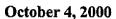
DEPARTMENT OF TRANSPORTATION

Office of Environmental Engineering BOX 23660 MS 8-A OAKLAND, CA 94623-0660 (510) 286-4444 TDD (510) 286-4454



Ms. Barbara J. Cook, P.E., Chief Northern California – Coastal Cleanup Operations Branch Department of Toxic Substances Control 700 Heinz Avenue, Building F, Suite 200 Berkeley, CA 94710-2721

Subject:

Former J&A Truck Repair and Container Freight sites

500 Kirkham Street and 1285 5th Street, Oakland, California

Dear Ms. Cook:

The following document is enclosed for your review in accordance with Voluntary Cleanup Agreement No. 4-1625-C for the Cypress Freeway Reconstruction Project:

Site Investigation Report, Task Order Number 04-192203-RJ Contract Number 43A0012,
 Former J&A Truck Repair and Container Freight Sites, Oakland, California By
 Professional Service Industries, Inc., September 22, 2000

Please direct any comments or questions you may have regarding this site to Jill Pollock at (510) 286-5638.

Sincerely,

HARRY Y. YAHATA District Director

Ву: /

CELIA McCUAIG

District Branch Chief

Enclosure:

CC: Ms. Betty Grahm, Regional Water Quality Control Board

Ms. Susan Hugo, Alameda Health Agency



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SITE INVESTIGATION REPORT TASK ORDER NUMBER 04-192203-RJ CONTRACT NUMBER 43A0012

FORMER J & A TRUCK REPAIR & CONTAINER FREIGHT SITES OAKLAND, CALIFORNIA

prepared for

CALIFORNIA DEPARTMENT OF TRANSPORTATION District 4

111 Grand Avenue Oakland, California

prepared by

Professional Service Industries, Inc.

1320 West Winton Avenue Hayward, California 94545 (510) 785-1111

September 22, 2000 575-0G011

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STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

Information provided in this Site Investigation Report (SIR), prepared by Professional Service Industries, Inc. (PSI), is intended exclusively for the use of Caltrans for the evaluation of subsurface conditions as it pertains to the subject sites. The professional services provided have been performed in accordance with practices generally accepted by other geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. As with all subsurface investigations, there is no guarantee that the work conducted will identify any or all sources or locations of contamination.

This SIR is issued with the understanding that Caltrans is responsible for ensuring that the information contained herein is brought to the attention of the appropriate regulatory agency. This SIR has been reviewed by a geologist who is registered in the State of California and whose signature and license number appears below.

Frank Poss, R.E.A. Senior Hydrogeologist

John D. Whiting, R.G

No. 5951 EXP 3-31-02

Senior Geologist

A Confanticeau Adriana Constantinescu, R.E.A.

1.0 INVESTIGATION SUMMARY

Professional Service Industries, Inc. (PSI) has been retained by the California Department of Transportation (Caltrans), under Task Order Number 04-192203-RJ and Contract Number 43A0012, to prepare this Site Investigation Report to assess current soil and groundwater conditions at the Former J & A Truck Repair Facility, located at 500 Kirkham Street (Site JA) and Container Freight (Site CF), located at 1285 5th Street, in the City of Oakland, California (subject site; Figure 1).

Seven soil boreholes were advanced on the two sites named above using a hollow-stem auger drill rig. All of the boreholes were completed as groundwater monitoring wells on April 25 and 26, 2000. Seven groundwater samples and one duplicate were collected from the new wells on May 2, 2000.

Based on the information presented in this report, the following conclusions have been reached:

- None of the soil samples collected from the Site JA contained detectable levels of total
 petroleum hydrocarbon as gasoline (TPH-G), total petroleum hydrocarbon as diesel
 (TPH-D), motor oil, organochlorine pesticides, and polychlorinated biphenyls. Five
 volatile organic compounds (VOCs) (1,1-Dichloroethane, Naphthalene, Styrene, 1,1,1Trichloroethane, and Trichlorotrifluorethane) and five semi-VOS (SVOCs)
 (Acenaphthylene, Fluoranthene, Naphthlene, Phenanthrene, and Pyrene) were
 detected at levels well below the Cypress Preliminary Remedial Goals (PRG) levels
 for soil.
- Ten metals (Arsenic, Barium, Chromium, Cobalt, Copper, Lead, Nickel, Thallium, Vanadium, Zinc) were detected above the detection limit in the soil samples collected for this investigation from the Site JA. The detected levels were well below the Cypress PRGs.
- Groundwater samples collected from the four new groundwater monitoring wells installed at Site JA did not contain motor oil, organochlorine pesticides or PCBs above the detection limits. Fourteen VOCs were detected in the water samples collected from this site. The detected concentrations of VOCs are less than the detected amounts in the grab groundwater sample collected on August 30, 1995. The highest levels of contaminants were detected in the groundwater sample collected from the groundwater monitoring well JA-4, located down gradient of the former site sumps.
- Soil samples collected from the Site CF contained detectable levels of TPH-G, TPH-D, and motor oil. TPH-G was detected at levels between 0.69 mg/kg and 0.77 mg/kg.

TPH-D was detected at levels ranging between 19 mg/kg to 370 mg/kg. The detected levels decrease with depth, between 0.5 m to 2 m (1.65 feet to 6 feet).

- Two VOCs (benzene and naphthalene) were detected at levels above the detection limit. Both values are well below the previous maximum detected levels.
- Sixteen SVOCs were detected in the tested soil samples above the detection limit. All of the detected levels were below the previous maximum detected levels at Site CF.
- Organochlorine pesticides as 4,4'-DDD was detected only in two soil samples, with the maximum level of 9.3 mg/kg.
- Aroclor-1260 was the only PCBs detected at a level of 0.082 mg/kg, with 0.918 mg/kg below the industrial PRG level for soil. Previous soil sampling performed at this site did not report PCBs above the detection limit.
- Ten metals were detected at concentrations well below the maximum detected levels reported by the previous subsurface investigations.
- Groundwater samples collected from the three new installed wells at the Site CF contained detectable levels of TPH-G, TPH-D, VOCs, and SVOCs. TPH-G was detected in all groundwater samples at levels between 0.5 mg/L and 94 mg/L. TPH-D was detected in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 2.8 mg/L and 21 mg/L.
- Nine VOCs were detected in the water samples collected during this investigation at the Site CF. One groundwater sample collected from the groundwater monitoring well CF-2 contained eight of the detected VOCs. Benzene, Carbon Disulfide, Ethylbenzene, Naphthalene, Styrene, Toluene, 1,2,4-Trimethylbenzene, Trichloroethene, and Xylenes were detected at levels above the MCL/EPA Region 9 PRG levels for drinking water.
- Nineteen SVOCs were detected in the groundwater samples tested during this
 investigation. Eighteen of the SVOCs detected levels were well below the maximum
 detected levels reported by the previous investigations.
- Motor oil, organochlorine pesticides, and PCBs were not detected in the groundwater samples collected from the Site CF.

 Only one metal was detected above the detection limit in the groundwater samples collected for this investigation from the Site CF. The detected level was 0.28 mg/l of barium.

Based on the results presented in this report, PSI recommends the following course of action:

• Groundwater monitoring be continued at the Site JA and Site CF, on a quarterly basis. According to the DTSC requirements, total dissolved solids (TDS) measurements should be collected. Also, filtered and unfiltered samples from the Site CF should be analyzed for SVOCs using EPA Method 8270.

1.0 INTRODUCTION

Professional Service Industries, Inc. (PSI) has been retained by the California Department of Transportation (Caltrans), under Task Order Number 04-192203-RJ and Contract Number 43A0012, to prepare this Site Investigation Report to assess current soil and groundwater conditions at the Former J & A Truck Repair Facility, located at 500 Kirkham Street (Site JA) and Container Freight (Site CF), located at 1285 5th Street, in the City of Oakland, California (subject site; Figure 1).

The scope of work for this investigation included:

- Drill 7 soil borings to a maximum depth of 5 meters (16.4 feet) (4 soil borings at Site 1 and 3 soil borings at Site 2),
- Install seven new groundwater monitoring wells in the drilled soil borings and survey the designated points,
- Develop, purge, and sample new monitoring wells to characterize groundwater in the upper aquifer (Merritt Sand Aquifer),
- Perform chemical analyses of soil and groundwater samples.
- Perform sieve analysis of one soil sample per each site and at changes in lithology (if any) to characterize the shallow aquifer,
- Prepare a technical report describing the investigation and interpretation of the data generated.
- Perform quarterly groundwater quality monitoring and reporting for a minimum of one year.

2.1 PROJECT OBJECTIVE

The objective of the project is to determine the general presence and concentration of contaminants of concern in the groundwater at each site and monitor these concentrations over a minimum of one year.

2.2 SITE BACKGROUND

2.2.1. J & A Truck Repair Facility (Site JA)

The former J & A Truck Repair facility was located at 500 Kirkham Street, in the City of Oakland, County of Alameda, California. For the extension of Cypress Freeway, Caltrans purchased the property from Mr. Barney Smilo, in the summer of 1994. The 1996 report prepared by Jonas and Associates, Incorporated (JAI) showed that an inspection of the site in 1979 by Alameda County Health Department (ACHD) revealed the presence of a white pigment, titanium oxide (TiO₂) in a storm drain southwest of the site. The California

Department of Health Services (DHS), currently known as Department of Toxic Substances Control (DTSC), performed an inspection on October 28, 1980, due to a citizen complaint. The inspector found "improper storage and disposal of hazardous wastes which include spills on soil, disposal into dumpster and onto adjacent property and storage in a pit" (JAI, 1996).

In March 1981, the DHS performed another inspection and an area of dead vegetation adjacent to a hole was observed on the eastern side of the site. Analysis of soil samples collected by DHS revealed the presence of pesticides and heavy metals in the surface soils. DHS and the California Regional Water Quality Control Board (RWQCB) recommended corrective action to clean-up contaminated soil and prevent future releases. No documentation exists to verify if any corrective action was performed at the site.

On June 23, 1992, GeoResource Consultants, Inc. (GeoResource) drilled one soil boring in the southeastern portion of this site, as part of a series of investigations on the site area performed for Caltrans. Two soil samples were collected at 0.3 and 1 meter (m) (1 and 3 feet) below ground surface (bgs) and submitted for laboratory analysis of organochlorine pesticides and Title 26 metals. The 1996 JAI 's report indicated that no organochlorine pesticides were detected in either of the two soil samples. The soil sample collected at 0.3 m (1 feet) bgs contained 81 mg/kg of lead.

The environmental assessment at this site continued in October 1994, when Environmental Solutions, Inc. (ESI) collected wipe samples of the former warehouse interior walls and soil and groundwater samples in the underground storage tank (UST) area and the remaining area of the site. Results of the wipe sample analysis indicated detectable concentrations of total recoverable petroleum hydrocarbons (TRPH), Metals, Organochlorine Pesticides, Polychlorinated Biphenyls (PCBs), Semi-Volatile Organic Compounds (SVOCs) and Volatile Organic Compounds (VOCs) on the interior walls of the warehouse. ESI subsurface investigation showed that, in general, soils on the site have been reported to be impacted by TRPH, Lead, and low concentrations of SVOCs and VOCs. The ESI's study showed that groundwater beneath the site has been impacted by TRPH, TPH-G, unknown compounds in the diesel range, oil and grease, metals, and VOCs (JAI, 1996).

All the structures on the property were demolished in April 1995. On August 30, 1995, under ACHD's supervision, one 1,100-gallon steel gasoline underground storage tank (UST) was removed from the western side of the property. At the time of the UST removal, two soil samples were collected from the walls of the excavation, at a depth of approximately 7 feet below ground surface. Petroleum hydrocarbons were detected in only one soil sample collected from the western side of the excavation pit at the following

concentrations: 5,500 mg/kg of total petroleum hydrocarbons as gasoline (TPH-G), 40 mg/kg of benzene, 260 mg/kg of toluene, 100 mg/kg of ethylbenzene, and 52 mg/kg of total xylenes. One groundwater sample was collected from the bottom of the excavation pit. Total petroleum hydrocarbons were detected in the groundwater sample at the following concentrations: 32 mg/l of TPH-G, 5.6 mg/l of benzene, 5.1 mg/l of toluene, 0.063 mg/l of ethylbenzene, and 5.5 mg/l of total xylenes. Lead was detected at 0.11 mg/l. One composite soil sample was collected from the soil stockpile and contained the following contaminants: barium (39 mg/kg), cadmium (0.5 mg/kg), chromium (17 mg/kg) lead (13 mg/kg), and mercury (0.05 mg/kg). Approximately forty cubic yards of soil was excavated and stockpiled at the site. Following waste characterization, on November 16, 1995, the soil stockpile along with the other soil excavated from the former J & A Truck Repair site was transported and disposed at ECDC Environmental, located in East Carbon, Utah as non-RCRA hazardous waste solid (JAI, 1995).

From November 13 through November 16, 1995, approximately 3,426.3 m3 (4,700 cubic yards) of soil was excavated to an approximate depth of 1.8 m (6 feet) bgs, by MCM Construction, Inc. (MCM). A total of 92 soil samples were collected from the walls and the bottom of the excavation pit. Thirty-two of the soil samples were collected from the walls of the excavation at depths of approximately three feet bgs. In addition, 60 samples were collected at the bottom of the excavation pit, at depth of approximately 1.8 m (6 feet) bgs. Twenty-five chemicals were detected in the tested soil samples. evaluation of the data and an estimation of human health risk was performed by SOMA Corporation of Emeryville, California. The estimation of risk was based on a quantitative comparison of the soil sample analytical results (both excavation and site characterization samples) with US EPA Region 9 Preliminary Remedial Goals (PRGs) and the calculation of equivalent risks. For the carcinogenic compounds, only the 95 percent upper confident limit (UCL) concentration for PCB was found to exceed the PRG value. estimated excess carcinogenic risk for the identified chemicals is 7.88E-06. Without the excess carcinogenic risk from the PCB, the total estimated excess carcinogenic risk for the identified chemicals would be 5.01E-07. For the identified non-carcinogenic compounds, none of the 95 percent UCL concentrations exceeded the corresponding PRG values, that is, individual chemical hazard quotients were less than a value of 1. The total hazard index for the identified non-carcinogenic compounds was also less than a value of 1 (2.89E-01) (JAI, 1996).

2.2.2. Container Freight Site, Oakland, California (Site CF)

The Container Freight site is located at 1285 5th Street in Oakland, Alameda County, California. According to Environmental Solutions, Inc.'s (ESI) report dated June 21, 1995, this site has been operated as a warehouse and distribution facility since 1967. Site activities consisted of unloading cargo from freight trains and transferring to trucks. Prior

to this use, the site was owned by the Commissary Department of the South Pacific Rail Road (SPRR). It is not known what site activities took place at the site when it was owned by SPRR. Caltrans purchased the site in 1994 in connection with the reconstruction of the Cypress Freeway. The Site CF is currently vacant because the former warehouse was demolished in May, 1995 to prepare for the construction of nine footings for an aerial structure of the main freeway alignment and an embankment for the 5th Street on and off ramps. A 700-gallon diesel UST, located in front of the former warehouse building, was removed from the site in late August 1995 (JAI, 1995).

On June 24, 1992, GeoResource Consultants (GRC) drilled four soil borings to depths ranging from 1.06 m to 2.6 m (3.5 to 8.5) feet bgs around the former diesel UST. One groundwater sample was collected using a Hydropunch sampling device. None of the soil and groundwater samples analyzed showed the presence of TPH-D at or above reported detection limits.

In November 1994, Environmental Solutions, Inc. (ESI) performed soil and groundwater sampling in the truck parking area in the back of the warehouse building advancing seven soil borings. In March 1995, ESI resumed the soil and groundwater sampling within the footprint of the former warehouse after it was demolished, advancing four more soil borings. Laboratory analysis results of soil samples collected from the former parking area have been impacted by petroleum hydrocarbons, heavy metals (mainly copper and lead), VOCs, and SVOCs. No PCBs were detected at or above the detection limits. A coal tar odor was detected in three of the soil borings at depths ranging from approximately 0.65 m to 1.32 m (2 to 4 feet) bgs. TRPH was detected at concentrations up to 1,000 mg/kg in three of the soil borings. Lead concentrations exceeding 50 mg/kg were detected in all tested soil samples, with a maximum concentration of 27,000 mg/kg in one of the soil samples collected at 1.05 m (3.5 feet bgs). Groundwater samples collected by ESI beneath the former truck parking area and beneath the former warehouse building has been impacted by TRPH, VOCs, metals, and SVOCs. Acetone was detected only in one groundwater sample taken from under the former warehouse site with a concentration of 78 µg/L. Benzene, toluene, ethylbenzene, and xylenes (BTEX) group was detected at concentrations ranging from 39 to 2,400 μg/L. Styrene, arsenic, nickel, and chromium were detected at concentrations exceeding National Pollutant Discharge Elimination System (NPDES) and East Bay Municipal Utilities District (EBMUD) permit discharge limits.

The "Underground Storage Tank Report" issued by JAI in 1995, presented that one 700-gallon steel UST was closed at the end of August 1995. Two soil samples collected from the tank pit contained detectable levels of TPH-G, Lead, and BTEX group. Unknown hydrocarbons in the diesel and motor oil range were also detected. The groundwater collected from the excavation pit contained none of the petroleum hydrocarbon

compounds tested for. Only one unknown hydrocarbon compound in the kerosene range was detected at a concentration of 0.63 mg/l (JAI, 1995).

Additional soil sampling performed by Harding Lawson Associates in the area of Cypress Freeway re-alignment on November 24, 1997 revealed that shallow soil samples collected at 0.3 m (1 foot) and 1 m (3 feet) bgs contained detectable levels of oil and grease, an unknown petroleum hydrocarbon, naphthalene, toluene, benzene, mercury barium, chromium, cobalt copper, lead, molybdenum, nickel, vanadium, and zinc.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

3.1 Site Geology

The subject site is located within a large region known as the Coast Ranges geomorphic province. This region is characterized by extensive folding, faulting and fracturing of variable intensity (Norris, 1990). The faults and folds trend northwesterly and comprise the pronounced northwest trending ridge-valley system. The oldest geologic formations in the Bay Area are probably of Jurassic age (138-205 million years ago). These formations have been subject to repeated episodes of deformation. By comparison, the youngest formations (Quaternary age – last 2 million years) have been only mildly flexed.

According to the "Geologic Map of the Flatland Deposits of the Southern Part of the San Francisco Bay Region" the subject site is undertain by fine-grained alluvium that consists of unconsolidated, plastic, moderately to poorly sorted silt and clay, rich in organic material. On the basis of borings drilled and logged at the subject site, the soil types encountered consist of the following:

- At Site JA, approximately 0.6 meter (m) (2 feet) of fill consisting of gravelly sand and silty sand was underlain by a green, poorly graded sand.
- At Site CF, the upper soil unit consisted of approximately 1.5 m (5 feet) of well graded gravelly silty sand, underlain by a poorly graded fine sand interbedded with clayey silt.

3.2 Site Hydrogeology

Environmental Solutions, Inc.' (ESI) s report issued on April 3, 1995 mentioned that the Merritt Sand is the first encountered subsurface aquifer, and is usually unconfined. The Merritt Sand is believed to be continuous across much of west Oakland south to Alameda Island. At the Site JA, the depths to groundwater were between 1.17 m to 1.89 m (3.83 feet to 6.2 feet). At the Site CF, the depths to groundwater were between 0.832 m to 1.54 m (2.73 feet to 5.06 feet). The Merritt Sand aquifer extends to a depth of approximately 18.3 m (60 feet) bgs, where Temascal Formation is believed to provide a competent aquitard between it and the deeper confined aquifer present in the Alameda Formation. ESI's report stated also, that based on aquifer pump test data, the Merritt Sand has a hydraulic conductivity on the order of 10⁻³ to 10⁻² centimeters per second. (cm/sec). The next aquifer below the Merritt Sand aquifer is the Alameda Formation which ranges from 36.6 m (120 feet) to 48.8 (160 feet). In general, this aquifer is confined, and is believed to be continuous across much of west Oakland, with a thickness of over 60.96 m (200 feet).

4.0 SUBSURFACE INVESTIGATION

This section describes the methodology that was implemented during the soil and groundwater investigation at the site. The objectives of the sampling procedures were to provide an accurate assessment of the current soil and groundwater conditions and to minimize the potential for cross-contamination during sampling operations.

4.1 PRE-FIELD ACTIVITIES

This section describes the tasks PSI performed prior to initiating any field activities. These tasks included:

- 1) attending the Caltrans Task Order Meeting:
- 2) reviewing of pertinent results of past site investigation reports;
- 3) preparing the Pre-Work Site Visit Checklist;
- 4) locating any underground utility lines in conjunction with Underground Service Alert (USA); and
- 5) obtaining two Caltrans Encroachment permits from the Caltrans Maintenance Permit Office and two Drilling Permits from Alameda County Public Works Agency.

4.1.2 Task Order Meeting and Pre-Work Site Visit

A Task Order Meeting was completed on March 10, 2000, with Mr. Frank Poss and Ms. Adriana Constantinescu of PSI and Ms. Jill Pollock and Mr. Peter Altherr of Caltrans in attendance. The primary purpose of the meeting was to familiarize PSI with site conditions that may impact field operations.

At the Pre-Work Site Visit on March 10, 2000, the boring locations were determined and a Pre-Work Site Visit Checklist was completed. Topics specified in the checklist included identification of borehole locations, confirmation of underground utility clearance, location of water/power supply sources, and storage areas for drill cuttings.

4.1.2 Health and Safety Plan

Prior to the commencement of field activities at the site, a site-specific Health and Safety Plan (HSP) was developed in compliance with 29 CFR 1910.120 and Title 8 California Code of Regulations, § 5192, under the supervision of a Certified Industrial Hygienist. The HSP was revised by DTSC and their conclusions were presented in a Memorandum dated April 20, 2000. The HSP was designed to address the potential hazardous materials that may be encountered during field activities at the site. Further, the HSP was

designed to minimize the exposure to potentially hazardous materials and unsafe working conditions to on-site personnel.

4.1.3 Utility Clearance

At least 48 hours prior to drilling activities, PSI contacted Underground Service Alert (USA) to identify utility lines that may underlie the areas of investigation. Two USA numbers were obtained for this project: 0074308 for Site JA and 0074319 for Site CF.

4.1.4 Project Permits

PSI obtained two drilling permits (one per each site) from Alameda County-Public Works Department and two encroachment permits from Caltrans – District 4, prior to drilling. Copies of permits are included in Appendix E.

4.2 SOIL BORINGS

Seven soil borings were advanced to investigate the soil and groundwater quality at the sites. The boring locations are presented in Figure 2 and were selected by Caltrans to assess the soil and groundwater quality down gradient of the former USTs and the effectiveness of the remedial excavations performed at both sites. The local groundwater gradient dips gently to the southeast towards the estuary (Laidlaw, 1995). V&W Drilling of Rio Vista, California provided the drilling services.

The borings were drilled using a hollow stem augers rig. The borings were extended to a maximum depth of approximately 5 meter (m) (16.4 feet bgs) and were 0.20 m (8 inches) in diameter.

At Site JA, soil samples were collected at the groundwater interface to assess the residual levels of contaminants in soil, if any, after the remedial excavation performed at this site. Groundwater was encountered at 2.3 m (7.5 feet) and 2.22 m (7 feet) below ground surface(bgs). Soil samples were collected at 2.2 m (7 feet) and at 1.95 m (6.5 feet) bgs.

At Site CF, four soil samples per boring were proposed to be collected at depths of 0.5, 1, and 2 m (1.64, 3.28, and 6.56 feet, respectively) bgs and at the groundwater interface to assess the vertical and horizontal extent of soil contamination, if any. Because groundwater was encountered at 2 m (6.56 feet) bgs, only three soil samples were collected from each boring. Field work for drilling and soil sampling activities were conducted in accordance with the field procedures described in Appendix A.

4.2.1 Soil Sampling Protocol

Soil samples were collected by a PSI geologist working under the supervision of a State of California Registered Geologist. The samples were collected using a 0.05 meter (2 inches) diameter stainless steel sampler containing three brass tubes. Upon retrieval of the sampler, a representative undisturbed soil sample was preserved for chemical analyses in a 0.15 meter (6 inches) stainless steel tube. Once the sampler was retrieved the ends of the sample tube were covered with Teflon sheets and capped with polyethylene end caps. The soil sample was labeled and placed in a zip-lock bag in a chilled cooler.

The soil samples were logged on chain-of-custody records and transported to Centrum Analytical of Redlands, California, a California Department of Health Services certified hazardous materials testing laboratory, following chain-of-custody protocol.

