mg/Kg
GAL111501-1	M203618	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	8.2	mg/Kg
		5.0	6010B	Lead	6.5	mg/Kg
		2.0	6010B	Zinc	30	mg/Kg
		2.0	6010B	Nickel	15	mg/Kg

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M324-13

Date: 11/21/01

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Project: 2001-11-0323

PO#

Date Rec'd: 11/20/01
Date Started: 11/20/01
Date Completed: 11/21/01

Date Sampled: 11/15/01
Time:
Sampler:

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
GAL111501-2	M203619	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	10	mg/Kg
		5.0	6010B	Lead	7.1	mg/Kg
		2.0	6010B	Zinc	44	mg/Kg
		2.0	6010B	Nickel	16	mg/Kg
GAL111501-3	M203620	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	10	mg/Kg
		5.0	6010B	Lead	12	mg/Kg
		2.0	6010B	Zinc	46	mg/Kg
		2.0	6010B	Nickel	19	mg/Kg
GAL111501-4	M203621	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	4.0	mg/Kg
		5.0	6010B	Lead	ND	mg/Kg
		2.0	6010B	Zinc	34	mg/Kg
		2.0	6010B	Nickel	26	mg/Kg
MB	M203622	0.5	6010B	Cadmium	ND	mg/Kg
		1.0	6010B	Chromium	ND	mg/Kg
		5.0	6010B	Lead	ND	mg/Kg
		2.0	6010B	Zinc	18	mg/Kg
		2.0	6010B	Nickel	ND	mg/Kg
LCS	M203623	0.5	6010B	Cadmium	99	mg/Kg
		1.0	6010B	Chromium	101	mg/Kg
		5.0	6010B	Lead	92	mg/Kg
		2.0	6010B	Zinc	110	mg/Kg
		2.0	6010B	Nickel	86	mg/Kg

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CERTIFICATE OF ANALYSIS

Date: 11/21/01

Report # M324-13

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Project: 2001-11-0323

PO#

Date Rec'd: 11/20/01
Date Started: 11/20/01
Date Completed: 11/21/01

Date Sampled: 11/15/01
Time:
Sampler:

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
LCSD	M203624	0.5	6010B	Cadmium	92	mg/Kg
		1.0	6010B	Chromium	93	mg/Kg
		5.0	6010B	Lead	87	mg/Kg
		2.0	6010B	Zinc	99	mg/Kg
		2.0	6010B	Nickel	80	mg/Kg

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CERTIFICATE OF ANALYSIS

Report # M324-13

Date: 11/21/01

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Project: 2001-11-0323

PO#

Date Rec'd: 11/20/01
Date Started: 11/20/01
Date Completed: 11/21/01

Date Sampled: 11/15/01
Time: 10:30am
Sampler:

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
WAL111501	M311537	0.001	200.7	Cadmium	ND	mg/L
		0.01	200.7	Chromium	0.08	mg/L
		0.01	200.7	Lead	ND	mg/L
		0.05	200.7	Zinc	0.86	mg/L
		0.05	200.7	Nickel	0.14	mg/L
MB	M311538	0.001	200.7	Cadmium	ND	mg/L
		0.01	200.7	Chromium	ND	mg/L
		0.01	200.7	Lead	ND	mg/L
		0.05	200.7	Zinc	0.24	mg/L
		0.05	200.7	Nickel	ND	mg/L
LCS	M311539	0.001	200.7	Cadmium	0.51	mg/L
		0.01	200.7	Chromium	0.52	mg/L
		0.01	200.7	Lead	0.49	mg/L
		0.05	200.7	Zinc	0.65	mg/L
		0.05	200.7	Nickel	0.44	mg/L
LCSD	M311540	0.001	200.7	Cadmium	0.52	mg/L
		0.01	200.7	Chromium	0.53	mg/L
		0.01	200.7	Lead	0.52	mg/L
		0.05	200.7	Zinc	0.69	mg/L
		0.05	200.7	Nickel	0.45	mg/L

Ramiro Salgado
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Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