4.2.2 Soil Classification

Soil was described by a PSI geologist and recorded on a field boring log for each boring drilled. The data recorded on the logs were based on examination of soil samples retrieved and drilling conditions observed in the field. Boring logs included information regarding the location of the boring, type of sampler used, and geologic descriptions of materials encountered.

Soils were classified according to the "Soil and Rock Logging Classification Manual" prepared by the State of California, Department of Transportation. The Soil and Rock Logging Classification Manual is consistent with the Unified Soil Classification System. Other information to be recorded on the logs included indications of contamination and the occurrence of groundwater. Organic vapor analyzer (OVA) measurements for soil samples were recorded on the field boring logs.

4.3 MONITORING WELL INSTALLATION AND DEVELOPMENT

Following drilling of the borings, PSI installed four groundwater monitoring wells at Site JA and three groundwater monitoring wells at Site CF (see Figure 2 for selected locations). The wells were installed through the hollow-stem augers. The well casings consisted of 5.08-centimeter (cm) (2-inch) inside diameter Schedule 40 PVC casing with 0.0508 cm (0.020-inch) machine-slotted screen. The selection of the screen size and filter pack material was performed using the description presented in the referenced reports of the first encountered aquifer as consisting of the Merritt sand, a yellowish brown silty and clayey sand. The length of screen was 4 m (14 feet). The sand filter pack was placed slow free-fall, from the bottom of the borehole until approximately 0.6 m (2 feet) bgs. The

drilling measuring tape was also moved continuously inside the annular space to prevent the bridging. In addition, the volume of the filter pack required was calculated and recorded before placement and the actual volume used was determined and recorded during well construction. The sand pack extended approximately 0.3 meters (1 feet) above the screen interval. Monterey-type number 3 sand was used for the sand pack. Approximately 0.3 meter (1 foot) of hydrated bentonite chips was placed above the sand pack by slow free-fall; neat cement mixed at a ratio of 5 gallons of water per 94-pound sack of cement provided the annular seal from the top of the bentonite to grade [approximately 0.3 m (1 foot)]. Well casing (including the well locking cap was completed approximately 0.05 m (2 inches) bellow the traffic-rated road box (Christie box) cover. The road box was completed approximately one inch above the existing grade surface to allow for precipitate run off. All concrete works, both inside and outside the road traffic box, were completed with a smooth finish.

The groundwater monitoring wells were initially developed in order to clean the well and stabilize the sand and disturbed aquifer materials from around the screened internal perforations. Well development was accomplished by bailing.

4.4 DECONTAMINATION PROCEDURES

Decontamination procedures were implemented to maintain sample integrity and to prevent cross-contamination between sampling locations. All sampling equipment was cleaned with a non-phosphate detergent and rinsed twice with deionized water prior to use at a new sampling location or was pressure washed. Sampling equipment included:

- Stainless-steel sampling equipment,
- Drilling equipment,
- Groundwater sampling equipment, and
- Sounders.

4.5 STORAGE AND DISPOSAL OF GENERATED WASTES

Water from equipment cleaning, well development, well purging activities, and soil cuttings were stored in individually labeled 55-gallon drums. The drums were placed on the southwestern corner of the Site CF and had metals covers. Each drum was labeled with the project number and location, generation date and soil boring number.

Disposition of the soil cuttings and waste water will be determined upon receipt of laboratory analytical results of the soil and water samples. PSI will arrange for the

management and appropriate disposal of soil and water generated during the field activities under Contract 43A0012.

4.6 MONITORING WELL SAMPLING

Prior to groundwater sampling, the groundwater elevation was measured from the top of the well casing using an electrical sounder. Static water levels were measured to the nearest ± 0.003 m (0.01 foot) from the top of the casing. The data is presented in Table 1 and Figure 3. The elevation survey of the top of the well casings was performed by a State of California licensed surveyor and data was submitted in both metric and English units using the vertical datum NGVD 1929 and horizontal datum CCS27 Zone 3. The results of the survey are included in Appendix C. This data was collected to allow calculation of the hydraulic gradient. Each monitoring well was purged of a minimum of three well volumes until pH, conductivity, and temperature stabilized. The purging was completed by bailing.

Samples used to be analyzed for volatile organic compounds were collected first. The groundwater samples were collected according to PSI's standard protocol, presented in Appendix A.

Following groundwater sample collection, the samples were logged on a chain-of-custody record and stored in an ice chest at 4 degrees Celsius. Sample preservatives were utilized as instructed by the analytical laboratory. All transportation and handling of the groundwater samples followed chain-of-custody protocol.

5.0 LABORATORY ANALYSIS PROGRAM

The soil and groundwater samples collected during this investigation were submitted to Centrum Analytical, a State of California Department of Health Services certified hazardous waste laboratory. A summary of the types of analyses and analytical methods is presented below and in the Table 2 through Table 7. Copies of the analytical results are attached in Appendix D.

All soil and groundwater samples collected were analyzed for the following constituents:

- EPA Modified 8015 TPH-Gasoline
- EPA Method 8015 modified TPH as Diesel (TPH-D)
- EPA Method 8015 modified Motor Oil
- ICAP EPA Method 6010 Heavy Metals
- EPA Method 8260B Volatile Organic Compounds (VOCs); including MTBE and oxygenates.
- EPA Method 8270C Semi-Volatile Organic Compounds (SVOCs).

Soil and groundwater samples collected from the Site JA and from the proposed groundwater monitoring well CF-1, located on Site CF, were tested for extra constituents, as follows:

- EPA Method 8081 Organochlorine pesticides
- EPA Method 8082 PCBs.

During groundwater purging and sampling the following parameters were measured:

- pH (field measurement)
- Conductivity (field measurement)
- Temperature (field measurement)

Grain size distribution of two soil samples collected from the Site JA and one soil sample collected from the Site CF were analyzed to characterize the shallow aquifer materials conditions. Results of the grain size tests are attached in Appendix D.

6.0 FIELD QUALITY ASSURANCE/QUALITY CONTROL

The following equipment calibration procedure and field documentation procedures were implemented by PSI field personnel.

6.1 SAMPLE IDENTIFICATION

Soil samples collected in the field were labeled according to standard protocol, as described in Appendix A.

6.2 CHAIN-OF-CUSTODY PROCEDURES

Chain-of-Custody records were used to document sample handling and shipping procedures. Chain-of-Custody records traced the samples from collection, through any custody transfers to the analytical laboratory. Information recorded on the Chain-of-Custody records included location of sample collection, sample identification, number, date and time of collection, number and type of sample containers, and analyses requested. The shipping conditions were also described on the Chain-of-Custody records. The name of the sampler(s) as well as the name of the person relinquishing the samples were documented. Chain-of-Custody procedures are described in Appendix A.

6.3 FIELD INSTRUMENTS

An organic-vapor analyzer (OVA) was used in the field for health and safety monitoring, as well as site assessment purposes. The OVA was used as an indicator of total petroleum hydrocarbons in soil samples and for health and safety purposes. A copy of the on-site calibration and air monitoring data sheet is attached to our report in Appendix F.

7.0 DATA EVALUATION AND DISCUSSION

Summaries of the analytical results are presented in Table 2 through Table 9. A copy of the laboratory reports and chain-of-custody records are included in Appendix D.

7.1 J & A TRUCK REPAIR SITE (SITE JA)

Laboratory Analytical Results - Soil

Tables 2 and 3 present a statistical analysis of the analytical data for soil samples collected at Site JA. For each contaminant a count of concentrations reported above the detection limit, a concentration maximum, a concentration minimum, a concentration average of the detected concentrations, and concentration standard deviation is provided.

Oil and Grease

The soil oil and grease analytical results are presented in Table 2 and Figure 4. Oil and grease was not detected above the detection limit of 10 mg/kg from soil samples collected during this investigation. The JAI's investigation performed in 1996, identified oil and grease in five of the soil samples collected from the walls of the remedial excavation at concentrations ranging from 88 mg/kg to 200 mg/kg (JAI, 1996).

Total Petroleum Hydrocarbons - Diesel (TPH-D)

The TPH-D analytical results for soil samples are presented in Table 2 and Figure 4. TPH-D was not detected in the soil samples collected from this site during this investigation. TPH-D was not detected in the previous investigations performed at Site JA (JAI, 1996).

Total Petroleum Hydrocarbons - Gasoline (TPH-G)

The TPH-G analytical results for soil samples are presented in Table 2 and Figure 4. TPH-G was not detected in the soil samples collected during this investigation at Site JA. Soil samples collected from the bottom of the remedial excavation performed at the subject site in 1995, contained TPH-G at levels between 13 mg/kg and 3,100 mg/kg (JAI, 1996).

Volatile Organic Compounds (VOC) detected by EPA Method 8260B.

The VOC analytical results for soil samples collected during this investigation are presented in Table 2 and Figure 4. Five VOCs were detected in the four collected soil samples. The detected levels are well bellow the Cypress Preliminary Remedial Goals (PRG)s for each specific chemical.

1,1-Dichloroethane was detected in three soil samples collected from soil borings JA-1, JA-3, and JA-4 (0.001 mg/kg, same as the detection limit). This level is with 0.419 mg/kg below the Cypress PRG for this chemical.

Naphthalene was detected in two soil samples collected from soil borings JA-3 and JA-4 at levels between 0.003 to 0.02 mg/kg. The maximum detected value is with 81.98 mg/kg below the Cypress PRG level for soil. The average concentration was 0.0115 mg/kg.

Styrene was detected in two of the soil samples collected from the soil borings JA-2 and JA-3 at a level equal with the detection limit of 0.001 mg/kg. No Cypress PRG was provided for this chemical.

1,1,1-Trichloroethane was detected in all soil samples collected during this investigation from the Site JA. Detected levels ranged from 0.005 to 0.007 mg/kg. The maximum detected level is with 469.993 mg/kg below the Cypress PRG level. The average concentration for 1,1,1-Trichloroethane was 0.006 mg/kg.

Trichlorotrifluorethane was detected in all four soil samples collected from the Site JA at levels between 0.005 to 0.008 mg/kg. The average concentration was 0.007 mg/kg. No Cypress PRG for soil is provided for this chemical.

Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270C

The SVOC analytical results for soil samples collected during this investigation are presented in Table 2 and Figure 4. Five SVOCs were detected in the tested soil samples. The detected levels are well below the Cypress PRG levels for soil for each specific chemical.

Acenaphthylene was detected only in one soil sample collected from the soil boring JA-3. at a detected level of 0.055 mg/kg. No Cypress PRG is provided for this chemical.

Fluoranthene was detected only in one soil sample collected from the soil boring JA-3 at 2.25 m (7 feet) below ground surface (bgs). The detected level was 0.072 mg/kg, with 2299.928 mg/kg below the Cypress PRG level for soil.

Napthalene was detected only in one soil sample collected from the soil boring JA-3. The detected level was 0.28 mg/kg which is with 81.72 mg/kg below the Cypress PRG for soil.

Phenanthrene was detected only in one soil sample collected from the soil boring JA-4. The detected level was 0.1 mg/kg, with 0.034 mg/kg above the detection limit. No Cypress PRG for soil is provided for this chemical.

Pyrene was detected only in one soil sample collected from the soil boring JA-4. The detected level was 0.14 mg/kg, with 1,699.86 mg/kg below the Cypress PRG level for soil.

Organochlorine Pesticides by EPA Method 8080

Organochlorine pesticides were not detected in the soil samples collected for this investigation. Only one confirmatory soil samples collected after the 1995 remedial excavation showed detectable concentrations of organochlorine pesticides (0.005 mg/kg of p,p-DDE) (JAI, 1996).

PCBs by EPA Method 8080

PCBs were not detected above the detection limits in the soil samples collected during this investigation. The confirmatory soil samples collected after the remedial excavation showed detectable concentrations of PCBs (up to 1.2 mg/kg of Aroclor) (JAI, 1996).

Metals by EPA Method 6010

Ten metals were detected above the detection limit in the soil samples collected for this investigation. The detected levels were well below the PRGs for the industrial soils. Antimony, Beryllium, Cadmium, Mercury, Molybdenum, Selenium, and Silver were not detected in the soil samples collected during this investigation. No metals were reported by the previous investigation above the Cypress PRGs for soil.

Antimony was not detected above the detection limit in the four soil samples collected during this investigation at Site JA. Previous soil samples analytical results did not report levels above the Cypress PRG level for soil.

Arsenic was detected in all soil samples at levels between 2.1 mg/kg and 3.0 mg/kg. The average value was 2.5 mg/kg. The maximum detected value is with 1.6 mg/kg below the Cypress PRG value for soil.

Barium was detected in all soil samples at levels between 37 mg/kg and 56 mg/kg. The average value was 46.75 mg/kg. The maximum detected value is with 11,944 mg/kg below the Cypress PRG value for soil.

Chromium was detected in all soil samples at levels between 30 mg/kg and 48 mg/kg. The average value was 37.75 mg/kg.

Cobalt was detected in all soil samples at levels between 4.6 mg/kg and 5.8 mg/kg. The average value was 5.325 mg/kg. No Cypress PRG value for soil is provided for cobalt.

Copper was detected in all soil samples at levels between 5.3 mg/kg and 8.4 mg/kg. The average value was 7.025 mg/kg. The maximum detected value is with 4,991.6 mg/kg below the Cypress PRG value for soil.

Lead was detected in all soil samples at levels between 1.5 mg/kg and 3.9 mg/kg. The average value was 2.475 mg/kg. The maximum detected value is with 836.1 mg/kg below the Cypress PRG value for soil.

Nickel was detected in all soil samples at levels between 26 mg/kg and 35 mg/kg. The average value was 31.25 mg/kg. The maximum detected value is with 9 mg/kg below the Cypress PRG value for soil.

Thallium was detected in two soil samples collected from soil borings JA-1 and JA-3, at levels between 19 mg/kg and 34 mg/kg. The average value was 26.5 mg/kg. The maximum detected value is with 7 mg/kg above the Cypress PRG value for soil.

Vanadium was detected in all soil samples at levels between 21 mg/kg and 30 mg/kg. The average value was 26.75 mg/kg. The maximum detected value is with 1,170 mg/kg below the Cypress PRG value for soil.

Zinc was detected in all soil samples at levels between 19 mg/kg and 26 mg/kg. The average value was 23.25. The maximum detected value is with 49,974 mg/kg below the Cypress PRG value for soil.

Soil Sieve Analysis

Two soil samples collected from the soil borings JA-2 and JA-4 were tested by PSI Geotechnical Laboratory, located in Corona, California. The soil sample collected from soil boring JA-2 at 2.25 m (7 feet) below ground surface was described as an orange-

brown silty fine and medium sand (SM). For this soil sample, 99% of the soil particles passed sieve #4 and 18% of the soil particles passed sieve #200. Soil sample collected from soil boring JA-4 at 1.5 m (5 feet) below ground surface was described a black gravelly sand (SP) with brown clayey sand with gravel (SC). For this soil sample, 62% of the soil particles passed sieve #4 and 18% of the soil particles passed sieve #200.

Laboratory Analytical Results - Groundwater

Groundwater samples were collected from the four new four installed groundwater monitoring wells, after developing and purging. Wells were purged until pH, temperature, and conductivity stabilized. Average measurements were pH (6.7), temperature (17.8 C), and conductivity (3,951 microSiemens).

No floating product or product sheen was observed in any groundwater sample collected at Site JA. Floating product was not reported in the previous investigations (JAI, 1996 and ESI, 1995).

Table 4 and 5 present a statistical analysis and a summary of the groundwater analytical data. For each contaminant a count of concentrations reported above the detection limit, a concentration maximum, a concentration minimum, a concentration average of the detected concentrations, and concentration standard deviation is provided.

Motor Oil

The groundwater oil and grease analytical results are presented in Table 4 and Figure 5. Motor oil was not detected above the detection limit of 10mg/L in the water samples collected during this investigation. Oil and grease was reported only in the grab groundwater sample collected from this site near the former UST for the ESI's investigation at a level of 2 mg/l (ESI, 1995).

Total Petroleum Hydrocarbons - Diesel

The TPH-D analytical results are presented in Table 4 and Figure 5. TPH-D was detected only in the groundwater sample collected from groundwater monitoring well JA-2 (0.8 mg/l). Well JA-2 is located along the western side of the property, at the limit of the remedial excavation. It is noted that TPH-D was not detected in the grab groundwater sample collected on August 30, 1995 (JAI, 1996, Figure 1-13).

Total Petroleum Hydrocarbons - Gasoline

The TPH-G analytical results are presented in Table 4 and Figure 5. TPH-G was detected only in one groundwater sample collected from groundwater monitoring well JA-2 (0.77 mg/l). This level is well below the levels of TPH-G detected in the previous grab groundwater sample collected on August 30, 1995 (32 mg/L) (JAI, 1996, Figure 1-13).

Volatile Organic Compounds (VOCs) by EPA Method 8260

Fourteen VOCs were detected in the water samples collected from the new four installed groundwater monitoring wells. VOCs analytical results are presented in Table 4 and Figure 5. One groundwater sample collected from well JA-4 contained thirteen of the detected VOCs. This groundwater monitoring well is located down-gradient of the former on-site sumps. The other three groundwater samples contained only minor amounts of detected VOCs. The detected concentrations of VOCs are less than the detected amounts in the grab groundwater sample collected on August 30, 1995 (JAI, 1996).

- 1,1-Dichloroethane was detected only in one groundwater sample collected from well JA-4 (0.0082mg/l). This level is with 0.0032 mg/l above the MCL for drinking water for this compound. No 1,1-Dichloroethane was reported before for this project site.
- 1,2 Dichloroethane was detected only in one groundwater sample collected from well JA-2 (0.0088mg/l). This level is with 0.0083 mg/kg above the EPA Region 9 PRG level for tap water for this compound. No 1,2-Dichloroethane was reported before for this project site.
- 1,1-Dichloroethene was detected only in one groundwater sample collected from well JA-4 (0.0062 mg/l). This level is with 0.00608 mg/kg above the EPA Region 9 PRG level for drinking water for this compound. No 1,2-Dichloroethene was reported before for this project site.

Naphthalene was detected in all four groundwater samples collected from this project site. The detected levels ranged between 0.0013 to 0.0083 mg/l. The average value of 0.0058 mg/l. The maximum level is with 0.0021 mg/l above the EPA Region 9 PRG level for tap water. No naphthalene was reported before in the grab groundwater sample collected at Site JA.

Tetrachloroethene (PCE) was detected only in one groundwater sample collected from the well JA-4 (0.13 mg/l). This level is with 0.125 mg/l above the MCL for drinking water. Trichloroethene (TCE) was detected in two of the tested groundwater monitoring wells, JA-2 and JA-4. The detected levels were 0.0007 and 0.63 mg/l, respectively. Only the level detected in well JA-4 is with 0.625 mg/l above the MCL for drinking water.

Vinyl chloride was detected only in one groundwater sample collected from the well JA-4 (0.0011 mg/l). This level is with 0.006 mg/l above the MCL for drinking water.

Benzene was detected only in the groundwater sample collected from well JA-4 (0.0007mg/l). This level is with 0.0093 mg/l below the MCL for drinking water for this compound and well below the previous maximum detected level in the grab groundwater sample collected on August 30, 1995 (32 mg/l) (JAI, 1996).

Chloroform was detected only in one groundwater sample collected from well JA-4 (0.0017mg/l). This level is with 0.0093 mg/kg below the EPA Region 9 PRG level for tap water for this compound.

Cis-1,2-Dichloroethene was detected only in one groundwater sample collected from well JA-4 (0.057 mg/l). No 1,2--Dichloroethane was reported before for this project site. No MCL or EPA Region 9 PRG is provided for this chemical.

Trans-1,2-Dichloroethene was detected only in one groundwater sample collected from well JA-4 (0.0008 mg/l). No trans-1,2-Dichloroethane was reported before for in the grab groundwater samples collected for this project site. No MCL or EPA Region 9 PRG is provided for this chemical.

1,1,1-Trichloroethane and 1,1,2-Trichloroethane were detected only in the well JA-4 at levels of 0.0042 and 0.0006 mg/l, respectively. These two levels are with 0.1958 mg/l and 0.0044 mg/l below the MCLs for drinking water.

Trichlorotrifluoroethane was detected only in one groundwater sample collected from the well JA-4 (0.0075 mg/l). This level is with 0.1425 mg/l below the MCL for drinking water.

Semivolatile Organic Compounds (SVOCs) using EPA Method 8270

SVOCs analytical results are presented in Table 4 and Figure 5. Only one compound was detected by EPA Method 8270: napthalene, in the groundwater sample collected from well JA-1 (0.002mg/l). This level is with 0.0042 mg/l below the PRG level for tap water. Naphthalene levels detected by EPA Methods 8270 and 8260 cannot be compared because different sample preparation methods were used in the laboratory.

Organochlorine Pesticides by EPA Method 8080

Organochlorine pesticides were not detected above the detection limit in the groundwater samples collected for this investigation. The previous investigation results do not present detected levels of organochlorine pesticides above the detection limits.

Polychlorinated Biphenyls (PCBs)

Polychlorinated Biphenyls (PCBs) were not detected above the detection limits in the groundwater samples collected for this investigation. The previous investigation results did not present detected levels of PCBs above the detection limits in the tested grab groundwater samples.

7.2 CONTAINER FREIGHT SITE (SITE CF)

Laboratory Analytical Results - Soil

Tables 6 and 7 present a statistical analysis of the analytical data for soil samples collected at former Container Freight site (Site CF). For each contaminant a count of concentrations reported above the detection limit, a concentration maximum, a concentration minimum, a concentration average of the detected concentrations, and concentration standard deviation is provided.

Motor Oil

The soil motor oil analytical results are presented in Table 6 and Figure 4. Oil and grease was detected above the detection limit in 8 of the ten tested soil samples, at levels between 23 mg/kg to 630 mg/kg. The maximum level (630 mg/kg) was detected in the soil boring advanced for groundwater monitoring well CF-1, at 0.5 meters (m) (1.64 feet below ground surface (bgs)). The motor oil concentration decreases with depth, i.e. at 2.0 m (6.56 feet) the detected level was 35 mg/kg. In the soil boring CF-2, the maximum detected level was 520 mg/kg at 1 m bgs. Soil samples collected from soil boring CF-3 contained comparable levels of motor oil (<100 mg/kg). Motor oil levels detected in the soil samples collected at the time of the former UST removal were 180 mg/kg to 1,100 mg/kg (JAI, 1995). Possible motor oil was reported by 1997 investigation performed by Harding Lawson Associates (HLA) at a level of 7,900 mg/kg.

Total Petroleum Hydrocarbons - Diesel (TPH-D)

The TPH-D analytical results for soil samples are presented in Table 6 and Figure 4. TPH-D was detected in all tested soil samples collected during this investigation, at levels ranging between 19 mg/kg to 370 mg/kg. The detected levels decrease with depth only in the soil samples collected from soil boring CF-1. The results of the soil samples collected from CF-2 and CF-3 did not present the same trend. TPH in the diesel range was detected by a previous subsurface investigation at a level up to 380 mg/kg in the soil sample collected from the former UST excavation pit (JAI, 1995). HLA's soil sampling performed in 1997 showed up to 2,600 mg/kg of TPH-D.

Total Petroleum Hydrocarbons - Gasoline

The TPH-G analytical results for soil samples are presented in Table 6 and Figure 4. TPH-G was detected only in two of the soil samples collected during this investigation from this site, in soil borings CF-1 and CF-2. The detected levels were 0.77 mg/kg and

0.69 mg/kg. These levels were below the level of TPH-G detected at the time of former UST removal (6.4 mg/kg).

Volatile Organic Compounds (VOC) detected by EPA Method 8260B.

The VOC analytical results for soil samples collected during this investigation are presented in Table 6 and Figure 4. Two VOCs (benzene and naphthalene) were detected in the soil samples collected from this site. Benzene was detected in two soil samples collected at 1 m and 3 m below ground surface (bgs) from soil borings CF-1 and CF-2 (0.001 mg/kg and 0.4 mg/kg, respectively, with an average of 0.2 mg/kg). The maximum value is below the previous maximum detected level of 13 mg/kg (Caltrans, 1998).

Naphthalene was detected in seven soil samples collected at different depths (0.5 m, 1 m, 2 m, and 3 m bgs) from soil borings CF-1, CF-2, and CF-3. The detected levels were between 0.005 and 390 mg/kg which are below the previous maximum detected value of 2,600 mg/kg (Caltrans, 1998). The average concentration was 56 mg/kg.

Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270C

The SVOC analytical results for soil samples collected during this investigation are presented in Table 6 and Figure 4. Sixteen SVOCs were detected in the tested soil samples, as follows:

Benzo[a]anthracene was detected in five soil samples collected from all soil borings, at detected levels between 0.91 mg/kg and 16 mg/kg. The maximum detected level (16 mg/kg) is below the previous maximum detected level of 300 mg/kg (Caltrans, 1998).

Benzo[a]pyrene was detected in 7 soil samples collected from all soil borings, at detected levels between 0.79 mg/kg to 40 mg/kg. The average value was 9.75 mg/kg. The maximum detected level (40 mg/kg) is below the previous maximum detected level of 520 mg/kg (Caltrans, 1998).

Benzo[b]fluoranthene was detected in 8 soil samples collected from all soil borings at depths between 0.5 m and 2 m, at detected levels between 0.59 mg/kg to 47 mg/kg. The average value was 10.7 mg/kg. The maximum detected level (47 mg/kg) is below the previous maximum detected level of 240 mg/kg (Caltrans, 1998).

Benzo[k]fluoranthene was detected in 7 soil samples collected from all soil borings at depths between 0.5m and 2 m bgs, at detected levels between 0.61 mg/kg and 47 mg/kg.

The average value was 12.1 mg/kg. The maximum detected level (47 mg/kg) is below the previous maximum detected level of 140 mg/kg (Caltrans, 1998).

Dibenzo[a,h]anthracene was detected in 3 soil samples collected from the soil borings CF-2 and CF-3 at depths between 1 m and 2 m bgs, at detected levels between 1.2 mg/kg to 6.3 mg/kg. The average value was 3.1 mg/kg. The maximum detected level (6.3 mg/kg) is below the previous maximum detected level of 67 mg/kg (Caltrans, 1998).

Indeno[1,2,3-cd]pyrene was detected in 4 soil samples collected from the soil borings CF-2 and CF-3 at depths between 0.5 to 2 m bgs, at detected levels between 2.6 mg/kg to 30 mg/kg. The average value was 13.5 mg/kg. The maximum detected level (30 mg/kg) is below the previous maximum detected level of 480 mg/kg (Caltrans, 1998).

Acenaphthene was detected only in one soil sample collected from the soil boring CF-2, at 0.5 m bgs (0.34 mg/kg). The detected level is below the previous maximum detected level of 170 mg/kg (Caltrans, 1998).

Acenaphthylene was detected in five soil samples collected from the soil borings CF-1 at 2 m bgs, CF-2 at 0.5 m and 2 m bgs, and CF-3 at 1 and 2 m bgs. The detected levels were between 0.675 mg/kg and 2 mg/kg. The maximum detected level (2 mg/kg) is below the previous maximum detected level of 230 mg/kg (Caltrans, 1998).

Anthracene was detected in five soil samples collected from all soil borings, at detected levels between 0.5 mg/kg and 4.6 mg/kg. The average value was 2 mg/kg. The maximum detected level (4.6 mg/kg) is below the previous maximum detected level of 180 mg/kg (Caltrans, 1998).

Benzo[g,h,i]perylene was detected in 7 soil samples collected from all soil borings at depths between 0.5 m and 2 m, at detected levels between 1 mg/kg to 33 mg/kg. The average value was 9.7 mg/kg. The maximum detected level (33 mg/kg) is below the previous maximum detected level of 700 mg/kg (Caltrans, 1998).

Chrysene was detected in 7 soil samples collected from all soil borings at depths between 0.5 m and 2 m bgs, at detected levels between 0.62 mg/kg and 19 mg/kg. The average value was 5.67 mg/kg. The maximum detected level (19 mg/kg) is below the previous maximum detected level of 470 mg/kg (Caltrans, 1998).

Fluoranthene was detected in 7 soil samples collected from all soil borings at depths between 0.5 m and 2 m bgs, at detected levels between 0.59 mg/kg to 62 mg/kg. The

average value was 16.7 mg/kg. The maximum detected level (62 mg/kg) is below the previous maximum detected level of 1,100 mg/kg (Caltrans, 1998).

Fluorene was detected in 4 soil samples collected from the soil borings CF-2 and CF-3 at depths between 0.5 m and 2 m, at detected levels between 0.53 mg/kg to 1.6 mg/kg. The average value was 0.88 mg/kg. The maximum detected level (1.6 mg/kg) is below the previous maximum detected level of 160 mg/kg (Caltrans, 1998).

Naphthalene was detected in 6 soil samples collected from all soil borings at depths between 0.5 m to 2 m. The detected levels were between 0.37 mg/kg and 2.4 mg/kg. The average value was 1.3 mg/kg. The maximum detected level (2.4 mg/kg) is below the previous maximum detected level of 2,600 mg/kg (Caltrans, 1998).

Phenanthrene was detected in 7 soil samples collected from all soil borings at depths between 0.5 m and 2 m. The detected levels were between 0.81 mg/kg to 26 mg/kg. The average value was 8.5 mg/kg. The maximum detected level (26 mg/kg) is below the previous maximum detected level of 1,800 mg/kg (Caltrans, 1998).

Pyrene was detected in 8 soil samples collected from all soil borings at depths between 0.5 m and 2 m bgs. The detected levels were between 0.85 mg/kg to 74 mg/kg. The average value was 8.5 mg/kg. The maximum value (74 mg/kg) is below the previous maximum detected level of 1,200 mg/kg (Caltrans, 1998).

Organochlorine Pesticides by EPA Method 8080

Organochlorine pesticides were detected only in the soil samples collected for this investigation from the soil borings CF-1 and CF-2. No organochloride pesticides were tested by the previous soil samplings performed at this site (Caltrans, 1998).

4,4-DDE was detected at two different levels, 0.5 m and 1 m bgs, in soil boring CF-1. The detected levels were between 0.009 mg/kg and 0.018 mg/kg. The average value was 0.0135 mg/kg.

4,4'-DDD was detected in two soil samples collected from soil borings CF-1 and CF-2, at levels between 0.003 mg/kg and 9.3 mg/kg. The average value was 4.6 mg/kg.

Dieldrin was detected only in one soil sample collected at 1 m bgs, from the soil boring CF-1, at a level of 0.002 mg/kg.

Endosulfan I was detected only in one soil sample collected at 0.5 m bgs, in the soil boring CF-1, at a level of 0.006 mg/kg.

PCBs by EPA Method 8080

PCBs as Arochlor-1260 was detected above the detection limit only in one soil sample collected from the soil boring CF-1 at 0.5 m bgs. The detected concentration is 0.082 mg/kg. Previous soil samplings performed at this site did not report PCBs above the detection limits.

Metals by EPA Method 6010

Twelve metals were detected above the detection limit in the soil samples collected for this investigation from the Container Freight site. Antimony, Beryllium, Selenium, Silver, and Thallium were not detected in the soil samples collected during this investigation.

Arsenic was detected in 9 soil samples at levels between 2.5 mg/kg and 12 mg/kg. The average value was 6.2 mg/kg. The maximum detected value is below the previous maximum detected value of 22 mg/kg (Caltrans, 1998).

Barium was detected in all soil samples at levels between 18 mg/kg and 130 mg/kg. The average value was 83.33 mg/kg. The maximum detected value is below the previous maximum detected value of 310 mg/kg (Caltrans, 1998).

Cadmium was detected in 2 soil samples at levels between 0.62 mg/kg and 0.28 mg/kg. The average value was 0.72 mg/kg. The maximum detected value is below the previous maximum detected value of 3.7 mg/kg (Caltrans, 1998).

Chromium was detected in all soil samples at levels between 2.9 mg/kg and 35 mg/kg. The average value was 22.8 mg/kg. The maximum detected value is below the previous maximum detected value of 5,000 mg/kg (Caltrans, 1998).

Cobalt was detected in all soil samples at levels between 0.59 mg/kg and 8.8 mg/kg. The average value was 5.46 mg/kg. The maximum detected value is below the previous maximum detected value of 2.2 mg/kg (Caltrans, 1998).

Copper was detected in all soil samples at levels between 14 mg/kg and 80 mg/kg. The average value was 43.9 mg/kg. The maximum detected value is below the previous maximum detected value of 920 mg/kg (Caltrans, 1998).

Lead was detected in all soil samples at levels between 22 mg/kg and 74 mg/kg. The average value was 54.7 mg/kg. The maximum detected value is below the previous maximum detected value of 27,000 mg/kg (Caltrans, 1998).

Mercury was detected in all soil samples at levels between 0.18 mg/kg and 0.3 mg/kg. The average value was 0.242 mg/kg. The maximum detected value is below the previous maximum detected value of 2.6 mg/kg (Caltrans, 1998).

Molybdenum was detected in all soil samples at levels between 0.66 mg/kg and 1.4 mg/kg. The average value was 0.88 mg/kg.

Nickel was detected in all soil samples at levels between 7.6 mg/kg and 41 mg/kg. The average value was 24.6 mg/kg. The maximum detected value is below the previous maximum detected value of 72 mg/kg (Caltrans, 1998).

Vanadium was detected in all soil samples at levels between 13 mg/kg and 37 mg/kg. The average value was 26.55 mg/kg. The maximum detected value is below the previous maximum detected value of 38 mg/kg (Caltrans, 1998).

Zinc was detected in all soil samples at levels between 30 mg/kg and 230 mg/kg. The average value was 108.8 mg/kg. The maximum detected value is below the previous maximum detected value of 17,000 mg/kg (Caltrans, 1998).

All concentrations of the ten metals detected during this investigation at the Site CF are below their maximum detected levels reported by the previous subsurface investigations performed at this site.

Soil Sieve Analysis

One soil sample collected from the soil boring CF-2 at 0.75 m (2.25 feet) bgs was tested by PSI Geotechnical Laboratory, located in Corona, California. The soil sample was described as a black gravelly sand (SW). For this soil sample, 62% of the soil particles passed sieve #4 and 18% of the soil particles passed sieve #200.

Laboratory Analytical Results – Groundwater

Groundwater samples were collected from the three new installed groundwater monitoring wells, after developing and purging. Wells were purged until pH, temperature, and conductivity stabilized. Average measurements were pH (6.9), temperature (18.7 C), and conductivity (1430 microSiemens).

No floating product was observed in any groundwater sample collected at the Site CF. A dark-gray color and sulfide and volatile odors were observed at the time of the groundwater sampling. Floating product was not reported in the previous investigations (JAI, 1996 and ESI, 1995).

Table 8 and 9 present a statistical analysis and a summary of the groundwater analytical data. For each contaminant a count of concentrations reported above the detection limit, a concentration maximum, a concentration minimum, a concentration average of the detected concentrations, and concentration standard deviation is provided.

Motor Oil

The groundwater TPH-motor oil analytical results are presented in Table 8 and Figure 5. Motor oil was not detected above the detection limits of 0.4 to 4.0 mg/L in the water samples collected during this investigation, at this site. No motor oil was reported in the grab groundwater samples collected from this site by the previous investigations (JAI, 1996 and JAI, 1995).

Total Petroleum Hydrocarbons - Diesel

The TPH-D analytical results are presented in Table 8 and Figure 5. TPH-D was detected in two groundwater samples collected from wells CF-1 and CF-2 (21 mg/kg and 2.8 mg/l, respectively). The average value was 8.5 mg/kg.

Total Petroleum Hydrocarbons - Gasoline

The TPH-G analytical results are presented in Table 8 and Figure 5. TPH-G was detected in all groundwater samples collected from this site at levels between 0.5 mg/l to 94 mg/l. TPH-G was detected in the grab groundwater sample collected on August 30, 1995 at a level of 32 mg/L (JAI, 1996, Figure 1-13).

Volatile Organic Compounds (VOCs) by EPA Method 8260

Nine VOCs were detected in the water samples collected from the new installed groundwater monitoring wells at Site CF. VOCs analytical results are presented in Table 8 and Figure 5. One groundwater sample collected from well CF-2 contained eight of the detected VOCs. The detected concentrations of VOCs are less than the detected amounts in the grab groundwater sample collected on August 30, 1995 (JAI, 1996).

Benzene was detected in all groundwater samples at levels between 0.0009 mg/l and 34 mg/l. The average value was 8.6 mg/l. The maximum detected level is with 33.999 mg/l above the MCL for drinking water for this compound. Previous investigations detected a maximum level of 2.4 mg/l of benzene (Caltrans, 1998).

Carbon Disulfide was detected only in one groundwater sample collected from well CF-2 (0.068 mg/l). This chemical was not reported by the previous subsurface investigations (Caltrans, 1998).

Naphthalene was detected in all groundwater samples collected from this site at levels between 0.0017 mg/l and 19 mg/l. The average value was 5.9 mg/L. Previous investigations detected a maximum level of 23 mg/l of naphthalene (Caltrans, 1998).

Styrene was detected in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 0.0008 mg/l and 0.59 mg/l. The average value was 0.29 mg/l. The maximum detected level is with 0.49 mg/l above MCL for drinking water for this compound. Previous investigations detected a maximum level of 0.061 mg/l of styrene.

Toluene was detected in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 0.01 mg/l and 1.6 mg/l. The average value was 0.54 mg/l. The maximum detected level is with 1.45 mg/l above the MCL for drinking water for this compound. Previous investigations detected a maximum level of 0.29 mg/l of toluene (Caltrans, 1998).

1,2,4-Trimethylbenzene was detected only in one groundwater sample collected from well CF-2 (0.0014 mg/l). This level is with 0.0036 mg/kg above the EPA Region 9 PRG level for tap water for this compound. No 1,2,4-Trimmethylbenzene was reported before for this project site (Caltrans, 1998).

Trichloroethene was detected only in one groundwater sample collected from well CF-1 (0.19 mg/l). This level is with 0.185 mg/l above the MCL for drinking water for this compound. No trichloroethene was reported before for this project site (Caltrans, 1998).

Ethylbenzene was detected in two of the groundwater samples collected from wells CF-1 and CF-2 (0.34 mg/l and 0.012 mg/l, respectively). This level is with 0.36 mg/l below the MCL for drinking water for this compound. Previous investigations detected a maximum level of 0.140 mg/l of ethylbenzene Caltrans, 1998).

Xylenes (total) were detected only in one groundwater sample collected from well CF-2 (0.011 mg/l). This level is 1.739 mg/l below the MCL for drinking water for this compound. Previous investigations detected a maximum level of 0.120 mg/l of xylenes (Caltrans, 1998).

Semivolatile Organic Compounds (SVOCs) using EPA Method 8270

SVOCs analytical results are presented in Table 8 and Figure 5. Nineteen SVOCs were detected by EPA Method 8270 in the groundwater samples collected from Site CF, as follows:

Benzo[a]anthracene was detected only in one groundwater sample collected from well CF-3 (0.004 mg/l). This value is with 0.003908 mg/l above the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 2.8 mg/l (Caltrans, 1998).

Benzo[a]pyrene was detected in two groundwater samples collected from the wells CF-2 and CF-3 at levels between 0.003 mg/l and 0.008 mg/l. The average value was 0.004 mg/l. The maximum detected level is with 0.0078 mg/l above the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 5,000 mg/l (Caltrans, 1998).

Benzo[b]fluoranthene was detected in two groundwater samples collected from the wells CF-2 and CF-3 at levels between 0.003 mg/l and 0.01 mg/l. The average value was 0.005 mg/l. The maximum detected level is with 0.009908 above the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 2.5 mg/l (Caltrans, 1998).

Benzo[k]fluoranthene was detected in two groundwater samples collected from the wells CF-2 and CF-3 at levels between 0.003 mg/l and 0.01 mg/l. The average value was 0.005 mg/l. The maximum detected level is with 0.00908 above the EPA Region 9 PRG level for drinking water. Previous investigations detected a maximum level of 2.7 mg/l (Caltrans, 1998).

Indeno[1,2,3-cd]pyrene was detected in only one groundwater sample collected from well CF-3 (0.006 mg/l). This level is with 0.00508 mg/l above the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 3,300 mg/l (Caltrans, 1998).

Naphthalene was detected in all groundwater samples at levels between 0.007 mg/l to 5.5 mg/l. The average value was 1.8 mg/l. The maximum detected level is with 5.4938 mg/l above the EPA region 9 PRG level for tap water. Previous investigations detected a maximum level of 23 mg/l (Caltrans, 1998).

Acenaphthene was detected only in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 0.004 mg/l and 0.008 mg/l. The average value was

0.005 mg/l. The maximum detected level is 0.366 mg/l below EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 4.2 mg/l (Caltrans, 1998).

Acenaphthylene was detected only in one groundwater sample collected from well CF-2 (0.069 mg/l). Previous investigations detected a maximum level of 3.6 mg/l (Caltrans, 1998). No MCL/PRG for drinking water was published for this chemical.

Anthracene was detected in two groundwater samples collected from the wells CF-2 and CF-3 at levels between 0.001 mg/l and 0.007 mg/l. The average value was 0.005 mg/l. The maximum detected level is with 1.793 below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 4.3 mg/l (Caltrans, 1998).

Benzo[g,h,i]perylene was detected in one groundwater sample collected from the well CF-3 (0.009 mg/l Previous investigations detected a maximum level of 5.1 mg/l, (Caltrans, 1998). No MCL/EPA Region 9 PRG level is provided for this chemical.

Chrysene was detected in two groundwater samples collected from the wells CF-2 and CF-3 at levels between 0.002 mg/l and 0.006 mg/l. The average value was 0.0037 mg/l. The maximum detected level is with 0.0032 mg/l below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 5.8 mg/l (Caltrans, 1998).

Dibenzofuran was detected in two groundwater samples collected from the wells CF-1 and CF-2 at a level of 0.003 mg/l. This detected level is with 0.021 mg/l below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 0.000002 mg/l (Caltrans, 1998).

Fluoranthene was detected in all groundwater samples collected, at detected levels between 0.007 mg/kg and 0.014 mg/kg. The average value was 0.011 mg/kg. The maximum detected level is with 1.486 mg/l below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 12 mg/l (Caltrans, 1998).

Fluorene was detected in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 0.013 mg/l and 0.016 mg/l. The maximum detected level is with 0.224 mg/l below the PRG level for tap water. Previous investigations detected a maximum level of 1.6 mg/l (Caltrans, 1998), with 0.224 mg/l above the EPA Region 9 PRG level for tap water.

2-Methylnaphthalene was detected in two groundwater samples collected from the wells CF-1 and CF-2, at detected levels between 0.022 mg/kg and 0.067 mg/kg. The average

value was 0.032 mg/kg. Previous investigations did not report detected levels for this chemical (Caltrans, 1998).

4-Methylphenol was detected only in one groundwater sample collected from the well CF-2 (0.17 mg/l and 0.041 mg/l (duplicate)). The maximum detected level is with 0.01 mg/l below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 0.370 mg/l (Caltrans, 1998) which is with 0.19 mg/l above the PRG level.

Phenanthrene was detected in all groundwater samples at levels between 0.004 mg/l to 0.055 mg/l. The average value was 0.035 mg/l. Previous investigations detected a maximum level of 22 mg/l (Caltrans, 1998).

Phenol was detected in two groundwater samples collected from the wells CF-1 and CF-2, at levels between 0.011 mg/l and 0.046 mg/l. The average value was 0.027 mg/l. The maximum detected level is with 21.959 mg/l below the EPA Region 9 PRG for tap water. Previous investigations detected a maximum level of 0.24 mg/l (Caltrans, 1998).

Pyrene was detected in all groundwater samples, at levels between 0.011 mg/l and 0.018 mg/l. The average value was 0.0145 mg/l. The maximum detected level is with 0.162 mg/l below the EPA Region 9 PRG level for tap water. Previous investigations detected a maximum level of 14 mg/l (Caltrans, 1998).

As presented above, eighteen of the SVOCs detected levels were well below the maximum detected levels reported by the previous investigations performed at this site.

Organochlorine Pesticides by EPA Method 8080

Organochlorine pesticides were not detected in the water samples collected during this investigation at Site CF. Previous investigations did not report detectable levels of organochlorine pesticides in the tested groundwater samples.

PCBs by EPA Method 8080

PCBs were not detected above the detection limit in the water samples collected during this investigation at Site CF. Previous investigations did not report detectable levels of PCBs in the groundwater samples.

Metals by EPA Method 6010

Only one metal was detected above the detection limit in the groundwater samples collected for this investigation from the Container Fright site. The detected level was 0.28 mg/l of barium. This detected level is with 2,599 mg/l below the EPA Region 9 PRG for tap water.

Previous investigations reported the following maximum levels of metals in the site groundwater: 0.054 mg/l of arsenic, 0.11 mg/l of barium, 0.006 mg/l cadmium, 1.4 mg/l of total chromium, 0.02 mg/l of cobalt, 7.0 mg/l of copper, 14 mg/l of lead, 0.008 mg/l of mercury, 1.8 mg/l of nickel, 0.01 mg/l of vanadium, and 28 mg/l of zinc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the information presented in this report, the following conclusions have been reached:

Site JA

- None of the soil samples collected from the Site JA contained detectable levels of TPH-G, TPH-D, motor oil, organochlorine pesticides, and polychlorinated biphenyls. Five VOCs(1,1-Dichloroethane, Naphthalene, Styrene, 1,1,1-Trichloroethane, and Trichlorotrifluorethane) and five SVOCs (Acenaphthylene, Fluoranthene, Naphthlene, Phenanthrene, and Pyrene) were detected at levels well below the industrial PRG levels for soil.
- Ten metals (Arsenic, Barium, Chromium, Cobalt, Copper, Lead, Nickel, Thallium, Vanadium, Zinc) were detected above the detection limit in the soil samples collected for this investigation from the Site JA. The detected levels were well below the industrial PRG levels for soils. Antimony, Beryllium, Cadmium, Mercury, Molybdenum, Selenium, Silver, and Thallium were not detected in the soil samples collected during this investigation at Site JA. No metals were reported by the previous investigations above the industrial PRG levels for soil.
- Groundwater samples collected from the four new groundwater monitoring wells installed at Site JA did not contain motor oil, organochlorine pesticides or PCBs above the detection limits. Only seven of the detected VOCs (1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, Naphthalene, Tetrachloroethane (PCE), Trichloethene (TCE), and Vinyl Chloride) were above MCL/EPA Region 9 PRG levels for drinking water. The highest levels of contaminants were detected in the groundwater sample collected from the groundwater monitoring well JA-4, located down gradient of the former site sumps.

Site CF

 Soil samples collected from the Site CF contained detectable levels of TPH-G, TPH-D, and motor oil. TPH-G was detected at levels between 0.69 mg/kg and 0.77 mg/kg. TPH-D was detected at levels ranging between 19 mg/kg to 370 mg/kg. The detected levels decrease with depth, between 0.5 m to 2 m (1.65 feet to 6 feet).

- Two VOCs (benzene and naphthalene) were detected at levels above the detection limit. Only maximum level of naphthalene was with 200 mg/l above the Cypress PRG level for soil. Sixteen SVOCs were detected in the tested soil samples above the detection limit. All of the detected levels were well below the maximum detected levels reported by the previous investigations performed at this site. The highest levels of SVOCs were detected in the soil samples collected from the boring CF-2 at 2 m (6 feet) below ground surface.
- Organochlorine pesticides as 4,4'-DDD was detected only in two soil samples, with the maximum level (9.3 mg/kg).
- Aroclor-1260 was the only PCBs detected at a level of 0.082 mg/kg. Previous soil samplings performed at this site had not reported PCBs levels above the detection limits.
- Twelve metals were detected in the collected soil samples at levels above the detection limits.
- Groundwater samples collected from the three new installed groundwater monitoring wells of the Site CF contained detectable levels of TPH-G, TPH-D, VOCs, and SVOCs. TPH-G was detected in all groundwater samples at levels between 0.5 mg/L and 94 mg/L. TPH-D was detected in two groundwater samples collected from the wells CF-1 and CF-2 at levels between 2.8 mg/L and 21 mg/L.
- Nine VOCs were detected in the water samples collected during this investigation.
 One groundwater sample collected from the groundwater monitoring well CF-2
 contained eight of the detected VOCs. Benzene, Carbon Disulfide, Ethylbenzene,
 Naphthalene, Styrene, Toluene, 1,2,4-Trimethylbenzene, Trichloroethene, and
 Xylenes were detected at levels above the MCL/EPA Region 9 PRG levels for
 drinking water.
- Nineteen SVOCs were detected in the groundwater samples tested during this investigation. Eighteen of the SVOCs detected levels were well below the maximum detected levels reported by the previous investigations.
- Motor oil, organochlorine pesticides, and PCBs were not detected in the groundwater samples collected from the Site CF.
- Only one metal (barium) was detected above the detection limit in the groundwater samples collected for this investigation from the Site CF.