QC REPORT

Report# M324-13

Dates Analyzed 11/20/01-11/19/01

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Analyte	Batch #	Method	MS %Recovery	MSD %Recovery	RPD	Blank
Cadmium	115937	200.7	95.8	96.6	0.9	ND
Chromium	115938	200.7	99.2	98.3	1.0	ND
Lead	115941	200.7	91.7	101.7	10.3	ND
Zinc	115940	200.7	87.3	85.1	2.5	ND
Nickel	115939	200.7	87.1	87.4	0.4	ND

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

QC REPORT

Report# M324-13

Dates Analyzed 11/20/01-11/21/01

STL ChromaLab
1220 Quarry Lane
Pleasanton CA 94566-4756

Analyte	Batch #	Method	MS %Recovery	MSD %Recovery	RPD	Blank
Cadmium	I15932	6010B	93.6	92.7	1.0	ND
Chromium	I15933	6010B	93.0	92.6	0.5	ND
Lead	I15936	6010B	82.5	89.0	7.5	ND
Zinc	I15935	6010B	80.0	80.0	0.0	ND
Nickel	I15934	6010B	85.4	80.2	6.2	ND

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

APPENDIX D

CHAINS-OF-CUSTODY

TETRA TECH, INC.

TETRA TECH, INC.
180 Howard Street, Suite 250
San Francisco, CA 94105-1661

CHAIN OF CUSTODY

63131

TT_____

Client Tetra Tech, Inc.	Project Name Alameda UST Removal	Destination Chromolab
Address 180 Howard Street, Suite 250, San Francisco, CA 941	Project Number 11979-03	Address 1220 Quarry Lane
Phone (415) 974-1221 Fax (415) 974-5914	Project Manager Gary Floyd	Tel (925) 484-1919 Fax
Contact Dick Brunner	Field Contact Tatjana Gruner Phone 415.974.1221	Contact Surinder Sidhu (6a-3p) Vincent (9a-6p)
Sampler Tatjana Gruner Sampler T. Gruner	Sample date(s) 11/15/2001	Turn Around Time STANDARD RUSH TUESDAY

ANALYTICAL PROCEDURES

Sample Description	Date	Time	Depth (feet)	*Media	# of Containers	Pres.	Field Filtered (y/n)	TPH-D (USEPA 8015mod)	TPH-G (USEPA 8015 mod)	BTEX (USEPA 8260)	Oil & Grease (USEPA 5520 D&E)	Oxygenates (USEPA 8260)	Chlorinated Hydrocarbons (USEPA 8260)	Semivolatile organic compounds (USEPA 8270)	Metals (Cd, Cr, Pb, Zn, Ni) (USEPA 6010)	8082 PCB					Comments	Lab ID #
WAL 111501	11/15/01	1030	9	GW	11	Y	-	X	X	X	X	X	X	X	X	X					72 HR	
SAL 111501S	11/15/01	1111	8	S	2	-	-	X	X	X	X	X	X	X	X	X					RUSH	
SAL 111501N	11/15/01	1122	8	S	2	-	-	X	X	X	X	X	X	X	X	X						
SAL 111501E	11/15/01	1135	8	S	2	-	-	X	X	X	X	X	X	X	X	X						
SAL 111501W	11/15/01	1144	8	S	2	-	-	X	X	X	X	X	X	X	X	X						
GAL 111501 1	11/15/01	1245	1	G	1	-	-	X	X	X	X	X	X	X	X	X						
GAL 111501 2	11/15/01	1245	1	G	1	-	-	X	X	X	X	X	X	X	X	X						
GAL 111501 3	11/15/01	1245	1	G	1	-	-	X	X	X	X	X	X	X	X	X						
GAL 111501 4	11/15/01	1245	1	G	1	-	-	X	X	X	X	X	X	X	X	X						
~~GAL 111501 C~~	~~11/15/01~~	~~1245~~	~~1~~	~~G~~	~~1~~	~~-~~	~~-~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~					COMPOSITE OF 4 SAMPLES TEMP.	