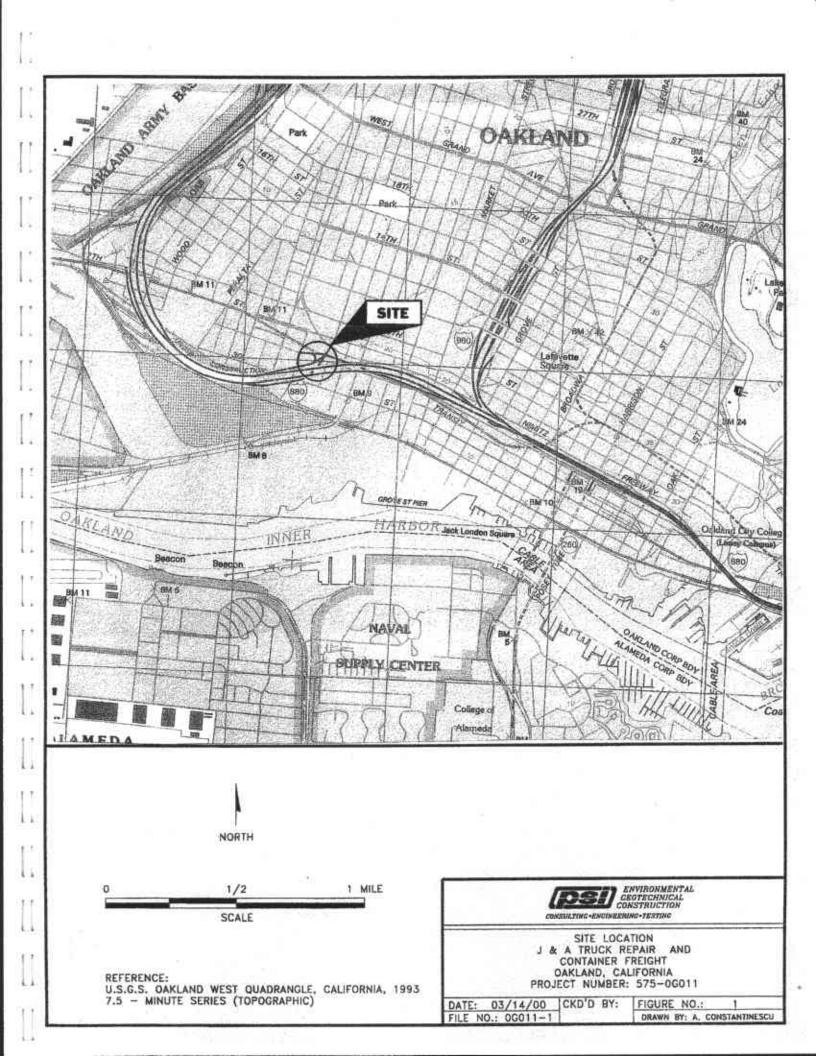
Recommendations

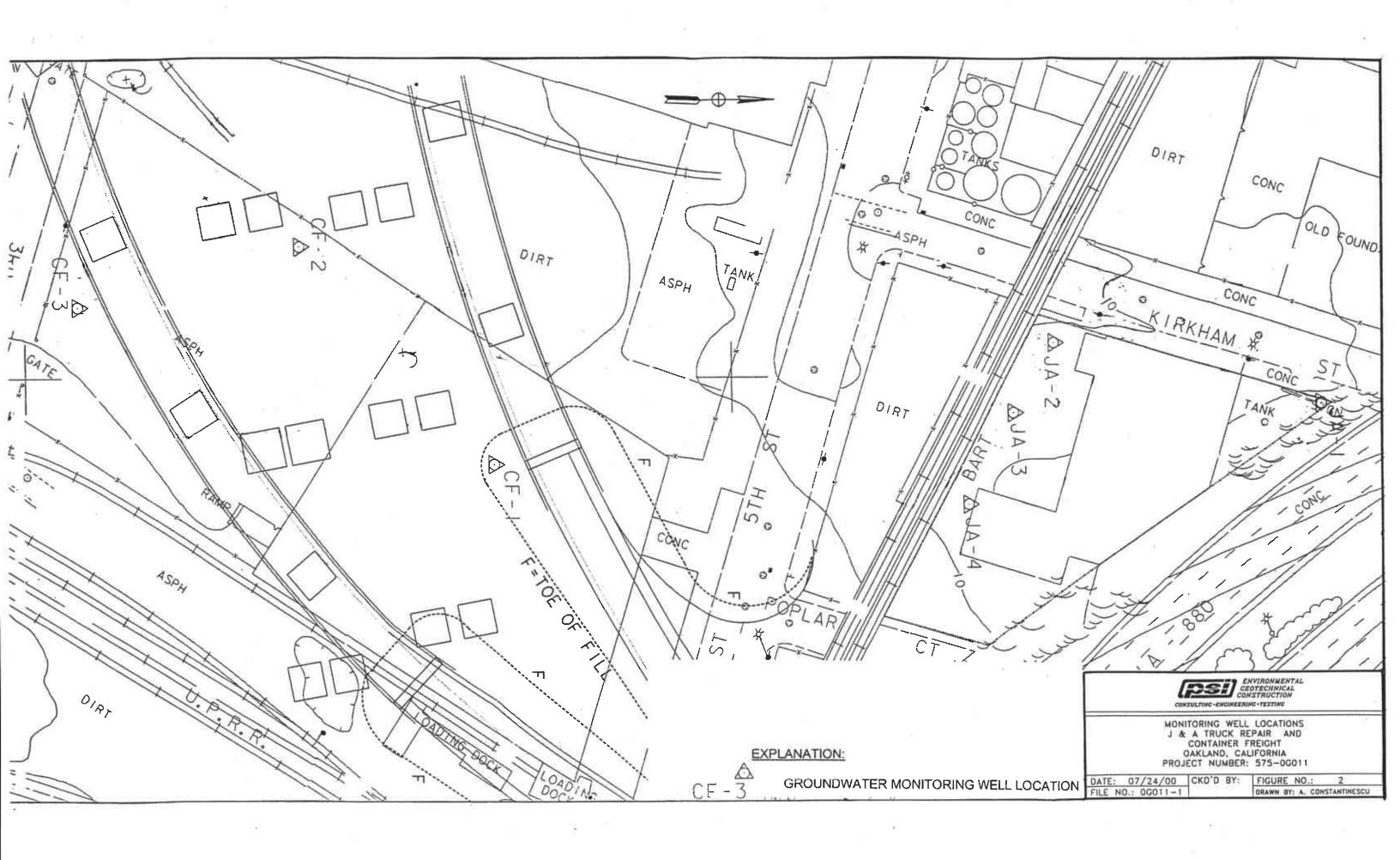
Based on the results presented in this report, PSI recommends the following course of action:

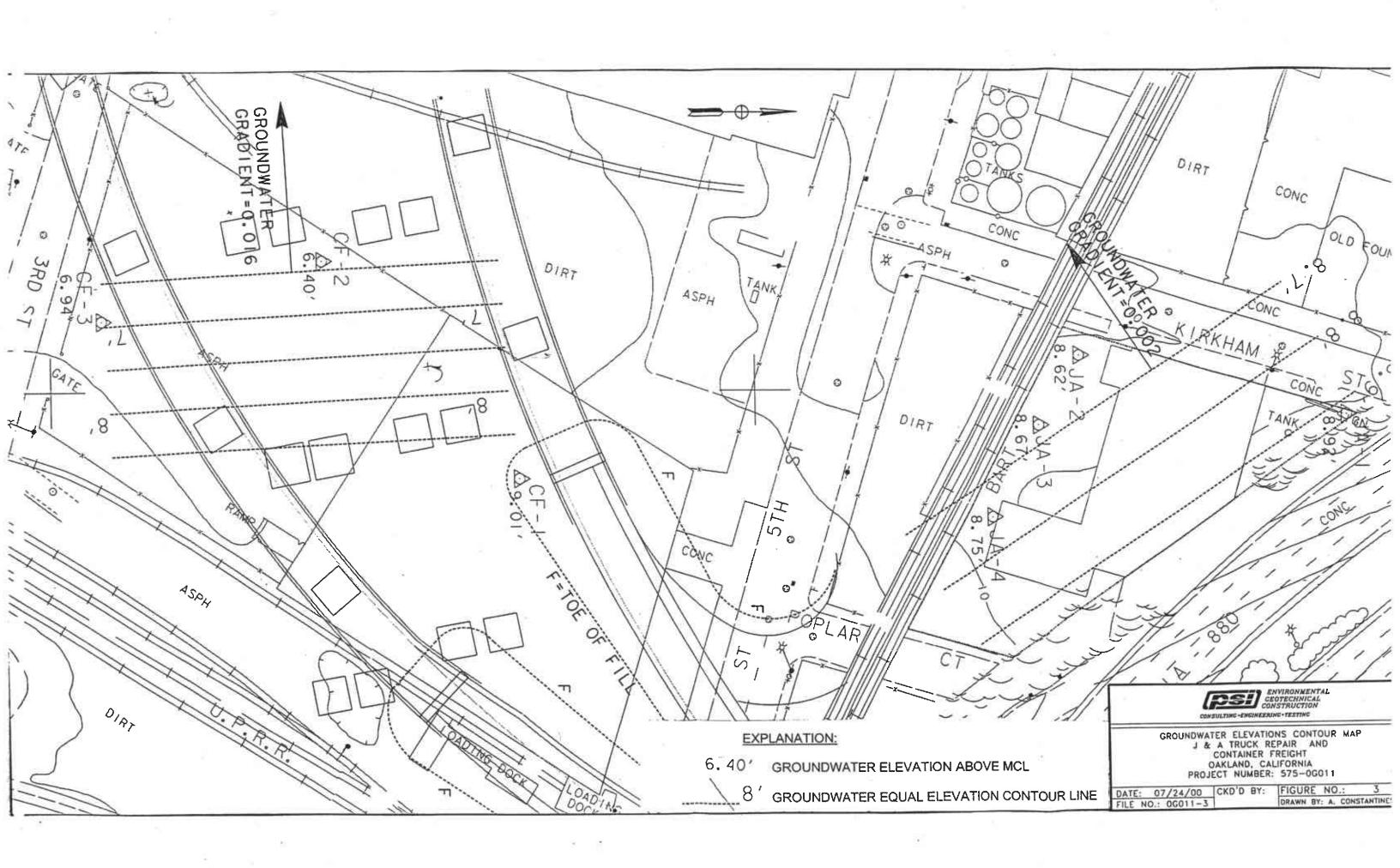
Continued groundwater monitoring at the Site JA and Site CF, on a quarterly basis.
 According to the DTSC recommendations, total dissolved solids (TDS) measurements should be collected. Also, filtered and unfiltered water samples from the Container Freight site should be analyzed for SVOCs using EPA Method 8270.

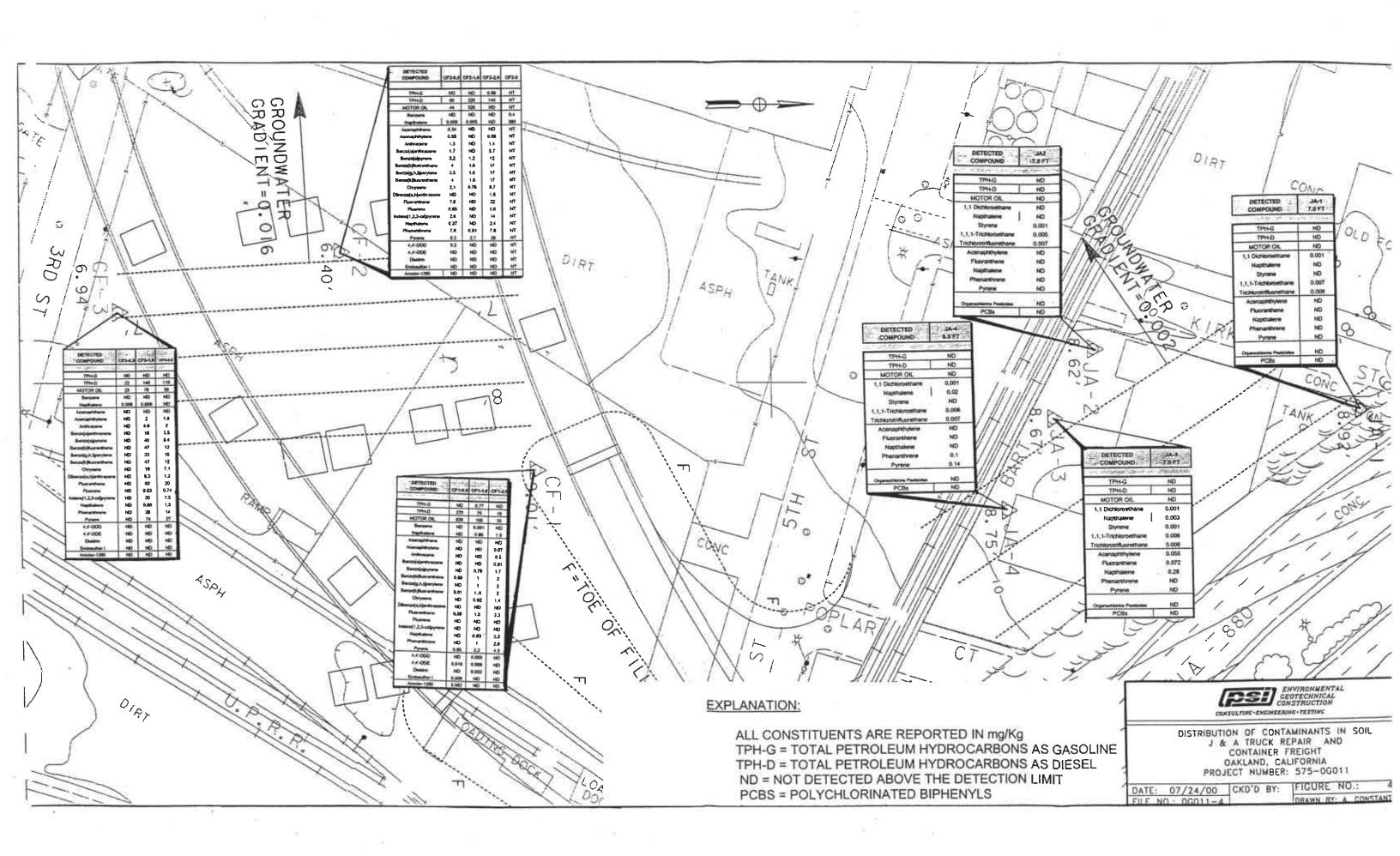
REFERENCES

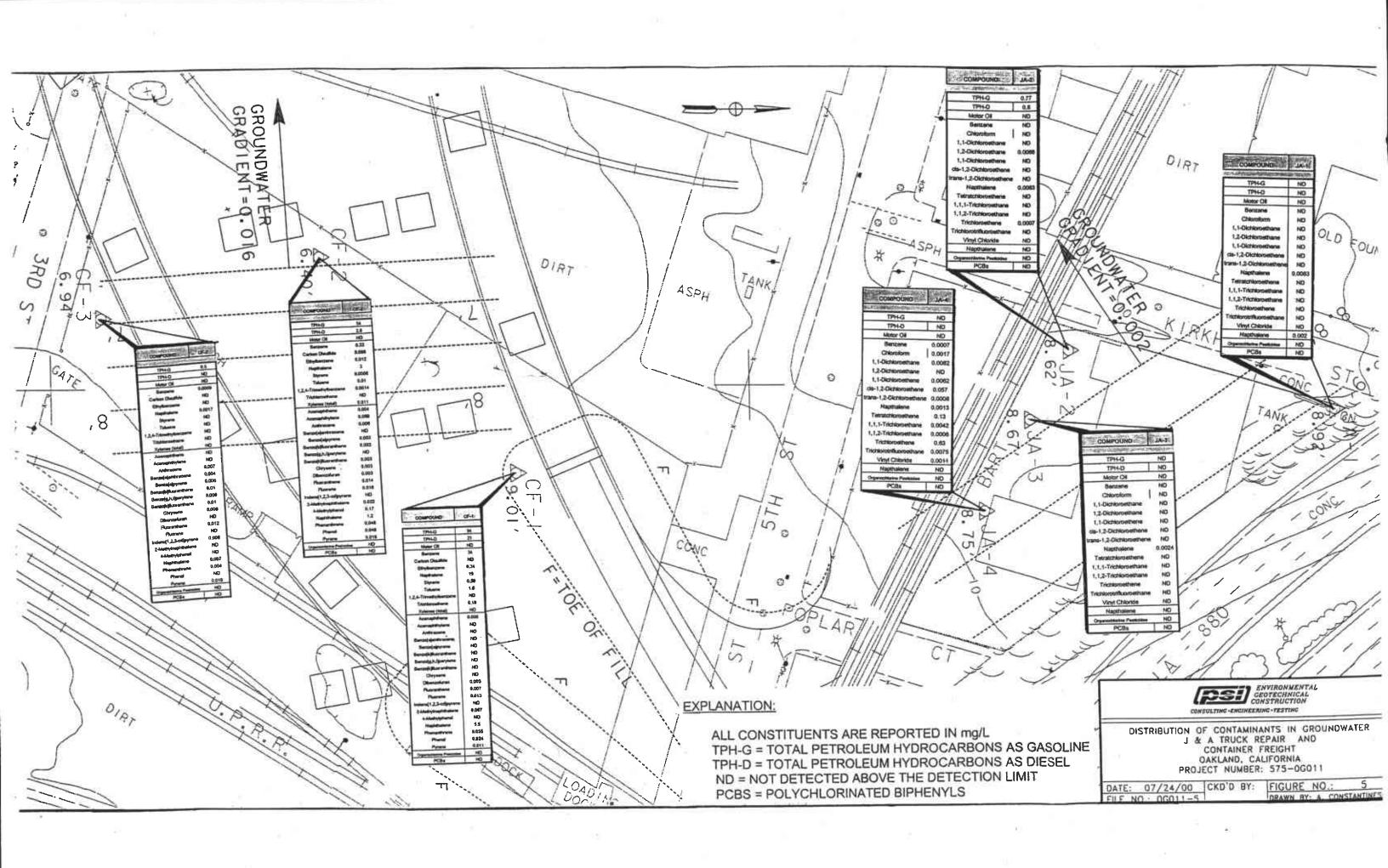
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GROUNDWATER ELEVATION AND PARAMETERS
J & A TRUCK REPAIR (SITE JA) AND CONTAINER FREIGHT (SITE CF)

TABLE 1

(SITE JA) AND CONTAINER FREIGHT (SITE C OAKLAND, CALIFORNIA

Sample Location	Date	TOC Elevation (feet msl)*	Depth To Groundwater	Groundwater Elevation (feet msl)*	Temperature	Conductivity (mS/cm)	рH
CF-1	5/2/00	14.07	5.06	9.01	14.4	4760	7.3
CF-2	5/2/00	10.2	3.8	6.4	14.8	17.85**	6.41
CF-3	5/2/00	9.67	2.73	6.94	22.2	5360	5.95
JA-1	5/2/00	15.12	6.2	8.92	16.9	1380	7.15
JA-2	5/2/00	13.15	4.53	8.62	16.7	2175	7.03
JA-3	5/2/00	12.64	3.97	8.67	17.3	1144	6.68
JA-4	5/2/00	12.58	3.83	8.75	19.2	1584.00	6.52

Notes:

mS/cm = milliseimens per centimeter

NM = Not Measured

All measurements are recorded in feet.

Feet msl = feet above mean sea level

^{*} TOC Measurements are from data supplied by ENGINEERING ASSOCIATES

^{**} Conductivity values for CF-2 were confirmed by the second groundwater sampling event performed on 8/7/00.

TABLE 2
STATISTICAL ANALYSIS AND SUMMARY OF SOIL ANALYTICAL RESULTS: ORGANICS
J & A TRUCK REPAIR (SITE JA)
OAKLAND, CALIFORNIA

ANALYTICAL METHOD	DETECTED COMPOUND	JA-1 7.0 FT	JA2 7.0 FT	JA-3 7.0 FT	JA-4 6.5 FT	DETECTION LIMIT	CYPRESS PRG		STA	ISTICAL FUN	CTION	
2000年月初200日,2016日1日20日	THE LEGISLAND DESIGNATION OF THE PERSON OF T	では、				District of the last		count	max	min	Average	STD.DEV
EPA METHOD 8015	TPH-G	ND	ND	ND	ND	0.5	NA		NA	NA	NA	NA
EPA METHOD 8015	TPH-D	ND	ND	ND	ND	10	100	- 4	NA	NA	NA	NA
EPA METHOD 8015	MOTOR OIL	ND	ND	ND	ND	10	NA	(NA.	NA	NA	NA
	1,1 Dichloroethane	0.001	ND	0.001	0.001	0.001	0.42-3.8		0.001	0.001	0.001	NA
	Naphthalene	ND	ND	0.003	0.02	0.002	82	:	0.02	0.003	0.0115	0.01202
VOC by EPA 8260B	Styrene	ND	0.001	0.001	ND	0.001	NA	2	0.001	0.001	0.001	NA
	1,1,1-Trichloroethane	0.007	0.005	0.006	0.006	0.001	470	4	0.007	0.005	0.006	0.000816
	Trichlorotrifluorethane	0.008	0.007	0.006	0.007	0.005	NA	4	0.008	0.006	0.007	0.000816
	Acenaphthylene	ND	ND	0.055	ND	0.033	NA	1	0.055	0.055	0.055	NA
	Fluoranthene	ND	ND	0,072	ND	0.033	2,300	1	0.072	0.072	0.072	NA
SVOC by EPA 8270C	Naphthalene	ND	ND	0.28	ND	0.033	82	1	0.28	0.28	0.28	NA
	Phenanthrene	ND	ND	ND	0.1	0.066	NA	1	0.1	0.1	0.1	NA
	Pyrene	ND	ND	ND	0.14	0.033	1,700	1	0.14	0.14	0.14	NA
ORGANOCHLORINE PESTICIDES by EPA 6081		ND	ND	ND	ND	0.001-0.020	NA.	O	NA	NA	NA	NA
PCBs by EPA 8082		ND	ND	ND	ND	0.05	NA	0	NA	NA	NA	NA

ND = Not Detected

Depth is presented in feet below ground surface.

All samples are reported as total concentration in milligrams per kilogram (mg/kg), unless indicated.

VOC = Total of Volatile Organic Compounds

SVOC = Sami-Votatile Organic Compounds

PRG = Preliminary remediation goals (EPA Region 9)

count = Number of concentrations reported above the detection limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 3 STATISTICAL ANALYSIS AND SUMMARY OF SOIL ANALYTICAL RESULTS: METALS J & A TRUCK REPAIR - SITE JA OAKLAND, CALIFORNIA

SAMPLE I.D.	DEPTH (F	, ∴ SB:	AS	BA	BE	CD	CR	CO	CU	PB	HG	MO :	NI	SE	AG	TL	V	ZN
JA1	7	ND	2.1	37	ND	ND	30	4.6	5,3	1.5	ND	ND	26	ND	ND	19	21	19
JA2	7	ИD	2.5	47	ND	ND	35	5.3	6.8	2	ND	ND	32	ND	ND	ND	27	23
JA3	7	ND	3.0	47	ND	ND	38	5.6	8.4	3.9	ND	ND	32	ND	ND	34	29	25
JA4	6.5	ND	2.4	56	ND	ND	48	5,8	7.6	2.5	ND	ND	35	ND	ND	ND	30	26
CYPRESS PRG		67	4.6-19*	12,000	1.8-0.2	24-2.7	NA	NA	5,000	840	45	830	400-44	830	830	14-27*	1,200	50,00
DETECTION LIMIT		2.50	0.50	0.50	0.50	0.05	0.50	0.50	0.50	0.50	0,10	0.60	1.00	2.50	0.50	2.50	0.50	10.00
	count	0	4	4	0	0	4	4	4	4	0	0	4	0	0	2	4	4
STATISTICAL	max	NA	3	56	NA	NA	48	5.8	8.4	3.9	NA	NA	35	NA	NA	34	30	26
FUNCTION	min	NA	2.1	37	NA	NA	30	4.6	5,3	1.5	NA	NA	26	NA	NA	19	21	19
	Average	NA	2.5	46.75	NA	NA	37.75	5.325	7.025	2.475	NA	NA	31.25	NA	NA	NA	26.75	23.25
	STD.DEV.	NA	0.37417	7.76209	NA	NA	7.58837	0.5252	1.32256	1.03401	NA	NA	3.77492	NA	NA	NA	4.03113	3.0957

Depth is presented in feet below ground surface
ND = Not detected at or above the laboratory detection limits
Metals are designated by their symbol on the periodic table of elements.
All samples are reported as total concentration in milligrams per kilogram (mg/kg), unless indicated.

PRG = Preliminary remediation goals (EPA Region 9)

NA = Not Available/Not applicable

count = Number of concentrations reported above the detection limit.

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 4
STATISTICAL ANALYSIS AND SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: ORGANICS

J & A TRUCK REPAIR (SITE JA)
OAKLAND, CALIFORNIA

		C/	WINITH.	OUTH O	21.415.2							
ANALYTICAL METHOD	COMPOUND	JAH	JA-2	JA-3	JA-4	DETECTION	MCL*/ PRG(mg/L)		STATI	STICAL F	UNCTION	,
	DESTRUCTION OF THE RESIDENCE	(2) PE (1)	Second St	1-01/870				count	max	min	Average	STD DEV
EPA METHOD 8015	TPH-G	ND	0.77	ND	ND	0.5	NA	1	0.77	0,77	0.77	NA
EPA METHOD 8015	TPH-D	ND	0.8	ND	ND	0.4	NA	1	0.8	0.8	0.8	NA
EPA METHOD 8015	Motor Oil	ND	ND	ND	ND	10	NA	0	NA	NA	NA	NA
	Benzene	ND	ND	ND	0.0007	0.0005	0.001*	- 1	0.0007	0.0007	0.0007	NA
	Chloroform	ND	ND	ND	0.0017	0.0005	0.011	1	0.0017	0.0017	0.0017	NA
	1,1-Dichloroethane	ND	ND	ND	0.0082	0.0005	0.005*	1	0.0082	0.0082	0.0082	NA
	1,2-Dichloroethane	ND	0.0088	ND	ND	0.0005	0.0005*	1	0.0088	0.0088	0.0088	NA
	1,1-Dichloroethene	ND	ND	ND	0.0062	0.0005	0.00012	1	0.0062	0.0062	0.0062	NA
	cis-1,2-Dichloroethene	ND	ND	ND	0.057	0,0005	0.006	1	0.057	0.057	0.057	NA
VOCs by EPA 8260B	trans-1,2-Dichloroethene	ND	ND	ND	0.0008	0.0005	0.01	1	0.0008	0.0008	0.0008	NA
	Napthalene	0,0083	0.0083	0.0024	0.0013	0.0005	0.0062	4	0.0083	0.0013	0.00508	0.00378
	Tetratchloroethene	ND	ND	ND	0.13	0.0005	0.005*	1	0.13	0,13	0.13	NA
	1,1,1-Trichloroethane	ND	ND	ND	0.0042	0.0005	0.2*	1	0.0042	0.0042	0.0042	NA
	1,1,2-Trichloroethane	ND	ND	ND	0.0006	0.0005	0.005*	1	0.0006	0.0008	0.0006	NA
	Trichloroethene	ND	0.0007	ND	0.63	0.0005	0.005*	2	0.63	0.0007	0.31535	0.44498
	Trichlorotrifluoroethane	ND	ND	ND	0.0075	0,005	0.15*	1	0.0075	0.0075	0.0075	NA
	Vinyl Chloride	ND	ND	ND	0.0011	0.0005	0.0005*	1	0.0011	0.0011	0.0011	NA
SVOCs by EPA 8270C	Napthalene	0.002	ND	ND	ND	0.0011	0.0062	1	0.002	0.002	0.002	NA
DRGANOCHLORINE PESTICIDES by EPA 8081		ND	ND	ND	ND	0.00005-0.001	NA	0	NA	NA	NA	NA
PCBs by EPA 8082		ND	ND	ND	ND	0.001	0.000034	0	NA	NA	NA	NA

ND = Not Detected

MCL* = Maximum contaminant levels for the primary drinking water chemicals/ Where MCL were not available EPA Region 9 Preliminary Remediation Goals for tap water were presented, if available All samples are reported as total concentration in milligrams per kilogram (mg/L), unless indicated.

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

count = Number of concentrations reported above the detaction limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 5 STATISTICAL ANALYSIS AND SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: METALS J & A TRUCK REPAIR - SITE JA OAKLAND, CALIFORNIA

SAMPLE I.D.	1.50	SB	AS	BA	BE	CD	CR	co	CU	PB	HG	MO	NI	SE	AG	TL	V	ZN
JA-1		ND	ИD	0.1600	ND	ND	ND	ND	ND	ND	ND	ND	0.0450	ND	ND	ND	ND	0.1200
JA-2		ND	ND	0.1500	ND	ND	0.0100	ND	ND	ND	ND	ND	0.0350	ND	ND	ИD	ND	0.1000
JA-3		ND	ND	0.1800	ND	ND	ND	ND	ND	ND	ND	ND	0.0300	ND	ND	ND	ND	0.1200
JA-4		ND	ND	0.1200	ND	ND	ND	ND	ND	ND	ND	ND	0.0270	П	ND	ND	ND	ND
PRG		15.0000	0.0450	2600	73.0000	18.0000	NA	2200	1400	0.0036	11.0000	180	730	180	180	NA	260	1100
DETECTION LIMIT		0.0150	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0002	0.1000	0.0100	0.0150	0.0100	0.0100	0.0100	0.1000
	count	0.0000	0.0000	4.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0000	0.0000	0.0000	0.0000	0.0000	3.0000
STATISTICAL	max	0.0000	0.0000	0.1800	NA	NA	0.0100	0.0000	0.0000	0.0000	NA	NA	0.0450	NA	NA	NA	0.0000	0.1200
FUNCTION	min	0.0000	0.0000	0.1200	NA	NA	0.0100	0.0000	0.0000	0.0000	NA	NA	0.0270	NA	NA	N.A	0.0000	0.1000
	AVERAGE	NA.	NA	0.1525	NA	NA	0.0100	NA	NA	NA	NA	NA	0.0343	NA	NA	NA	NA	0.1133
	STD.DEV.	NA	NA	0.0250	NA	NA	NA	NA	NA	NA	NA	NA	0.0079	NA	NA	NA	NA	0.0115

ND = Not detected at or above the laboratory detection limits

Metals are designated by their symbol on the periodic table of elements.

All samples are reported as total concentration in milligrams per kilogram (mg/L), unless indicated.

PRG = Preliminary remediation goals (EPA Region 9) for tap water

NA = Not Available/Not applicable

count = Number of concentrations reported above the detection limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 6

STATISTICAL ANALYSIS AND SUMMARY OF SOIL ANALYTICAL RESULTS: ORGANICS CONTAINER FRIGHT (SITE CF) OAKLAND, CALIFORNIA

ANALYTICAL METHOD	DETECTED	CF1-0.5	CF1-1.0	CF1-2.0	CF2-0,5	CF2-1.0	CF2-2.0	CF2-3	CF3-0,5	CF3-1.0	CF3-2.0	DETECTION	100 100	STATE	TICAL FU	NCTION	
		Britis.	1000000	15000	70						marrier)	1 2 100 1	count	max	min	Average	STD.DE
EPA METHOD 8015	TPH-G	ND	0,77	ND	ND	ND	0.69	NT	ND	ND	ND	0,5	2	0.77	0.69	0.73	0.05650
EPA METHOD 8015	TPH-D	370	70	19	60	220	140	NT	22	140	110	10-100	9	370	19	127.8889	111.09
EPA METHOD 8015	MOTOR OIL	630	100	35	44	520	ND	NT	23	78	58	10-100	8	630	23	186	243 096
VOCs by EPA 8260B	Benzene	ND	0.001	ND	ND	ND	ND	0.4	ND	ND	ND	0.001	2	0.4	0.001	0.2005	
	Napthalene	ND	0.98	1.5	0.009	0.005	ND	390	0.008	0.009	NO	0.002		390	0,005	56.073	
	Acenaphthene Acenaphthylene	ND ND	ND ND	ND 0.67	0.34 0.85	ND ND	ND 0.69	NT TN	ND ND	ND 2	ND 1.8	0.33 0.033	5	0,34 2	0.34 0.67	0.34 1.202	
	Anthracene	ND	ND	0.5	1.5	ND	1.4	NT	ND	4.6	2	0.33	5	4.6	0.5	2	1.55086
	Benzo[a]anthracene	ND	ND	0.91	1.7	NĐ	5.7	NT	ND	16	5.5	0.66	5	16	0.91	5.962	6.0152
	Benzo[a]pyrene	QИ	0.79	1.7	3.2	1.2	12	NT	ND	40	9.4	0.66	7	40	0.79	9.755714	14.031
	Benzo(b)fluoranthene	0.59	1	2	4	1.8	17	NT	ND	47	12	0.33	8	47	0.59	10.67375	15.834
	Benzo(g,h,i)perylene	ND	1	2	3.5	1.6	17	NT	ND	33	10	0,99	7	33	1	9.728571	11.798
SVOCs by EPA 8270C	Benzo(k)fluoranthene	0.61	1	2	4	1.8	17	NT	ND	47	12	0.33	8	47	0.61	10.67625	15.832
	Chrysene	ND	0.62	1.4	2.1	0.76	8.7	NT	ND	19	7.1	0.33	7	19	0.62	5.668571	6,7020
	Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND	1.8	NT	ND	6.3	1.2	0.99	3	6.3	1.2	3.1	2.7874
	Fluoranthene	0.59	1.5	3.3	7.6	ND	22	NT	ND	62	20	0.33	7	62	0.59	16.71286	21.771
	Fluorene	ND	ND	ND	0.65	ND	1.6	NT	ND	0.53	0.74	0.33	4	1.6	0.53	0.88	0.48784
	Indeno[1,2,3-cd]pyrene	ND	NĐ	ND	2.6	ND	14	NT	ND	30	7.5	1.3	4	30	2.6	13.525	11.9346
	Napthalene	ND	0.83	2.2	0.37	ND	2.4	NT	ND	0.85	1.3	0.33	6	2.4	0.37	1.325	0.81296
	Phenanthrene	ND	1	2.6	7.6	0.81	7.8	NT	ND	26	14	0.68	7	26	0.81	8.544286	9.01833
	Pyrene	0.85	2.2	4.8	9.3	2.7	29	NΤ	ND	74	27	0.33	8	74	0.85	18.73125	24.9614
	4,4'-DDD	ND	0.003	ND	9.3	ND	ND	NT	ND	ND	ND	0.001-0.02	2	9,3	0.003	4.6515	6.57397
ORGANOCHLORINE PESTICIDES	4,4'-DDE	0.018	0.009	ND	ND	ND	ND	NT	ND	ND	ND	0.002	2	0.018	0.009	0.0135	0.00636
by EPA 8081	Dieldrin	NĎ	0.002	ND	ND	ND	ND	ΝΤ	ND	ND	ND	0.002	1	0.002	0.002	0.002	
	Endosulfan I	0.008	ND	ND	ND	ND	ND	NT	ND	ND	ND	0.001	- 1	0.006	0.006	0.006	
PCBs by EPA 8082	Aroclor-1260	0.082	ND	ND	ND	ND	ND	NT	ND	ND	ND	0.05	1	0.082	0.082	0.082	NA

Notes:

ND = Not Detected

Depth a presented in feet below ground surface.
All samples are reported as sold concentration in militarisms per kilogram (mg/kg), unless indicated,
VOCs = Total of Votales Organic Compounds

SVOCa * Semi-Volatile Organic Compounds

PRG = Pretiminary remediation goals (EPA Region 9)

NA = Not Available/Not Applicable

count = Number of concentrations above the detection limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 7
SUMMARY OF SOIL ANALYTICAL RESULTS: METALS
CONTAINER FREIGHT (SITE CF)
OAKLAND, CALIFORNIA

SOIL SAMPLE I.D.	DERTH (m)	SB	AS	BA .	BE	CD	CR	со	cu	PB	HG	МО	N	SE	AG	TL	V	ZN
CF1-0.5	0.5	ND	4.7	130	ND	NĐ	30	7.8	30	49	ND	0.66	33	ND	ND	ND	32	89
CF1-1.0	1	ND	8.8	120	ND	ND	35	8.8	51	49	0.3	1	41	ND	ND	ND	37	87
CF1-2.0	2	ND	5.8	130	ND	0.82	_27	6.4	36	74	0.23	1.4	25	ND	ND	ND	26	150
CF2-0.5	0.5	ND	5.9	71	ND	ND	20	6.2	41	65	0.24	ND	19	ND	ND	ND	28	76
CF2-1.0	1	ND	5.4	99	ND	ND	29	6.6	38	64	0.26	0.71	30	ND	ND	ND	31	87
CF2-2.0	2	NĐ	12.0	55	ND	0.62	7.1	2.5	80	48	ND	ND	12	ND	ND	ND	13	230
CF3-0.5	0.5	ND	2.5	77	ND	ND	22	4.1	14	73	0.18	ND	16	ND	ND	ND	19	50
CF3-1.0	1 1	ND	6.0	18	ND	ND	2.9	0.59	71	22	ND	ND	7.6	ND	ND	ND	25	30
CF3-2.0	2	ND	5.1	50	ND	ND	32	6.2	34	48	ND	0.67	38	ND	ND	ND	28	180
DETECTION LIMIT		2.50	0.50	0.50	0.50	0.05	0.50	0,50	0.50	0.50	0,10	0.50	1.00	2.50	1.00	2.50	0.50	10.00
	count	0	9	9	0	2	9	9	9	9	5	5	9	0	0	0	9	9
STATISTICAL	max	NA	12	130	NA	0.82	35	8.8	80	74	0.3	1.4	41	NA	NA	NA	37	230
FUNCTION	min	NA	2.5	18	NA	0.62	2.9	0.59	14	22	0.18	0.66	7.6	NA.	NA	NA	13	30
	AVERAGE	NA	6.24444	83.3333	NA	0.72	22.7778	5.46555556	43.8889	54.6667	0.242	0.888	24.6222	NA	NA	NA	26.5556	108.778
	STD.DEV.	NA	2.70329	39.2428	. NA	0.14142	11.1376	2.60378144	20.5514	16.2942	0.04382	0.31854	11.7339	NA	NA	NA	7.12585	64.751

ND = not detected at or above the laboratory detection limits

Metals are designated by their symbol on the periodic table of elements.

All samples are reported as total concentration in milligrams per kilogram (mg/kg), unless indicated.

NA = Not Available/Not Applicable

count = Number of concentrations above the detection limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

TABLE 8

STATIŞTICAL ANALYSIS AND SUMMARY OF GROUNDWATER ANALYTICAL RESULTS CONTAINER FREIGHT (SITE CF) OAKLAND, CALIFORNIA

ANALYTICAL METHOD	COMPOUND	CF-1	CF-2	CF-3	CF-10	DETECTION	PRG(mg/L)	NEGA	STATIS	TICAL FU	NCTION	
TOTAL DIVINORMAN AND STREET	AND DESCRIPTION OF THE PERSON NAMED IN	ALTERNATION OF		ALTERNATION OF	ATTICK HISTORY	STATE OF STREET		count			average	STO.DE
EPA METHOD 8015	TPH-G	94	54	0.5	7.7	0,5-50	NA.	- 4	94	0.5	39.05	43.63
EPA METHOD 8015	TPH-D	21	2.8	ND	1.8	0.4-4.0	NA.	3	21	1.8	8 533333	10.B0
EPA METHOD 8015	Motor Oil	ND	ND	ND	ND	0.4-4.0	NA.	0	NA	NA	NA	NA
	Benzene	34	0.33	0.0009	0.27	0.0005	0.001*	- 4	34	0.0009	8.650225	16.90
	Carbon Disulfide	ND	0.068	ND	ND	0.0005	1 0	1	0.068	0.066	0.068	NA
	Ethylbenzene	0.34	0.012	ND	0,013	0.0005	0.7*	3	0.34	0,012	0.121667	0.189
	Napthalene	19	3	0.0017	1.6	0.0005	0.0062	4	19	0.0017	5.875425	8.829
VOCs by EPA 8260B	Styrene	0.59	0.0008	ND	ND	0.0005	0.1*	2	0.59	8000.0	0.2954	0.416
	Toluene	1.6	0.01	ND	0.014	0.0005	0.15*	3	1.6	0.01	0.541333	0.916
	1,2,4-Trimethylbenzene	ND	0.0014	ND	NĐ	0.0005	0.005	1	0.0014	0.0014	0.0014	N/A
	Trichloroethene	0.19	МD	NĐ	ND	0.0005	0.005*		0.19	0.19	0.19	N/
	Xylenes (total)	ND	0.011	ND	ND	0.005	1.75*	- 1	0.011	0.011	0.011	N/
	Acenaphthene	0.008	0.004	ND	0.004	0.001	0.37	3	800.0	0.004	0.005333	0.002
	Acenaphthylene	ND	0.069	ND	0.031	0.001	NA	2	0.069	0.031	0.05	0.00
	Anthracene	ND	0.006	0.007	0.001	0.006	1.8	3	0.007	0.001	0.004667	0.003
	Benzo(a)anthracene	ND	ND	0.004	ND	0.002	0.000092	1	0.004	0.004	0.004	NA
	Benzo(a)pyrene	ND	0.003	0.008	0.002	0.002	0.0002*	3	900.0	0.002	0.004333	0.003
	Benzo[b]fluoranthene	ND	0.003	0.01	0.003	0.001	0.000092	3	0.01	0.003	0.005333	0.004
	Benzo(g.h,ijperylene	ND	NĎ	0.009	NĐ	0.003	NA NA	1	0.009	0.009	0.009	NA
	Benzo[k]fluoranthene	ND	0.003	0.01	0.003	0.001	0,00092	3	0.01	0.003	0.005333	0.004
	Chrysene	ND	0.003	0.006	0.002	0.001	0.0092	3	0.006	0.002	0.003667	0.002
SVOCs by EPA 8270C	Dibenzoluran	0.003	0.003	ND	0.003	0.001	0.024	3	0.003	0.003	0.003	
	Fluoranthene	0.007	0.014	0.012	0.011	0.001	1.5	4	0.014	0.007	0.011	0.002
	Fluorene	0.013	0.016	ИĎ	0.014	0.001	0.24	3	0.016	0.013	0.014339	0.001
	Indeno[1,2,3-cd]pyrene	ND	ND	0.006	ND	0.004	0.00092	1	0.006	0.006	0.006	NA
	2-Methylnaphthalene	0.067	0.022	ND	0.008	0.001	NA	3	0.067	0.008	0.032333	0.030
	4-Methylphenol	ND	0.17	ND	0.041	0.005	0.18	2	0.17	0.041	0.1055	0.091
	Naphthalene	5.5	1.2	0.007	0.52	0.001	0.0062	4	5.5	0.007	1.80675	2.510
	Phenanthrene	0.055	0.048	0.004	0.033	0.002	NA	4	0.055	0.004	0.035	0.022
	Phenol	0.024	0.046	ND	0.011	0.004	22	3	0.046	0.011	0.027	0.017
	Pyrene	0.011	0.018	0.016	0.013	0.001	0.18	4	0.018	0.011	0.0145	0.003
ORGANOCHLORINE PESTICIDES by EPA 8080	All Compounds	ND	ND	ND	ND	0.00005-0.001	NA	0	NA	NA	NA	NA
PCBs by EPA 8080	All Compounds	ND	ND	ND	ND	0.001	0 000034	0	NA	NA	NA	NA

Notes

ND . Not Detected

MCL* • Maximum coontaminants levels for the primary drinking water chemicals/ Where MCL were not available. EPA Region © Presidency Ramedation Code were presented. If available.

All samples are reported as total concentration in milligrams per kilogram (mg/L), unless indicated,

VOCs = Votatile Organic Compounds

SVOCa = Semi-Volatile Organic Compounds

TPH-G = Total petroleum hydrocarbons as gasoline

TPN-D = Total petroleum hydrocarbons as diesel

* = MCL is for either a single isomer or the sum of the isomers.

NA = Not Available/Not Applicable

count = Number of Tests

max. = Maximum value

min = Minimum value

average = Average value of the detected values above the detection limit

TABLE 9
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS: METALS
CONTAINER FREIGHT (SITE CF)

SOIL SAMPLE I.E	Laken s. t	SB	AS	BA	BE	CD	CR	60	cu	PB	HG	мо	(1)	SE	AG	TL	V	ZN
CF-1		ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CF-2		ND	ND	ND 、	ND	ND	ND	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND	ND
CF-3		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
CF-10		ND	ND	ND	ND	ND	ND	ИĎ	ND	ND	ND	ND	ND	МĐ	ND	ND	МD	ND
DETECTION LIMIT	A Committee	0.30	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.0002	0.20	0.20	0.30	0.20	0.20	0.20	2.00
	count	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STATISTICAL	max	NA	NA	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.
FUNCTION	min	NA	NA	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA
	AVERAGE	NA	NA	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	STD.DEV.	NA	NA	NA	NA	NA.	NA	NA NA	NA	NA	NA	NA	NA	NA.	NA	NA	NΑ	NA

OAKLAND, CALIFORNIA

Notes:

ND = not detected at or above the laboratory detection limits

Metals are designated by their symbol on the periodic table of elements.

All samples are reported as total concentration in milligrams per kilogram (mg/L), unless indicated.

NA = Not Available/Not Applicable

count = Number of concentrations above the detection limit

max = Maximum value

min = Minimum value

average = Average of the detected values above the detection limit

APPENDIX A FIELD PROCEDURES

APPENDIX A FIELD PROCEDURES

I. DRILLING OF SOIL BORINGS AND COLLECTION OF SOIL SAMPLES

The following procedures will be used for the drilling and sampling of the soil borings drilled at the site:

- 1. Drilling will be conducted by V&W Drilling Environmental under the supervision of PSI. Drilling equipment will be pressure washed at the beginning of the day and between soil borings.
- Prior to the commencement of drilling activities at the site, Underground Service Alert (USA) will be contacted to identify underground utilities in the areas that the borings will be located.
- Boring logs for the soil borings drilled at the site will be prepared under the supervision of a State of California Registered Geologist. The soil cuttings observed during drilling will be described in accordance with the Unified Soil Classification System.
- 4. Soil samples will be collected using a California stainless steel sampler with 2-inch diameter. When the boring has been advanced to the appropriate sampling depth, a 2-inch diameter sampler lined with 2-inch diameter brass tubes will be placed in the open boring. When the sampler is advanced to the appropriate depth an undisturbed soil sample will be collected by pushing the sampler into the subsurface using a 140 pounds hammer.
- 5. Once the sampler has been retrieved the ends of the sample tube will be covered with Teflon sheets and capped with polyethylene end caps. The sample will be labeled and placed in a zip-lock bag in a chilled cooler pending delivery to the laboratory for analysis.
- 6. Soil samples will be assigned identification numbers such as JA1-0.5, where JA1 indicates the site name, boring 1 and -0.5 indicates that the sample was collected at 0.5 meters bgs from boring 1 at that site. The samples will be labeled with the sampling designation, depth, date, client name, and project number.
- 7. Soil samplers will be washed between sampling intervals with Alconox soap followed by two deionized-water rinses.

- 8. Chain-of-custody procedures using chain-of-custody forms will be used to document sample handling and transportation.
- 9. A Century 128 organic vapor analyzer (OVA) or equivalent device will be used to monitor volatile organic compounds (VOCs) in the ambient air during drilling at the site in accordance with the site health and safety plan. VOC concentrations in the soil will be measured and recorded on the borings logs for depths that soil samples were collected. VOCs in the soil will be measured at the sampling depths by partially filling a zip-loc bag with soil. The components of the soil are allowed to volatilize and fill the headspace in the tube for at least 10 minutes prior to inserting the OVA probe through one of the end caps and recording the measurements.
- 10. Soil cuttings and steam wash water generated during drilling activities at the site will be contained in Department of Transportation (DOT) approved 55-gallon drums. The drums will be labeled with the contents, date, well or boring number, client name, and project number.

II FIELD DOCUMENTATION OF SAMPLING PROCEDURES

The following outline describes the procedures adhered by PSI for proper sampling documentation.

- 1. Sampling procedures will be documented in a field notebook that will contain:
 - 1. Sample collection procedures
 - 2. Date and time of collection
 - 3. Date of shipping
 - 4. Sample collection location
 - 5. Sample identification number(s)
 - 6. Intended analysis
 - 7. Quality control samples
 - 8. Sample preservation
 - 9. Name of sampler
 - 10. Any pertinent observations

- 2. Samples will be labeled with the following information:
 - 1. Sample number
 - 2. Well number
 - 3. Date and time sample was collected
 - 4. Sampler's name
 - 5. Sample preservatives (if required)
- 3. The following is the sample designation system for the site:

For Borings, the samples will be labeled JA(Boring Number)-(Depth) (i.e. sample collected from boring 1 at 0.5 m (1.65 feet) would be JA1-0.5)

For groundwater samples (W) (Boring Number) (i.e. WJA4)

- 4. Handling of the samples will be recorded on a chain of custody form which shall include:
 - 1. Site name
 - 2. Signature of Collector
 - 3. Date and time of collection
 - 4. Sample identification number
 - 5. Number of containers in sample set
 - 6. Description of sample and container
 - 7. Name and signature of persons, and the companies or agencies they represent, who are involved in the chain of possession
 - 8. Inclusive dates and times of possession
 - 9. Analyses to be completed

III. GROUNDWATER SAMPLING

The following are procedures that will be implemented while performing well monitoring, well purging, and water sampling.

1. All non-disposable equipment will be washed prior to entering the boring with an Alconox solution, followed by two tap water rinses and a deionized water rinse.

- 2. Groundwater samples will be collected after purging three to five well casing volumes. Purged water will be stored in 55-gallon drums for future disposal. Physical parameter measurements (temperature, pH, and specific conductance) will be closely monitored throughout the well purging process and will be used as indicators for assessing sufficient purging.
- Water samples will be collected with a single-use Teflon bailer. The water will be immediately decanted into laboratory-supplied vials and bottles. The containers will be overfilled, capped, labeled, and placed in a chilled cooler prior to delivery to the laboratory for analysis. Table 2 attached to this appendix presents the container type and preservation method required by the EPA methods. Also, Table 3 is presenting the detection limits that will be used by Centrum Analytical Laboratories for the required EPA methods.
- 5. Chain-of-custody procedures, including chain-of-custody forms, will be used to document water sample handling and transport from collection to delivery to the laboratory for analyses.
- 6. Groundwater samples will be delivered to the State-certified hazardous waste laboratory within approximately 24-hours of collection.

APPENDIX B BORING LOGS

ر ح	<u> </u>	LD	U	KI	IAC	LOG	_				BORING NO:	JA-1	
" 1 -											SHEET 1	OF	1
,							PROJECT NAME:	J&AT	RUCK RE	PAIR (S	ITE 1), OAKLAN	D	·
							PROJECT NUMBER:	575-0G	011		DATE: 4/26/00		
							NORTHINGS:				EASTINGS:		
,							DRILLING COMPANY:		DRILLING				
7"							DRILLING METHOD:		W-STEM	AUGER		· · · · · · · · · · · · · · · · · · ·	
1 .							BORING DIAMETER:		(8 inch)		DEPTH:	5 m (16.4 f	eet)
									GROUND	WATER	LEVELS		
* ſ							DATE		ļ		MENTS	DEP	TH BGS
:							4/26/00		GROUND	WATER E	NCOUNTERED	2.:	m (-7.5 FEET)
-		••••											
		SAMPLE NO.	RECOVERY	SAMPLE INTERVAL	BLOW COUNT	DE	ESCRIPTION		PID (PPM)	uscs	R	EMARKS	
, I <u>,</u>	-					Gill (amunity and) to	ularitat o o do de de		<u> </u>		Asphalt Pavement		
			·			Fill (gravelly sand) to appro	iximately 0.5 m (2 feet).		 	sw			
Ϊ.	_					-			 				
, I. '	_								 		<u></u>	-	
	_										Groundwater encou	ntered at ~2.3	m (7.5 feet).
ľ													
<u> </u>	-	JA1-7.0				Sand accept and add made	m sand, green, damp to wet.		-				·
	-			hi i ti Chin		cana, poorly graded, medic	m sand, green, damp to wet.		<u> </u>	SP			
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									ļ		Total depth = 5 met		
									 		Soil borehole was o	onverted in a	groundwater
10	-				<u> </u>				 		monitoring well.		
:							1		L		<u> </u>		
Ľ					 .		LOGG	ED BY: C	hris Merrii	:t			
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301				11/	LUG	_			•	BORING NO:	JA-2	
;										SHEET 1	OF	1
						PROJECT NAME:	J&AT	RUCK RE	PAIR (S	ITE 1), OAKLANI	D	
ţ						PROJECT NUMBER:	575-0G			DATE: 4/26/00		
						NORTHINGS:			·	EASTINGS:		··
1						DRILLING COMPANY:	V&W	DRILLING	;		····	
Į						DRILLING METHOD:		W-STEM				
						BORING DIAMETER:	20 cm (DEPTH:	5 m (16.4 fe	eet)
1									WATER	LEVELS		
1						DATE				MENTS	DEPT	H BGS
						#####		GROUND		NCOUNTERED		m (=7.5 FEET)
Ì					<u> </u>							M(-7.3 FEE1)
DEPTH (m)	SAMPLE NO.	RECOVERY	SAMPLE INTERVAL	BLOW COUNT	DE	SCRIPTION		PID (PPM)	uscs	RI	EMARKS	
								 	 	Asphalt Pavement		
•		[Fill (silty sand) to approxim	ately 0.8 m (2.5 feet).			SM			
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1-				<u> </u>								
' —				-				<u> </u>				
				_				 		Groundwater encou	ntered at -2.3	m (7.5 feet).
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2—	JA2-7.0		3 - N. 182	25	Sand, poorly graded, medic	ım sand, green, damp to wet.		 	SP			
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									1	Total depth = 5 met	ers (16.4 feet)	bgs.
i										Soil borehole was c		
10		ł								monitoring well.		
	<u> </u>	1	.]		<u> </u>		···	<u>L</u>	<u> </u>	<u></u>		
						LOGGE	ED BY: C	hris Merri	tt	-		
<u> </u>									÷			

301		V	KI	N	i LOG	_				BORING NO:	JA-3
										SHEET 1	OF 1
						PROJECT NAME:	J&AT	RUCK RE	EPAIR (S	SITE 1), OAKLAN	0
1						PROJECT NUMBER:	575-0G	011		DATE: 4/26/00	
					•	NORTHINGS:				EASTINGS:	
1						DRILLING COMPANY:	V&W	DRILLING	}		
1						DRILLING METHOD:	HOLLO	W-STEM	AUGER		
						BORING DIAMETER:		(8 inch)		DEPTH:	5 m (16.4 feet)
1							(GROUND	WATER	LEVELS	
ļ						DATE			COM	MENTS	DEPTH BGS
						4/26/00		GROUND	WATER E	NCOUNTERED	-2.3 m (-7.5 FEET)
 			·		· · · · · · · · · · · · · · · · · · ·						
ОЕРТН (m)	SAMPLE NO.	RECOVERY	SAMPLE INTERVAL	BLOW COUNT	DE	ESCRIPTION		PID (PPM)	USCS	R	EMARKS
—				-	Em (e)(6					Asphalt Pavement	
-				—	Fill (silty sand) to approxim	atery 0.8 m (2.5 feet).			SM		
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י ן											· · · · · · · · · · · · · · · · · · ·
_									İ	Groundwater encou	intered at ~2.3 m (7.5 feet).
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•	JA3-7.0			25 50/5	Sand, poorly graded, mediu	m sand, green, damp to wet.			SP		
, –				30/3						The color turns brow	vn.
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									4	Total depth = 5 met	
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10								 		monitoring well.	
<u> </u>						LOGGE	D BY: C	hris Merrit	t .		

SOIL BURING LUG										BORING NO:	JA-4
r										SHEET 1	OF 1
						PROJECT NAME:	J&AT	RUCK RE	PAIR (S	SITE 1), OAKLAN	n '
! "						PROJECT NUMBER:	575-0G	011		DATE: 4/26/00	
						NORTHINGS:		·		EASTINGS:	
						DRILLING COMPANY: V & W DRILLING					
, ¹ ,						DRILLING METHOD: HOLLOW-STEM AUGER					
						BORING DIAMETER:	20 cm ((8 inch)		DEPTH:	5 m (16.4 feet)
-							(GROUND	WATER	LEVELS	
, ¹ ,						DATE			COM	MENTS	DEPTH 8GS
, L						4/26/00		GROUND	WATER E	NCOUNTERED	-2.2 m (-7 FEET)
			,							· · · · · · · · · · · · · · · · · · ·	
DEPTH (m)	SAMPLE NO.	RECOVERY	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION			PID (PPM)	uscs	REMARKS	
, I, <u> </u>										Asphalt Pavement	
					Fill (silty sand) to approxima	ately 1.5 m (5 feet).			SM		
										<u></u>	
,' <u>.</u> '				13				<u> </u>		<u> </u>	
_				10			· · · · · ·			Groundwater encou	ntered at ~2.2 m (7 feet).
'I —				14					ļ.		mores de 2.2 m (7 lest).
2—	A4-6.5		y navigo	16	Sand poorly graded modic	m sand, green, damp to wet.					
F				26	cente, poorly graded, friedly	in sand, green, damp to wet.			SP	The estantion be	
'I			·							The color turns brow	m.
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							PROJECT NAME	: CONTA	AINER FR	EIGHT (SITE 2), OAKLAN		
٠							PROJECT NUME	BER: 575-0G			DATE: 4/25/00		
							NORTHINGS:						
1								DRILLING COMPANY: V & W DRILLING					
l							DRILLING METHOD: HOLLOW-STEM AUGER						
l							BORING DIAME	TER: 20 cm ((8 inch)		DEPTH:	5 m (16,4 feet)	
l									GROUND	WATER	LEVELS		
l								DATE COMM				DEPTH BGS	
ĺ							4/25/00		GROUND	WATER E	NCOUNTERED -2 m (~6 FEET)		
	SAMPLE NO. RECOVERY SAMPLE INTERVAL BLOW COUNT					DE	1		PID (PPM)	uscs	REMARKS		
ŀ			-	-"	├								
		1			-	Gravelly sand, well graded,	fine to coarse sand w	with fine to coores	 	sw	Asphalt Pavement		
	_	CF1-0.5			100/6*	gravel, brown, dry to damp		IIIIO IO GUBISE	0	344	Lot of concrete deba	is hard to start drive at	
l	1				21					1	Lot of concrete debris, hard to start drive at 0.5 m to 0.65 m.		
ı	_	CF1-1.0				Gravelly-silty sand, as abov	е.		0				
	_				39				<u> </u>				
l					40	<u> </u>					Commentered		
	2	CF1-2.0			38	As above: sampple grades	damp to wet in tubes.	damp to wet in tubes.			Groundwater encountered at ~2 m (6 feet).		
	_				36	Gravelly sand, poorly grade	d, fine sand with coarse gravel, wet,		0	SP			
	_				<u> </u>	grayish-green.	··· ·- ·- ·- ·			1			
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	10						·····				Monitoring well.	onverted in a groundwater	
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								LOGGED BY: Ch	ris Merrit	t			
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						7				BORING NO:	CF-2
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						PROJECT NAME:			EIGHT (SITE 2), OAKLAN	
						PROJECT NUMBER:	575-0G	011		DATE: 4/25/00	
i						NORTHINGS:	37 (3.147)	0001111		EASTINGS:	
						DRILLING COMPANY:		DRILLING			
•						DRILLING METHOD: BORING DIAMETER:		W-STEM	AUGER		
						BORING DIAMETER.		(8 inch)	141475	DEPTH:	5 m (16.4 feet)
						DATE		GROUND			
•						4/25/00		GROUND		MENTS	DEPTH BGS
ł						1/20/00		GICCUND	WAIERE	NCOUNTERED	-2 m (-6 FEET)
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E	õ	₹	SAMPLE INTERVAL	BLOW COUNT							
DEPTH (m)	SAMPLE NO.	RECOVERY	ΙΞ	Ιġ	, n	ESCRIPTION				_	
<u> </u>	₽	ပ္သြ	9	Š		ESCRIPTION		PID	USCS	R	EMARKS
ă	S,	8	Ĭ	12				(PPM)			
<u>i</u>			Ġ								
_										Asphalt Pavement	
	CF2-0.5			13 23	Gravelly silty sand, well gra	ded, fine to coarse sand, with	fine to		sw		
i —	CF2-0,5	l	Sec. 36	38	coarse gravel and silt, brow	vn, dry to damp.		0	ļ		ris, hard to start drive at
1	CF2-1.0			30				0	1	0.5 m to 0.65 m.	
		ļ	4.00	50/3				<u> </u>	1		
. —			ŀ		Clayey sand, poorly graded	fine sand with clay, brown, da	ımp.		SP		
2 —		l	emic aways	11					1	Groundwater encou	ntered at ~2 m (6 feet).
· _	CF2-2.0		100	8	Consoller giller good, well are	d-d &					
2			1	1	(fine to coarse), with traces	ded, fine to coarse sand with g	gravei	0	SW	ļ	
					(mis to double), min dades	or mes, wet, black.			1		
· • • • • • • • • • • • • • • • • • • •	CF2-3.0	İ		×	Clayey sand, poorly graded	fine sand with clay, dark gray	to black, we	et.	SP	Soil cuttings smell ti	ke sewage/rotten eggs.
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								†	1	Total depth = 5 met	ers (16.4 feet) bas
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10				<u> </u>						monitoring well.	
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				·		rogg	ED BY: C	hris Merri	tt		

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		_	1 11	-	<u> </u>	•				BORING NO:	CF-3
·,										SHEET 1	OF 1
						PROJECT NAME	: CONTA	NER FR	EIGHT (SITE 2), OAKLAI	
i,						PROJECT NUMB	BER: 575-0G	011		DATE: 4/25/00	
						NORTHINGS:				EASTINGS:	
j						DRILLING COMP		DRILLING			
,)						DRILLING METH		W-STEM	AUGER		
						BORING DIAMET				DEPTH:	5 m (16.4 feet)
								GROUND			
1,						DA ⁻	TE			MENTS	DEPTH BGS
						4/25/00		GROUND	WATER E	NCOUNTERED	-2.2 m (-7 FEET)
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	SAMPLE NO.	RECOVERY	SAMPLE INTERVAL	BLOW COUNT	DE		PID (PPM)	USCS	EMARKS		
	_								<u> </u>	Asphalt Pavement	
,	-		F 195. C		Sandy gravel, well graded, t		with fine to		GW		
	_ C32-0.5			_	coarse sand, gray/black, da	amp.		0]		
1—	CF3-1.0		g - 177	5		· · · · · · · · · · · · · · · · · · ·	 				
	- 1.0		*\	4				0	ļ		
	-		-	╁	Gravelly sand, well graded t	fine to coarse sand, wi	ith fine to	-	sw	Groundwater encou	intered at ~0.31 m (3 feet).
2_	[]		L.	2	coarse gravel, black, wet, w	rith traces of fines.		-	1 "	 -	
!'	CF3-2.0	1	: Ecroper	3							
i,	-			2	Silt, green, wet, with low pla	asticity.		0	ML		
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r' 3—	-			\vdash	Clayey silt, green, wet, with	moderate placticity		-	ML		
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T	-			-			•	-	1	monitoring well.	converted in a groundwater
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'l'							LOGGED BY: C	hris Merri	tt		
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WELL/BORING NO: JA-1 to JA-4 and CF-1 to MONITORING WELL CONSTRUCTION DATA PERMIT NO: DATE: 04/25 & 26/00 PROJECT NAME: PROJECT NO: 575-0G011 OAKLAND WELL SITE LOCATION PLAN: SEC: TWN: RGE: LAT: LONG: DRILLING CO: V & W DRILLING DRILL CREW: ☐ SHALLOW ☐ SINGLE CASED WELL TYPE: MONITORING PERMANENT ☐ INTERMEDIATE ☐ DOUBLE CASED ☐ RECOVERY ☐ TEMPORARY ☐ DEEP OTHER MAN | OTHER **WELL SCHEMATIC** INSTALLATION DATA DECON. STEAM CLEAN HIGH PRESSURE WASH SOAP WASH OTHER TOC ABOVE GROUND IF JOINTS: THREADED WELDED COUPLED RISER BOX OR STICKUP SCREWED OTHER N/A M. PIT CASING: YES NO DESCRIBE N/A FT. WELL SCREEN: PVC STAINLESS TEFLON OTHER DIAMETER: 2 2 4 6 OTHER IN SLOT: 0.010 0.020 OTHER BOREHOLE ANNULAR DIAMETER DRILLING SOLID STEM IN HOLLOW STEM MUD ROTARY BACKFILL METHOD: AIR ROTARY DIRECT PUSH ☐ HAND AUGER IN. OTHER 22 cm. 2 0 cm. 2" 4" 6" 8" 12" OTHER IN BIT SIZE: 0.7 FT. DRILLING MUD: ■ NONE WATER BENTONITE CASING OTHER CEMENT DIAMETER CENTRALIZER: YE\$ NO TOTAL BENTONITE [] 5 cm. WELL GROUT [] 2 IN. COMPLETION: FLUSH MOUNT STICKUP TRISER BOX DEPTH SILICA SAND SCH: 40 PVC LOCK TYPE: DOLPHIN MASTER KEY NO. FROM NATIVE SOIL□ OTHER TOC OTHER PAD: 2X2 4X4 OTHER CUTTINGS: DRUMMED NUMBER OF DRUMS 5 M. 16.4 FT. SPREAD OTHER SEAL BENTONITE 15 cm. MASONRY SAND DEVELOPMENT NONE BAILING PUMPING AIRLIFT 0.5 FT. OTHER METHOD: SURGE & BLOCK OTHER TIME: 10 MIN 20 MIN OTHER ☐ 10 GAL AMOUNT ☐6 GAL OTHER GAL WATER BEFORE: SILTY TURBIO ☐ OPAQUE ☐ CLEAR FILTER WATER AFTER: SILTY TURBID OPAQUE CLEAR PACK WELL EVIDENT ODOR: YES NO TYPE SCREEN DEVELOPMENT DRUMMED NUMBER OF DRUMS 1 5 FT. LENGTH TYPE WATER: SPREAD TREATED POTW OTHER #3 SAND 1 4 FT. M. OVER WELL SUMP ☐ YES ☐ NO (CROSS OUT IF IN. NOT ORILLED) A contentiuses PREPARED BY:

PSI Rev. 12/95

APPENDIX C: SURVEY DATA

13

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MONITORING WELL LOCATIONS AND ELEVATIONS

IN THE VICINITY OF

500 KIRKHAM STREET

OAKLAND, CALIFORNIA

The following tables represent a summary of the Horizontal and Vertical Locations for the seven wells at or near the site. Values are shown for both FEET and METERS.

ELEVATIONS (MSL)

WELL ID	ELEV. (M)	ELEV. (Ft.)
JA-4	3.83	12.58
JA-3	3.85	12.64
JA-2	4.01	13.15
JA-1	4.61	15.12
CR-3	2.95	9.67
CR-2	3.11	10.20
CR-1	4.29	14.07

Notes: Elevations were derived directly in feet and converted to meters using the standardized equation: 1 Meter = 39.37 / 12 Feet.

Elevations were based upon information provided by CalTrans: Flight Cross @ 5th & Kirkham having an elevation of 11.05 - Mean Sea Level (MSL).

Elevations were taken upon the top of the well casing pvc pipe inside of the casting.

July 17, 2000

To PSI

1320 West Winton Avenue Hayward, California

Attention: Ms. Adriana Constantinesc

From: Gilbert E. Hayes

Engineering Associates

P.O. Box 11078

Oakland, California; 94611-0078

Re Kirkham Streeet Monitoring Wells

Dear: Adriana:

After receiving the necessary monument coordinates from CalTrans this afternoon, I have re-calculated the values for the wells as follows:

Values are Per Cal Trans Values for the found monuments, and are accurate to within 0.1

POINT	NORTHING	EASTING	NOTES/COMMENTS
A829	479609,3440	1482692.9010	Found CalTrans Mon
A831	479582.0667	1482524.9894	Found CalTrans Mon
FD77	479491.1410	1483018.4670	Fnd. Tag in Curb
CF1	479332.7425	1482561.2768	M. Well
CF2	479195.0284	1482408.2584	M. Well
CF3	479037.4057	1482450.1000	M. Well
JA4	479665.4877	1482589,9081	M. Well
JA3	479699.0678	1482525.4298	M. Well
JA2	479728.5120	1482476.9972	M. Well
JA1	479916.6308	1482518,7732	M. Well

Please call if you have any questions.

C

III 17 2000 16:00

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PAGE A1

APPENDIX D

LABORATORY RESULTS AND CHAIN-OF-CUSTODY RECORDS

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY . CHEMICAL AND BIOLOGICAL ANALYSES

Client:

PSI

1320 W. Winton Ave.

Hayward, CA 94545

Date Sampled:

04/26/00

Date Received:

04/28/00

Job Number:

16373

Project: Caltrans - J&A Trucking

CASE NARRATIVE

The following information applies to samples which were received on 04/28/00:

The samples were received at the laboratory chilled and sample containers were intact.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested.

Report approved by:

Robert R. Clark, Ph.D. Laboratory Director

ELAP # 1184

DL: Detection Limit - The lowest level at which the compound can reliably be detected under normal laboratory conditions.

ND: Not Detected -- The compound was analyzed for but was not found to be present at or above the detection limit.

NA: Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.

Centrum (800) 798-9336

Metals

Client: PSI

Project:

Caltrans - J&A Trucking

Job No: Matrix:

16373 Soil 🕝

Analyst: RLB/TLR Date Sampled:

04/26/00

Date Received:

04/28/00

Date Digested:

05/01/00

Date Analyzed:

05/02-06/00

Batch Number: 6010\$1551

		Sample iD:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Element	Method #	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Antimony	6010	2.5	ND	ND .	ND	ND	ND
Arsenic	6010	0.50	ND	2.1	2.5	3.0	2.4
Barium	6010	0.50	ND	37	47	47 .	56
Beryllium	5010	0.50	ND	ND	ND	ΝĎ	ND
Cadmium	6010	0.50	ND	ND	ND	ND	ND
Chromium	6010	0.50	ND	30	35	38	48
Cobalt	6010	0.50	ND	4.6	5.3	5.6	5.8
Copper	6010	0.50	ND	5.3	6.8	8.4	7.6
Lead	6010	0.50	ND	1.5	2.0	3.9	2.5
Mercury	7471	0.10	МD	ND	ND	ND	ND
Molybdenum	6010	0.50	ND	ND	ND	ND	ND
Nickel	6010	1.0	ND	26	32	32	35
Selenium	6010	2.5	ND	ND	ND	ND	ND
Silver	6010	1.0	ND	ND	ND	NO	ND
Thallium	6010	2.5	ND	ND	ND	ND	ND
Vanadium	6010	0.5	ND	21	27	29	30
Zinc	6010	10	ND	19	23	25	26
	1606166061666						



QC Sample Report - Metals

Matrix: Soil

Batch #: 6010S1551

MS/MSD Sample ID: JA1-7.0

	Batch P	recision	Results	:	,	Batch A	ccuracy	/ Results:	
Metai	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fail	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits Percent Recovery	Pass / Fail
Antimony	52.2	52.0	0%	20%	Pass	50	112	_~ 75 - 125	Pass
Arsenic	51.8:	52.0	∵ 0% ∵	20%	Pass	:::50	107	75 - 125	Pass
Barium	85.9	86.4	1%	20%	Pass	50	105	75 - 125	Pass
Beryllium	50.7	52.3	3%	20%	Pass	50	107	75 - 125	Pass
Cadmium	48.2	48.7	1%	20%	Pass	50	107	75 - 125	Pass
Chromium	79.1	81.5	3%	20%	Pass	50	108	75 - 125	Pass
Cobalt	53.0	53.9	2%	20%	Pass	50	108	75 - 125	Pass
Copper	57.4	58.2	1%	20%	Pass	50	108	75 125	Pass
Lead	50.7	50.6	0%	20%	Pass	50	107	75 - 125	Pass
Mercury	2.74	2.80:	2% ∵	20%	Pass	:2:5	111	75 - 125	Pass:
Molybdenum	52.2	52.2	0%	20%	Pass	50	113	75 - 125	Pass
Nickel	75.4	77.7	3%	20%	Pass	50	108	75 - 125	Pass
Selenium	48.1	48.9	2%	20%	Pass	50	103	75 - 125	Pass
Silver	49.1	50.1	2%	20%	Pass	50	104	75 - 125	Pass
Thallium	48.0	48.8	2%	20%	Pass	50	107	75 - 125	Pass
Vanadium	70.3	71.2	1%	20%	Pass		109	75 125	Pass
Zinc	69.0	70.1	2%	20%	Pass	50	115	75 - 125	Pass

Analytic	ai notes

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

MS: Matrix Spike

RPD: Relative Percent Difference

MSD: Matrix Spike Duplicate



Modified 8015 - Fuel Screen

Client:

PSI

Project:

Job No.: . Matrix:

16373

Analyst:

Caltrans - J&A Trucking

Soil JL

Date Sampled:

04/26/00

Date Received:

04/28/00

Date Extracted:

05/01/00

Date Analyzed:

05/01/00

	Dau	211	Num	Der.	0015	יטפוסטנ	,
•		•	-,	٠.,			

		Motor	Detection		
Fuel Identified:	Diesel	Oil	Limits		
Units:	mg/kg	mg/kg	 mg/kg		
Blank	ND	ND	10		
JA1-7.0	ND	ND	 10		
JA2-7.0	ND	ND	10		
JA3-7.0	ND	ND	10		
JA4-6.5	ND	ND	10.		



QC Sample Report - EPA 8015M Diesel

Matrix: Soil

Batch #: 8015DS1909

Batch Accuracy Results

Analyt e	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Diesel	100	82	70 - 130	Pass

Analytical Notes:	
	-

Batch Precision Results

MS/MSD Sample ID:Laborat	Ž.	o,	ercent (RPD)	ntrol Limit	
Analyte	Spike Sample Recovery mg/	Spike Duplicate Recovery mg/K	Relative Perceni Difference (RPD	Upper Cont RPD	Pass/Fail
Diesel	82	75	9%	29%	Pass

MS: Matrix Spike Sample	
MSD: Matrix Spike Duplicat	te

Analytical Notes	· ·
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Modified 8015 - Total Volatile Hydrocarbons as Gasoline

Client:

PSI

Project:

Caltrans - J&A Trucking

Job No.:

16373

Matrix: Analyst; Soil

CP

Date Sampled:

04/26/00

Date Received:

04/28/00

Date Analyzed:

05/01/00

Batch Number:

8015GS2591

	Detection	Petroleum Hydrocarbons as	
	Limit	Gasoline	
Sample ID	mg/kg	mg/kg	
Method Blank	0.50	ND	
JA1-7.0	0.50	ND	
JA2-7.0	0,50	NO NO	
JA3-7.0	0.50	ND	
JA4 - 6.5	0.50	ND:	



QC Sample Report - EPA 8015M Gasoline

Matrix: Soil

Batch #: 8015GS2591

Batch Accuracy Results

	Control Sample			
	ratio	တ္လ	nits	
	Sent	y LC	ě	
	Š	Ae	ance	. . .
	Spike (mg/Kg	Rec	cepti Recc	ass/F
Analyte	Spik mg/l	%	~ ¥ %	P.
in and an analysis of the state				
Gasoline	10.6	160	70 130	Pass

Analytica	al Notes:	
`-		•
		•

Batch Precision Results

MS/MSD Sample ID: 16369	Kg	olicate mg/Kg	ercent (RPD)	trol Limit	
Analyte	Spike Sample Recovery mg/	Spike Duplicate Recovery mg/K	Relative Percent Difference (RPD	Upper Control RPD	Pass/Fail
Gasoline	7.24	7.37	2%	30%	Pass

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Analytical Notes:	
•	

EPA 8080 - Organochlorine Pesticides & PCBs

Client: Project: PSI

Caltrans - J&A Trucking

Job No.: Matrix:

16373

Analyst:

Soil

TPW

Date Sampled: Date Received: 04/26/00 04/28/00

Date Extracted:

05/01/00

Date Analyzed:

05/05/00

Batch Number:

PESTS0249

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Pesticides	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Aldrin	0.001	ND	ND	ND	ND	· ND	
Alpha-BHC	0.001	···· NO·····	NØ	QN	ND	ND	
Beta-BHC	0.001	, ND	ND .	ND	ND	ND	* * * * * * * * * * * * * * * * * * * *
Delta-BHC	0.001	ND	ND	ND	ND	ND	
Gamma-BHC (Lindane)	0.001	ND	ND	ND	ND	ND.	***********
Chlordane	0.010	ND	ŃĎ	ND	, DO	ND	
4,4'-DDD	0.002	ND	ND	ND	ND	ND	
4,4'-DDE	0.002	ND	ND	ND	ND	ND	
4,4'-DDT	0.002	ND -	ND	ND	ND	ND	
Dieldrin	0.002	ND	ND	ND	GM	ND	
Endosulfan I	0.001	ND	ND	ND	ND	ND	
Endosulfan II	0.002	ND	ND	ND	ND	ND	
Endosulfan sulfate	0.002	ND	ND	ND	ND	ND	
Endrin	0.002	ND	ND	DИ	ND	ND	
Endrin Aldehyde	0.002	ND	ND	ND	ND	ND	• • • • • • • • • • • • • • • • • • • •
Endrin Ketone	0.010	ND	ND	ND	ND	ND	
Heptachior	0.001	ND	ND	ND	ND	DИ	*******
Heptachior Epoxide	0.001	ND	NÐ		ND	ND	
Methoxychlor	0.010	ND	ND	ND	ND	ND	* • • • • • • • • •
Toxaphene	0.020	ND		ND	ND	ND	
PC8s							
Aroclor-1016	0.050	ND	ND	ND	ND	ND	
Aroclor-1221	0.050	ND	ND	ND	ND	ND	
Aroclor-1232	0.050	ND	ND	ND	ND	ND	
Aroclor-1242	0.050	ND	ND	ND	ND	ND	
Arocfor-1248	0.050	ND	ND	ND	ND	MD	
Aroclor-1254	0.050	ND	ND	ND	ND	ND	
Araclar-1260	0.050	ND	O O O	ND ND	NO	NO	\$3333333333333333333333333333333333333

Surrogates (% recovery) Limits: 50 - 150

	<u> </u>						
		Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Tetrachloro-m	ı-xylene		117	135	118	118	131
					140 4141 40 40 40 40 40 40 40 40 40 40 40		

QC Sample Report - EPA 8080 Pesticides

Matrix: Soil

Batch #: PESTS0249

Batch Accuracy Results

Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Lindane	0.0066	90 -	32 - 127	Pass
Heptachlor	0.0066	98	34 - 111	Pass
Aldrin	0.0066	109	42 - 122	Pass
Dieldrin	0.026	88	36 - 146	Pass
Endrin	0.026	102	30 - 147	Pass
DDT	0.026	93	25 - 160	Pass
Aroclor 1242	0.0667	83	75 - 127	Pass

Analytical Notes:	
	· · ·

Batch Precision Results

MS/MSD Sample ID: Lat	poratory Conti	rol Sample	:		
Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Lindane	0.0030	0.0028	7%	25%	Pass
Heptachlor	0.0033	0.0036	9%	25%	Pass
Aldrin	0.0036	0.0035	3%	25%	Pass
Dieldrin	0.0117	0.0108	8%	25%	Pass
Endrin	0.0135	0.0117	14%	25%	Pass
DDT	0.0124	0.0112	10%	25%	Pass

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Analytical Notes:

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate

EPA 8260 - Volatile Organics with Oxygenates

Centrum (800) 798-9336

Client:

PSI

Project:

Caltrans - J&A Trucking

Job No.: Matrix:

Soil

Analyst:

16373

MBH

Date Sampled: Date Received: 04/26/00

04/28/00 Date Analyzed: 05/01/00

Batch Number:

M48260S182

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Acetone	0.05	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAM	E) 0.005	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND
Bromoberizene	0,005	ND	NO	NĐ	ND	ND
Bromochloromethane	0.005	ND	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	NO	NO	ON	N D
Bromoform	0.005	ND	ND	ND	ND	ND
Bromomethane	0.01	ND	NO	NO	ND	NO
tert-Butanol (TBA)	0.05	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.01	ND	ND	ND	ND	ND:
n-Butylbenzene	0.002	ND	ND	ND	ND	ND
sec-Butylbenzene	0.002	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	ND	ND	ND	ND	ND
Carbon disulfide	0.01	ND	ND	ND	ND	NO
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	NO	ND	ND
Chloroethane	0.005	ND	ND	ND	ND	ND
Chloroform	0.002	ND	NO	NO	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	ND	NO	ND	ND	ND
4-Chlorotoluene	0.002	ND	ND	00000000000000000000000000000000000000	ND	ND
Dibromochloromethane	0.002	ND	ND	NO	ND	
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan		ND	NO NO	B	ND ND	ND
Dibromomethane	0.001	ND	ND	ND		ND
1,2-Dichlorobenzene	0.001	ND	NO	ND	ND ON	ND
1,3-Dichlorobenzene	0.002	ND	ND	ND		ND
1,4-Dichlorobenzene	0.002	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.005	ND	ND		NO	ND
t.1-Dichtoroethane	0.003	ND		ND	ND	ND
1,2-Dichloroethane	0.001	ND	0.001	NO	0.001	0.001
1 1 Dichloroethene	0.001	NO NO	ND	ND	ND	ND
sis-1,2-Dichloroethene	0.003		NO	NO	ND	ND
rans-1,2-Dichloroethene	0.002 0.002	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	NO	ND	ND	ND
3-Dichloropropane	0.001 0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane		ND	NO	ND	NO	ND
	0.001	ND	ND	ND	ND	ND
1-Dichloropropene	0.001	ND	NO	NO	ND	ND

EPA 8260 - Volatile Organics with Oxygenates

04/26/0(800) 798-9336

Client:

PSI

Project:

Caltrans - J&A Trucking

Job No.:

16373

Matrix:

Soil MBH Analyst;

Date Sampled:

Date Received:

Date Analyzed:

04/28/00 05/01/00

Batch Number:

M48260S182

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
cis-1,3-Dichloropropene	0.001	ND.	ND	ND .	ND	ND	
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND	
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND	
Ethylbenzene	0.001	ND	ND	ND	ND:	ND	
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND	
Mexachlorobutadiene:	0:001	··· ND···	ND	GN	ND	ND	
2-Hexanone	0.01	ND	ND	ND	ND	ND	
Isopropylbenzene:	0.001	NO:	ND	NĐ	D	NĐ	
p-Isopropyltoluene	0.002	ND	ND	ND	ND	ND 1	
Methylene chloride	0.02	ND	ND	ND	ŃĎ	ND	
4-Methyl-2-pentanone	0.01	· ND	ND	ND	- ND	ND .	
Methyl fert-Bufyl Ether (MfB	E) 0.005	ND	ND	NÐ	ND	ND	
Napthalene	0.002	ND	ND .	ПO	0.003	0.020	
n-Propy/benzene	0.001	ND	ND	מא	ND	ND	
Styrene	0.001	ND	0.001	0.001	ND	0.001	
1,1,1,2-Tetrachloroethane	0.001	ND	NØ	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND	:
Tetrachloroethene	0.001	MD	NO	GN	ND	ND	
Toluene	0.001	ND	ND	ND	ИD	ND	
1,2,3-Trichlorobenzene	0.002.	אס	ND	ND:	ND	ND	
1,2,4-Trichlorobenzene	0.002	ND	ND	ON	ND	ON.	
1,1,1-Trichloroethane	0.001	MQ	0.007	0.005	0.006	0.006	
1,1,2-Trichloroethane	0.003	ND	ND	ND	ND	ND	
Trichloroethene	9.001	ND	ND	DM	ND	ND	
1,2,3-Trichloropropane	0.003	ND	ND	ND	ND	ND	
Trichlorofluoromethane	0.001	NO	MD	ND	ND	ND	
Trichlorotrifluoroethane	0.005	ND	800.0	0.007	0.006	0.007	
1;2;4-Trimethylbenzene:	0.001	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.001	ND	ND	DM	ND	ND	
Vinyt chloride	0:002	ND	ND	ND	ND	ND	
Xylenes (total)	0.003	ND	ND	ND.	ND	NĐ	

Surrogates (% recovery) Limits: 80 - 130

Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Dibromafluoromethana	102	105	98	101	104	
Toluene-d8	102	94	110	101	100	
Bromofluorobenzene	98	97	106	102	97	

QC Sample Report - EPA Method 8260

Matrix: Soil

Batch #: MS48260S182

Batch Accuracy Results

Sample iD: Laboratory Cor	ntrol Sample			··· -
Analyt e	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
1,1-Dichloroethene	0.020	107	59 - 172	Pass
Benzene	0.020	93	66 142	Pass
Trichloroethene	0.020	90	71 - 137	Pass
Toluene	0.020	88	59 - 139	Pass
Chlorobenzene	0.020	94	60 - 133	Pass

Analytical Notes:	Analytical Notes:						
·							

Batch Precision Results

MS/MSD Sample ID: 16350-1

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
1,1-Dichloroethene	0.0225	0.0235	4%	22%	Pass
Benzene	0.0196	0.0198	1%	21%	Pass
Trichloroethene	0.0202	0.0190	6%	24%	Pass
Toluene	0.0195	0.0176	10%	21%	Pass
Chlorobenzene	0.0201	0.0201	0%	21%	Pass

	Arialyucai Notes.
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MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate



EPA 8270 Semivolatile Organics

PSI Client:

Project: Caltrans - J&A Trucking

Job No.: 16373 Matrix: Soil TPW Analyst:

Date Sampled:

04/26/00 04/28/00

Date Received: Date Extracted:

05/03/00

Dates Analyzed:

05/05/00

Batch Number: 8270S0621

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Compound	DL.	mg/Kg	mg/Kg	mg/Kg	· mg/Kg	mg/Kg
Acenaphthene	0.033	ND	ND /	, ND	ND .	ND
Acenaphthylene	0.033	ND	ND	DN	0.055	ND
Anthracene	0.033	ND	ND	ND	ND	ND
Benzojajanthracene	0.066	ND	ND	N D	ND	ND
Benzo[a]pyrene	0.066	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.033	ND	ND	МĐ	NĐ	ND
Benzo[g,h,i]perylene	0.099	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.099	ND	ND	ND	ND	ND
Benzyl alcohol	0.13	ND:	ND	ND	ND	ND
bis(2-Chloroethoxy)methar	ne 0.066	ND	NO	NO	GΜ	ND
bis(2-Chloroethyl)ether	0.066	ND	ND	. ND	ND	ND
bis(2-Chloroisopropyl)ethe	r 0.099	ND	NO	NO	NO	ND
bis(2-Ethylhexyl)phthalate	0.33	ND	ND	ND	ND	ND
4-Bromophenylphenylethe		ND	ND	ОИ	····ND	В
Butylbenzylphthalate	0.033	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.16	ND	ND	NO	ND	ND
4-Chloroaniline	0.16	ND	ND	ND	ND	ND
2-Chloronaphthalene	0.033	ND	ND	ND	GN	ND
2-Chlorophenol	0.13	ND	ND	ИD	ND	ND
4-Chlorophenylphenylethe	r 0.033	ND	NO	NO	NO	ND
Chrysene	0.033	ND	ND	ND	ND	ND
Di-n-butylphthalate	0.33	סת	NO	ND	ND	ND
Di-n-octylphthalate	0.033	ND	ND	ND	ND	ND
Dibenzo[a]h]anthracene	0.099	ND	ND	NO	ND	ND
Dibenzofuran	0.033	ND	ND	ИD	ND	ND
1,2-Dichloroberizene	0.033	NO	ND	NĐ	GN	ND
1,3-Dichlorobenzene	0.033	ND	ND	ND	ND	ND
1,4-Dichloropenzene	0.033	ND	NO	NO	ND	ND
3,3-Dichlorobenzidine	0.13	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.16	ND	ND	ND	NĐ	ND
Diethylphthalate	0.33	ND	ND	ND	ND	ND
2.4-Dimethylphenol	0.099	ND	ND	NO	ND	ND
Dimethylphthalate	0.033	ND	ND	ND	ND	ND
4.6-Dinitro-2-methylpheno	ol 0.33	ND	ND	NO	NO	ND
2,4-Dinitrophenol	1.6	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.033	ND	NO	NO	ND	ND



EPA 8270 Semivolatile Organics

PSI Client:

Project: Caltrans - J&A Trucking

Job No.: 16373 Matrix: Soil Analyst: **TPW**

Date Sampled: 04/26/00 Date Received:

04/28/00

Date Extracted: Dates Analyzed: 05/05/00

05/03/00

Batch Number: 8270S0621

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	-
Compound	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
2,6-Dinitrotoluene	0.099	ND	ND	ND	ND	ND	
Fluoranthene	0.033	ND	NO	ND	0.072	ND	
Fluorene	0.033	ND	` ND	ND ND	ND 1	ND	
Hexachlorobenzene	0.033	ND	ND	ND	ND	ND	
Hexachlorobutadiene	0.033	ND	ND	ND	ND	ND	
Hexachlorocyclopentadien	e. 1.6	ND	ND	ND	ND	ND	
Hexachloroethane	0.033	ND	ND	ND	ND	ND	
Indeno[1,2,3-c,d]pyrene	0.13	ND	ND	NØ	ND	ND	
Isophorone	0.033	ND	ND	ND	ND	ND	
2-Methylnaphthalene	0.033	ND	ND	ND	ND	ND	
2-Methylphenoi	0.16	ND	ND	ND	ND.	ND	
4-Methylphenal	0.16	שא	NĎ	NO	ND	ND	
N-Nitrosodi-n-propylamine	0.033	ND	ND	ND	ND	ND	
N-Nitrosodiphenylamine	0.033	ND	ND	ND	ΝĐ	ND	
Naphthalene	0.033	ND	ND -	ND	0.28	ND	. , , , , , , , , , , , , , , , , , , ,
2-Nitroaniline	.0.099	ND	ND	ND		ND	
3-Nitroaniline	0.099	ND	ND	ND	ND	ND	
4-Nitroaniline	0.33	ND	ND	ND.	ND	ND	
Nitrobenzene	0.099	ND	ND	ND	ND	ND	
2-Nitrophenal	0.13	ND	ND	NØ	ND	ND	
4-Nitrophenol	0.33	ND	ND	ND	ND	ND	
Pentachlorophenol:	1.6	ND	ND	ND	ND	ND	
Phenanthrene	0.066	ND	ND	ND	0.10	ND	
Phenot	0.13	ND	NO	NØ	ND	ND	
Pyrene	0.033	ND	ND	ND	0.14	ND	
1,2,4-Trichlombenzene	0.033	ND	GN	ND	ΝĎ	ND	
2,4,5-Trichlorophenol	0.2	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol:	0.33	ND:	ND	ND	ND:	ND:	

Surrogates (Limits) in Percent Recovery

Sample !!	D: Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
2-Fluorophenol (25 - 121%)	75	84	8.1	87	79	
Phenol-D5 (24 - 113%)	73	82	80	87	77	
Nitrobenzene-D5: (23 - 120%)	60.	67	65	71	64	
2-Fluorobiphenyl (30 - 115%)	77	83	84	87	80	
2.4,6-Tribromophenol (19 - 122%)	90	92	94	95	87	
p-Terphenyl-D14 (18 - 137%)	86	82	84	108	80	



QC Sample Report - EPA 8270

Batch #: 8270S0621

Matrix: Soil

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Calliple		Lavorator		Janua

Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fall
Phenol	2.66	80	5 - 112	Pass
2-Chlorophenol	2.66	94	23 - 134	Pass
1,4-Dichlorobenzene	1.33	. 91	20 - 124	Pass
N-Nitrosodi-n-propylamine	1.33	71	0 - 230	Pass
1,2,4-Trichlorobenzene	1.33	96	44 - 142	Pass
4-Chloro-3-Methylphenol	2.66	90	22 - 147	Pass
Acenaphthene	1.33	89	47 - 145	Pass
4-Nitrophenol	2.66	104	0 - 132	Pass
2,4-Dinitrotoluene	1.33	92	39 - 139	Pass
Pentachlorophenol	2.66	126	14 - 176	Pass
Pyrene	1.33	90	52 - 115	Pass

۱naly	rtical Notes:
-	

Batch Precision Results

MS/MSD Sample	ID:	Laboratory Control Sample
---------------	-----	---------------------------

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Phenol	2.12	1.95	9%	35%	Pass
2-Chlorophenol	2.50	2.27	10%	50%	Pass
1,4-Dichlorobenzene	1.22	1.12	9%	27%	Pass
N-Nitrosodi-n-propylamine	0.95	88.0	7%	38%	Pass
1,2,4-Trichlorobenzene	1.28	1.16	10%	23%	Pass
4-Chloro-3-Methylphenol:	2.39	2.23	7%	33%	Pass
Acenaphthene	1.18	1.09	8%	23%	Pass
4-Nitrophenol	2.77	2.60	6%	50%	Pass
2,4-Dinitrotoluene	1.23	1,15	6%	47%	Pass
Pentachlorophenol	3.36	3.11	8%	47%	Pass
Pyrene	1.20	1.11	8%	36%	Pass

Analytical Note:	3 :		
<u>.</u>			
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Centrum Job # 16373

290 TENNESSEE STREET REDLANDS, CA 92373

(909) 798-9336 • (800) 798-9336

FAX (909) 793-1559

Chain of Custody Record

www.centre	M1-1295.COM		INDESCORE	, 4111-140 3 , ¢	•		/4		Ple	as	e Cir	cle /	Ana	lyse	s Re	equ	est	ed		\	
Project No:	CGOII		Project No	eme: Cans	- JATRULKING CONTAG	NER FRES	Sign			\neg	Sins	ΤТ				윤					Turn-Around Time
	FRANKPUSS.	·	Phone:	185-	Fax: -1111 BIO 785 - 20 W. WINTON A	-1192	en, Carbo		곀		Sees S	4		S Pest/PC		RCRA,	Conductivity				□ 24 Hr. RUSH* □ 48 Hr. RUSH* 歯 Normal TAT
Client Name (Report and Billing			Address:	13 H	20 W. WINTON AVAYUARO, CA 9454	厄 15	Diese Fuel Screen, Carbon	only		, 413.2	104 mo - 604 8015	GCMS: MUBE Conf. Only	529	8080: Pesticides, PCBs(Pest/PCB)		Metals: (Title 22 (CAM) RCRA,		ت ¥¥			*Requires PRIOR approval, additional charges apply
	•	T		<u> </u>	1			S S	E E	¥.			8270			U	S	şi,			Requested due date:
(Cab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M:	8015M:	8021B:	418.1 (TRPH),	Cm HO	GCMS:	GCMS: (8270C)	8080: P		Metals	pH, TDS, TSS,	Flashpoint,		_	Remarks/Special Instructions
1	JA1-7.0	4-26-00	0834	SUIL		1555	X	<u> </u>			XIX		X	X		X				_	
2	TA2-7.0		1050	1			$\langle X \rangle$	X.			<u> </u>		X	X		X					
3	JA3-7.0		1305				X)	$oxed{f f ar ar ar ar ar ar ar ar ar ar$		į	XX		X	X		X					
4	JA4-6.5	A	1516	4		₩	X)	Y			X 7	_	X	X		<u>X</u>					
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	hed by: (Sampler's Signature) S MERRITT		Date: 4-27-00	Time:	3) Relinquished by:	,	Date:	T	lme:		To be					-	_				Sample Disposal
2) Received	by:		Date:	Time:	4) Received by:		Date:	_ +	lme:	- 1	Samp Custo			- 1		4		From	Field	'	Client will pick up Return to client
The deliver	y of samples and the signature	on this cha	in of custo	iy form	5) Relinquished by:		Date:	-	ime:		Ail sa	mple	conta	ainer	intac	:17	X V•				Lab disposal
	authorization to perform the an and Conditions set forth on the			e under	Freceived for Laboratory by:		949/ 1/2	di	ime: GZ		□ Co	urier	Àγ	PS/F	6d Ex	<i>)</i> 🛭	Hand	carr	ied		
Laboratory	Notes:				The state of the s	<u> </u>		=-	<u> </u>												Sample Locator No.
				<u>-</u>							- 6		218	≥ √		<u></u>	1	4	<u>۲°</u>		E-5

Centrum Job # 16393
Page _____ of _____

290 TENNESSEE STREET REDLANDS, CA 92373

(909) 798-9336 • (800) 798-9336

FAX (909) 793-1559 lab@centrum-labs.com

Chain of Custody Record

www.centi	um-labs.com		lab@cen	trum-labs.c	om		_		llaa	(`iro	lo A	nal	vea	s Re	~	aet			\	
Project No Project Ma Client Nam	OGOTT PANK POSS 18:	5	Project N T + Phone: 5 (C	ame: A TP 3 78 Willing) 1 HA	CALTRANS UCK/CONTACNER Fax: 5-1111	FREJGHI 15-1192 U AUE 43	Olesel, Juel Screen, Carbon Chain	8021B: BTEX/MtBE Only		SI	64, 534.2			Bs(Pest/PCB)		Metals: (Title 22 (CAM) RCRA, PP	TSS, Conductivity	Hex Cr			Turn-Around Time 24 Hr. RUSH* 48 Hr. RUSH* Normal TAT *Requires PRIOR approval, additional charges apply Requested due date:
Centrum II	•	Date sample	Time d sampled	Sample matrix	Site location	Containers: # and type	BD15M: O	8021B: B	418.1 (TRPH),	TPHA	GCMS: (8	GCMS: M	BCMS:	8080: Pesi	ľ	Metals: (1	pH, TOS,	Flashpoint			Remarks/Special Instructions
	JA-1:	\$ -2-6	0 6955	1520		10	XIS	V		X	X		X	X		X					BLOKEN
2	JA-2		1045	1		10	Χİ	₹		又	X		又	X)	X.					# 2 LITER BOTTLE BROKEN
3	JA-3		1150			10	X)	1		X	又		X	X		A				Г	# LITER BOTTLE
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5	CF - 1		1515			8	XIS			X	X		X	Х	J	XI					
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	authorization to perform the an and Conditions set forth on the i			e nuqet	6) Received for Laboratory by;		73	Tim : (Cour	ler j	X UI	>S/[6	d Ex	□ F	land	car	ried		
Laboratory	Notes: FILTE	ER	ME	TALS	- Marx vander 180	· · · · · · · · · · · · · · · · · · ·		.1'.						<u> </u>							Sample Locator No. F - 1 4-VOA



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY . CHEMICAL AND BIOLOGICAL ANALYSES

Client:

PSI

1320 W. Winton Ave.

Hayward, CA 94545

Date Sampled:

05/02/00

Date Received:

05/03/00

Job Number:

Project: CT J&A Truck/Container Freight

CASE NARRATIVE

The following information applies to samples which were received on 05/03/00:

The samples were received at the laboratory chilled and sample containers were intact.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested.

6010B: Some samples were run at a dilution due to sample matrix effects; consequently, reporting limits were raised.

Laboratory Director

ELAP # 1184

DL: Detection Limit - The lowest level at which the compound can reliably be detected under normal laboratory conditions.

ND: Not Detected -- The compound was analyzed for but was not found to be present at or above the detection limit.

NA: Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.

Metals

Client: PSI

Project: CT J&A Truck/Container Freight

Job No: 16393 Matrix: Water Analyst: RLB/TLR Date Sampled:

05/02/00

Date Received:

05/03/00

Date Digested:

05/04/00

Date Analyzed:

05/04-15/00

Batch Number: 6010W1555

		Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4									
Element	Method #	DL	mg/L	mg/L	mg/L	mg/L	mg/L									
Antimony	6010B	0.015	ND	ND	ND	ND	. ND									
Arsenic	6010B	0.010	ND	. ND	ND	ND	ND									
Barium	6010B	0.010	ND	0.16	0.15	0,18	0.12	Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Maria Ma Maria Maria Beryllium	6010B	0.010	ND	ND	ND	ND	ND (est pri e Sin enskr
Cadmium	6010B	0.010	ND	ND	ND	ND	ND	역) 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1								
Chromium	6010B	0,010	ND	ND	0.010	ND	ND									
Cobalt	6010B	0.010	ND	ND	ND	ND	ND									
Copper	6010B	0.010	NO	GN	ND	ND	ND	.g								
Lead	6010B	0.010	ND	ND	ND	ND	ND	5.5 T 1927, 4								
Mercury	7470	0.0002	ND	ND	ND	ND	ND									
Molybdenum	6010B	0.010	ND	ND	ND	ND	ND									
Nickel	6010B	0,010	ND	0.045	0.035	0.030	0.027									
Selenium	6010B	0.015	ND	ND	ND	ND	ND	Tall Tries								
Silver	6010B	0.010	ND:	ND	ND	ND	ND									
Thallium	6010B	0.010	ND	ND	ND	ND	ND									
Vanadium	6010B	0.010	ND	ND	NO	ND	ND									
Zinc	6010B	0.10	ND	0.12	0.10	0.12	ND	1.1.4								
	San San San San San San San San San San	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la companya de	194. July	ti gan i Tilik k	ara serkima e											

Metals

PSI Client: Date Sampled: 05/02/00 Project: CT J&A Truck/Container Freight Date Received: 05/03/00 Job No: 16393 Date Digested: 05/04/00 Matrix: Water Date Analyzed: 05/04-15/00 Analyst RLB/TLR Batch Number: 6010W1555

	S	ample ID:	CF-1	CF-2	CF-3	CF-10		
Element	Method #	DL*	mg/L	mg/L	mg/L	mg/L		
Antimony	6010B	0.30	ND	ND	ND .	ND		
Arsenic	6010B	0.20	ND	ND	ND	ND		
Barium	6010B	0.20	0.28	ND	ND	ND	· Security Managers	ini manganak i makab
Beryllium	6010B	0.20	ND	ND	ND	ND		
Cadmium	6010B	0.20	ND	ND	ND	ND	. 4239,1119 × 13811.	\$ 25 JMA 15 LJ
Chromium	6010B	0.20	ND	ND	ND	ND		:
Cobalt	6010B	0.20	ND	ND	ND	ND		
Copper	6010B	0.20	ND	ND	ND	ND		
Lead	6010B	0.20	ND	ND	ND	ND	in indicator in the con-	in and Mark the Mills
Mercury	7470	0.0002	ND	ND	ND	ND		
Molybdenum	6010B	0.20	ND	ND	ND	ND	Turburgas or exempt	
Nickel	6010B	0.20	ND	ND	ND	ND		·
Selenium	6010B	0.30	ND	ND	ND	ND		
Silver	6010B	0.20	ND	ND	ND	ND		
Thallium	6010B	0.20	ND	ND	ND	ND	• ;	
Vanadium	6010B	0.20	ND	ND	ND	ND	15 × 1	- 1
Zinc	6010B	2.0	ND	ND	ND	ND		
			der of the ground	Taylor San	· ·			

^{*}See Case Narrative regarding raised reporting limits.



QC Sample Report - Metals

Matrix: Water
Batch #: 6010W1555
MS/MSD Sample ID: JA-1

	Batch F	recision	Result	s:		Batch A	ccurac	y Results:	
Metal	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fail	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits Percent Recovery	Pass / Fail
Antimony	1.01	1.07	6%	20%	Pass	1.0	101	75 - 125	Pass
Arsenic	0.99	1.05	5%	20%	Pass	1.0	97	75 - 125	Pass
Barium	1.21	1.21	1%	20%	Pass	1.0	102	75 - 125	Pass
Beryllium	0.95	1.01	6%	20%	Pass	1.0	98	75 - 125	Pass
Cadmium	1.02	1.02	0%	20%	Pass	1.0	103	75 - 125	Pass
Chromium	1.00	1.02	2%	20%	Pass	1.0	101	75 - 125	Pass
Cobalt	1.01	1.02	1%	20%	Pass	1.0	103	75 - 125	Pass
Copper	1.05	1.06	1%	20%	Pass	1.0	103	75 - 125 75 - 125	Pass
Lead	0.97	1.03	6%	20%	Pass	1.0	100	75 - 125	Pass
Mercury	2.51	2.59	3%	20%	Pass	0.005	110	75 - 125	Pass
Molybdenum	1.01	1.07	6%	20%	Pass	1.0	101	75 - 125	Pass
Nickel	1.02	1,06	4%	20%	Pass	1.0	101	75 - 125	Pass
Selenium	0.97	1.03	6%	20%	Pass	1.0	98	75 - 125	Pass
Silver**	1:03	1.06	3%	20%	Pass	1.0	103	75 - 125	Pass
Thallium	0.96	1.00	4%	20%	Pass	1.0	98	75 - 125	Pass
Vanadium	1.05	1.06	0%	20%	Pass	1.0	104	75 - 125	Pass
Zinc	1.13	1.13	0%	20%	Pass	1.0	113	75 - 125	Pass

Analytical Notes

**The MS/MSD for this analyte did not meet the acceptance criteria due to a sample matrix effect.
The LCS / LCSD pair was used to provide precision data for this batch.

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

MS: Matrix Spike

RPD: Relative Percent Difference

MSD: Matrix Spike Duplicate



Modified 8015 - Fuel Screen

Client: PSI

Project: CT J&A Truck/Container Freight

Job No.: 16393 Matrix: Water Analyst: JL Date Sampled: 05/02/00
Date Received: 05/03/00
Date Extracted: 05/08/00
Date Analyzed: 05/09/00
Batch Number: 8015DW1914

Fuel Identified:	Diesel	Motor Oil		Detection Limits
Units:	mg/L	mg/L		mg/L
Blank	. ND	ND		0.40
JA-1 JA-2	ND	ND	ESS com 1800 sc ools ou nomine est son	0.40
JA-3	0.8	ND:		0.40
JA4	ND ND	ND ND		0.40
CF-1	21	ND		0.40 4.0
CF-2	2.8	ND		0.40
CF-3	ND	ND		0.40
CF-10	1.8	ND		0.40
		is mant operation in General Baragar on some		
			en egy var e	

QC Sample Report - EPA 8015M Diesel

Matrix: Water

Batch #: 8015DW1914

Batch Accuracy Results

Sample ID: Laboratory Con	troi Sample	}	* **	
Analyte	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Diesel	0.8	77	70 - 130	Pass

Analytical Notes	<u>:</u>	
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Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/L.	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Diesel	0.62	0.64	3%	25%	Pass

Analytical Notes:	<u></u>	
•		-
		•
	Analytical Notes:	Analytical Notes:

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate



Modified 8015 - Total Volatile Hydrocarbons as Gasoline

Client: PSI Date Sampled: 05/02/00 CT J&A Truck/Container Freight Project: Date Received: 05/03/00 Job No.: 16393 Date Analyzed: 05/04/00 Matrix: Water Batch Number: 8015GW2593 Analyst: CP

Method Blank 0.5 ND JA-1 0.5 ND JA-2 0.5 0.77 JA-3 0.5 ND JA-4 0.5 ND CF-1 50.0 94 CF-2 50.0 54 CF-3 0.5 0.50 CF-10 5.0 7.77	Detection Limit	Petroleum Hydrocarbons as Gasoline
Method Blank 0.5 ND JA-1 0.5 ND JA-2 0.5 0.77 JA-3 0.5 ND JA-4 0.5 ND CF-1 50.0 94 CF-2 50.0 54 CF-3 0.5 0.50 CF-10 5.0 7.77		
JA-2 JA-3	0:5	la transfer de la facilitat de la companyación de l
JA-3 0.5 ND JA-4 0.5 ND CF-1 50.0 94 GF-2 56.0 54 CF-3 0.5 0.50 CF-10 5.0 7.7	0.5	ND
JA-4 0.5 ND CF-1 50.0 94 CF-2 56.0 54 CF-3 0.5 0.50 CF-10 5.0 7.7	0:5	0.77
CF-1 50.0 94 GF-2 56.0 54 CF-3 0.5 0.50 CF-10 5.0 7.7	0.5	ND
GF-2: 50.0 54. CF-3 0.5 0.50 CF-10 5.0 7.7	0.5	ND
CF-10 0.5 0.50 CF-10 5.0 7.7	50.0	94
CF-10 600	50.0	54
		0.50
	50	
	na di kanangan Marajawa Maratanya katangan kanangan kanangan kanangan kanangan kanangan kanangan kanangan kana Kanangan kanangan ka	to the second second the second second second second second second second second second second second second se
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randina di Santania. Ny fivondronana ara-daharanjaraha ara-daharanjaraha di Santania di Santania di Santania d	표 보기 (1) - 발표를 하고 있는 것이다. 	
[2]		
Minus からい AMP には 17 でも App にっぽう しゃしょか はるいには 感染 からられい かっぱか かいがか しょうしょう 見をして かいしょう ロー・ディー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		

QC Sample Report - EPA 8015M Gasoline

Matrix: Water

Batch #: 8015GW2593

Batch Accuracy Results

Sample ID: Laboratory Cont	roi Sample	<u>.</u>	•	
Analyte	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Gasoline	10.0	100	70 - 130	Pass

Analyt	ical Notes:
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1.	
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-	

Batch Precision Results

MS:	Matrix	Spike	Sample	
MSE)- Matri	y Snik	e Dunlic	ste

Analytical Notes:



EPA 8080 - Organochlorine Pesticides & PCBs

Client: PSI

Project: CT J&A Truck/Container Freight

Job No.: 16393 Matrix: Water Analyst: TPW

Date Sampled: 05/02/00

Date Received: 05/03/00 Date Extracted: 05/06/00

Date Analyzed: 05/08/00 Batch Number: PESTW0251

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-1
Pesticides	DL	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aldrin	0.0001	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.0001	ND	ND	NÓ	ND	NO	ND
Beta-BHC	0.0001	ND	ND	ND	ND	ND	ND
Delta-BHC	0.0001	ND	ND	ND	סא	ND	ND
Gamma-BHC (Lindane)	0.0001	ND	ND	ND	ND	ND	ND
Chlordane	0.0001	ND	ND	ND	ND	NO	ND
4,4'-DDD	0.0002	ND	ND	ND	ND	ND	ND
4,4'-DDE	0,0002	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.0002	ND	ND	ND	ND	ND	ND
Dieldrin	0.0002	ND	ND	ND	ND	ND	ND
Endosulfan I	0.0001	ND	ND	ND	ND	ND	ND
Endosulfan II	0.0002	ND	ND	МĎ	ND.	ND	ND
Endosulfan sulfate	0.0002	ND	ND	ND	ND	ND	ND
Endrin	0.0002	ND	ND	ND	ND	ND	ND.
Endrin Aldehyde	0.0002	ND	ND	ND	ND	ND	ND
Endrin Ketone	0.001	ND	ND	ND	ND S	ND	ND
Heptachlor	0.00005	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	0 00005	NO	ND	ND	ND	ND	ND
Methoxychlor	0.0005	ND	ND	ND	ND	ND	ND
Toxaphene	0.001	ND	ND	ND	ND	ND	ND:
PCBs							
Aroclor-1016	0.001	ND	ND:	ND	ND	ND	ND
Aroclor-1221	0.001	ND	ND	ND	ND	ND	ND
Araclor-1232	0.001	ND	ND	ND	ND	ND.	ND
Aroclor-1242	0.001	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.001	ND	ND	ND	ND	ND	ND
Aroclor-1254	0.001	ND	ND	ND	ND	ND	ND
Arocior-1260	0.001	ND	ND	ND	ND	ND	ND

Surrogates (% recovery) Limits: 50 - 150

		Sample ID	: Blan	k JA-1	JA-2	JA.	3 JA-4	CF-1
			in two		•		***	
Tetrachloro-m-x	ylene ·		126	117	93	10:	2 105	121
	*	· .			,			-

QC Sample Report - EPA 8080 Pesticides

Matrix: Soil

Batch #: PESTW0251

Batch Accuracy Results

Sample i	ID:	Laboratory	 Control 	Sample
----------	-----	------------	-----------------------------	--------

Analyte	Spike Concentration μg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Lindane	0.1	87	32 - 127	Pass
Heptachlor	0.1	108	34 - 111	Pass
Aldrin	.0.1	103	42 - 122	Pass
Dieldrin	0.4	76	36 - 146	Pass
Endnn	0.4	86	30 - 147	Pass
DDT	0.4	73	25 - 160	Pass
Aroclor 1242	2.0	93	75 - 127	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Lindane	0.087	0.085	2%	25%	Pass
Heptachlor	0.108	0.107	1%	25%	Pass
Aldrin	0.103	0.102	1%	25%	Pass
Dieldrin	0.300	0.290	3%	25%	Pass
Endrin	0.340	0.330	3%	25%	Pass
TOO	0.290	0.290	0%	25%	Pass

.

Analytical Notes:

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate



EPA 8260 - Volatile Organics with Oxygenates

Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.:

16393

Matrix: Analyst: Water JMR •

Date Sampled:

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number:

per: M4S8260W2096

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-2
Compounds	DL	μg/L_	μg/L	нд/L	μg/L	μ g/ L,	μg/L
Acetone	50	ND	- ND	ND	· ND	ND	ND
tert-Amyl Methyl Ether (TAM	acentores en antenantescetétététététététététététététététététété	ND	ND	ND	ND	ND	ND
Benzene L	0.5	ND	ND	ND	ND.	0.7	330
Bromobenzene -	1.0	ND	ND	ND	ND	ND	ON
Bromochloromethane	1.0	, ND	ND	ND	ND	ND	ND
Bromodichloromethane	0:5	ND	ND	ND	ND	ND	ND
Bromoform	0.5	ND	ND	ND	ND	ND	ND
Bromomethane	0.5	ND	ND	ND	ND	ND	ND
tert-Butanol (TBA)	50	ND	ND	ND	- ND	ND	ND
2-Butanone (MEK)	10	ND	ND	ND	ND	ND	DN
n-Butylbenzene	0.5	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	0,5	ND	ND	ND	ND	ND	ב פא
tert-Butylbenzene	0.5	ND	ND	МD	ND	ND	ND
Carbon disulfide	. 10	ND	ND	ND	ND	ND	68
Carbon tetrachloride	0.5	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.5	ND	ND :	ND	ND	ND	ND
Chloroethane	0.5	ND	ND	ND	ND	ND	ND
Chlorafarm	0.5	ND	GND	ND	ND	1.7	ND
Chloromethane	0.5	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	ND	ND	ND	ND	OND	ND
4-Chlorotoluene	0.5	ND	ND	ND	ND	ND	ND
Dibromochioromethane	0.5	ND	QN	ND:	ND:	ND	ND ND
1,2-Dibromoethane	0.5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan		ND	ND	ND	ND	ND	ND ND
Dibromomethane	0.5	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	ND	DI	ND.	ND.	4.2	ND
1,3-Dichlorobenzene	0.5	ND	ND	ND	ND	ND NO	ND ·
1,4-Dichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.5	ND	ND	ND		ND .	ND
1,1-Dichloroethane	0.5	ND	ND		ND	ND	ND
1,2-Dichloroethane	0.5	ND	ND	ND	ND.	8.2	ND
1,1-Dichloroethene	0.5	ND	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	8.8	ND	ND	ND
cis-1,2-Dichloroethene	0.5	ND	ND	ND:	ND	6.2	ND
rans-1,2-Dichloroethene	0.5		ND ND	ND	ND	57	ND
1,2-Dichloropropane	0.5	ND		ND:	ND	0.8	ND
1,3-Dichloropropane		ND	ND	ND	ND	ND	ND
2.2-Dichloropropane	0.5	ND		ND	NO	ND	ND
, .	0.5	ND	ND	ND	ND	ND	ND
t,1-Dichloropropene	0.5	ND	ND	ND	ND	ND	МD

(800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client;

PSI

Project:

CT J&A Truck/Container Freight

Job No.:

16393

Matrix: Analyst: Water **JMR**

Date Sampled:

05/02/00

Date Received: Date Analyzed:

05/03/00

Batch Number:

05/04-12/00 M4S8260W2096

	Sample ID:	Blank	JA-t	JA-2	JA-3	JA-4	CF-2
Compounds `	DL	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
cis-1,3-Dichloropropene	0.5	ND	ND	ND	ND	ND ·	· ND
trans-1,3-Dichloropropene	0,5	ND	ND	ND	NĐ	ND :	ND
Diisopropyl Ether (DIPE)	5.0	ND	ND	ND	ND	ND	ND
Ethylbenzene	0,5	ND	ND	ND	ND	ND	12
Ethyl tert-Butyl Ether (EtBE)	5.0	ND	ND	ND .	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND.	ND	ND	ND	ND
2-Hexanone	10	ND	ND	ND	ND	ND	ND
lsopropylbenzene	0.5	ND	ND	ND	ND *	ND	ND
p-Isopropyitoluene	0.5	NÓ	ND	ND	ND	ND	ND
Methylene chloride	20	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	5.0	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE	≣) 1.0	ND	ND	ND.	ND		ND
Napthalene	0.5	ND	8.3	8.3	2.4	1.3	2,900
n-Propylbenzene	0.5	ND	ND	ND	ND	ND	2,300 ND
Styrene	0.5	ND	ND	ND	ND	ND	0.8
1,1,1,2-Tetrachloroethane	0.5	ND	ND	ND	ND	ND '	ND
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	ND *	ND	ND	ND	130	ND
Toluene	0.5	ND	ND	ND	ND	ND	10
1,2,3-Trichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	ND	ND	ND	ND	4.2	ND
1,1,2-Trichloroethane	0.5	ND	ND	ND	ND	0.6	ND
Trichtoroethene	0.5	ND	ND	0.7	ND ND	630	ND.
1,2,3-Trichloropropane	0.5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	ND	. NO	ND	GN	ND	ND
Trichlorotrifluoroethane	5.0	ND	ND	ND	ND	7.5	ND
1,2,4-Trimethylbenzene	0.5	ND	ND	ND	ND	ND	1.4
1,3,5-Trimethylbenzene	0.5	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	NO	ND	ND	ND	1.1	ND.
Xylenes (total)	1.5	ND	ND	ND	ND	ND	11

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-2
Dibromofluoromethane		106	107.	108	107	104	112
Toluene-d8		104	106	107	105	105	112
Bromofluorobenzene	· .	102	100	101	101	101	98



EPA 8260 - Volatile Organics with Oxygenates

Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.: Matrix: 16393 Water

Analyst:

JMR

Date Sampled:

d: 0

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number: M4S8260W2096

	Sample ID:	CF-3					_		· ·		
Compounds	DL	μg/L									
Acetone	50	ND	·								
tert-Amyl Methyl Ether (TA	AME) 5.0	ND			. 2000A-000A-0	0.0210000	10000000	C18 D1-8891	A 64 650 100 A 64 650 100 100		2000 AN WOODS
Benzene	0.5	0.9	rawa transariabbaggg	rnin o oo onooo, 211				-	- SOMEON CONTRACT OF	al entire jan.	- P. 1983
Bromobenzene	1.0	ND				- 60 (100 a) - 20 (100 a)	100000000			100 - 100	×25(3)
Bromochloromethane	1.0	ND		1.54 ASSESSES	20080630000		A0000000000000000000000000000000000000	100000000000000000000000000000000000000	4.0380044 KL	5. 7.7% F	11-5803
Bromodichloromethane	0.5	ND					100000			100000	10.893
Bromoform	0.5	ND	or a comment of the comment	eri, werspepite	u 1999-ya. 200-ya	00244.1%	-900,000,000,000	ACCESSES ASS	· ANTONIO	*** (8) ***	\$ 6.7865
Bromomethane	0,5	ND:							i kwijetiyi. Na a	1 2 A A A A A A A A A A A A A A A A A A	- Q
tert-Butanol (TBA)	50	ND	rines (Africa Pediggs)	Sari di Sari di 1		\$250,000 1	340M.V.			17.4.4	A .43
2-Butanone (MEK)	10	ND	100 - 204 2 - 200 - 204 3 - 200 - 204				2000 Mg	345,62		- 11 ·	- 75g
n-Butylbenzene	0.5	ND		-			\$4000 \$40			7. *	
sec-Butylbenzene	0.5	ND				Company Company Company				172	zi.
tert-Butylbenzene	0.5	ND			2 20 Mer 100 CC	1.0	wines a sec	. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	The area		***
Carbon disulfide	10	ND		* 1988 ***********************************	m i gent patint. I de secol		228,2127				
Carbon tetrachloride	0.5	ND		• • • • • • • • • • • • • • • • • • • •		1 000 4101	1 25 A	Materials			
Chlorobenzene	0.5	ND				1 Mag	Albania.	4.5	16.	1.4	۸,
Chloroethane	0.5	ND				* 4547		Contract Contract	***	-	•
Chloroform	0.5	ND	e de la company		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4 J. S		177		
Chloromethane	0.5	ND			•		******		•		*
2-Chlorotoluene	0.5	ND							# P	. , .	3
4-Chiorotoluene	0.5	ND							ş	* **	• • •
Dibromochloromethane	0.5	ND						,			
1,2-Dibromoethane	0.5	ND						e			. * *
1,2-Dibromo-3-chloroprop	ane 10	ND	200					4.			
Dibromomethane	0.5	ND		***			٠				-
1,2-Dichlorobenzene	0.5	ND		1.							•
1,3-Dichlorobenzene	0.5	ND									
1,4-Dichlorobenzene	0.5	ND						4.1	1	1 1	1
Dichlorodifluoromethane	0.5	ND				,					
1,1-Dichloroethane	0.5	ND				1 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2.1			: :
1,2-Dichloroethane	0.5	ND									
1,1-Dichloroethene	0:5	ND	100			1.11			4		
cis-1,2-Dichloroethene	0.5	ND					•		••		
trans-1,2-Dichloroethene	0.5	ND	•								
1,2-Dichloropropane	0.5	ND		•							
1,3-Dichloropropane	0.5	ND:									
2,2-Dichloropropane	0.5	ND									
1,1-Dichloropropene	0.5	ND			-				-		

entrum (800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.:

Matrix: Analyst:

Water

16393

JMR

Date Sampled:

05/02/00

Date Received: Date Analyzed:

05/03/00 05/04-12/00

Batch Number:

M4S8260W2096

	Sample ID:	CF-3	-		100						- 	
Compounds	DL	μg/L		· .				•		·	· ·	
cis-1,3-Dichloropropene	0.5	ND			-		<u>.</u>		•		_	
trans-1,3-Dichloropropene	0.5	ND				******			: ::::::::::::::::::::::::::::::::::::	nosen	Zukyy	
Diisopropyl Ether (DIPE)	5.0	ND	19200046 2000	vicini personali e	in daptigen (4)	100 miles		TOPPERSON (S)	rastructions	199980993 -		
Ethylbenzene	0.5	NO		X1000							Salata	
Ethyl tert-Butyl Ether (EtBE)	5.0	ND	and the second of	in hinochtese .	. American de la composition de la composition de la composition de la composition de la composition de la comp		um guasah tedilir	P1000000