Relinquished by	Date/Time	Received By	Date/Time	Condition Received
	11/15/01 1445			Cold Sealed Intact
Relinquished by	Date/Time	Received By	Date/Time	Condition Received
			11/15/01 1445	Cold Sealed Intact
Shipping Method	No. of Packages		Shipping Number	

*MEDIA CODE

Soil	S	Concrete	C
Wipe	F	Surface Water	SW
Wood	WO	Ground Water	GW
Sludge	SL	Compost	CO
Soil Gas	SG	GRAVEL	G

REMARKS

Chain of Custody 2001-11-0323-1

M324-13

Date Shipped: 11/20/2001

From:

STL ChromaLab (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager: Surinder Sidhu
Phone: Ext:
Fax: (925) 484-1096
Email: ssidhu@chromalab.com

To:

GeoAnalytical Labs - SUB CONTRACT ONLY
1405 Kansas Avenue
Modesto, CA 95351

Phone: (209) 572-0900
Fax: (209) 572-0916
Contact: Karen Cole
Phone: (209) 572-0900

CL Submission #: **2001-11-0323**
CL PO #:

Project #: 11979-03
Project Name: Alameda UST Removal

Client Sample ID / Analysis	CL#	Sampled	Matrix / Method	Date
WAL111501 M311537 ~~sample missing~~	001	11/15/2001 10:30	Water	
Metals			6010B/7470A	11/20/2001 17:00
SAL111501-S M203614	002	11/15/2001 11:11	Soil	
Metals			6010B/7470A	11/20/2001 17:00
SAL111501-N M203615	003	11/15/2001 11:22	Soil	
Metals			6010B/7470A	11/20/2001 17:00
SAL111501-E M203616	004	11/15/2001 11:35	Soil	
Metals			6010B/7470A	11/20/2001 17:00
SAL111501-W M203617	005	11/15/2001 11:44	Soil	
Metals			6010B/7470A	11/20/2001 17:00
GAL111501-1 M203618	006	11/15/2001 12:45	Soil	
Metals			6010B/7470A	11/20/2001 17:00
GAL111501-2 M203619	007	11/15/2001 12:45	Soil	
Metals			6010B/7470A	11/20/2001 17:00

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Surinder Sidhu Time: 11 Am	Signature: Time:	Signature: Time:
Printed Name: STL - CL Date: 11/20/01	Printed Name: W Cannon Date: 11/20/01	Printed Name: Date:
Company:	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: Time: 10:40	Signature: Lidia Padilla Time: 1:15	Signature: Time:
Printed Name: Date: 11/20/01	Printed Name: Lidia Padilla Date: 11/20/01	Printed Name: Date:
Company:	Company: GeoAnalytical Lab.	Company:

Chain of Custody 2001-11-0323-1

Date Shipped: 11/20/2001

From:	To:
STL ChromaLab (CL) 1220 Quarry Lane Pleasanton, CA 94566-4756	GeoAnalytical Labs - SUB CONTRACT ONLY 1405 Kansas Avenue Modesto, CA 95351
Project Manager: Surinder Sidhu Phone: Ext: Fax: (925) 484-1096 Email: ssidhu@chromalab.com	Phone: (209) 572-0900 Fax: (209) 572-0916 Contact: Karen Cole Phone: (209) 572-0900
CL Submission #: **2001-11-0323** CL PO #:	Project #: 11979-03 Project Name: Alameda UST Removal

Client Sample ID	CL #	Sampled	Matrix	
Analysis			Method	Due
GAL111501-3 m203620	008	11/15/2001 12:45	Soil	
Metals			6010B/7470A	11/20/2001 17:00
GAL111501-4 m203621	009	11/16/2001 12:45	Soil	
Metals			6010B/7470A	11/20/2001 17:00

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

only 5 metals (Cd, Cr, Pb, Zn, Ni) only

MB 11/16 m203622
LCS 11/16 m203623
LCSD 11/16 m203624
MB M311538
LCS M311539
LCSD M311540

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Surinder Sidhu Time: 4 pm	Signature: [illegible] Time: 1245	Signature: Time:
Printed Name: SURINDER SIDHU Date: 11/20/01	Printed Name: [illegible] Date: [illegible]	Printed Name: Date:
Company: STL-CL	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: [illegible] Time: 11 AM	Signature: Time:	Signature: Time:
Printed Name: [illegible] Date: 11/20/01	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company: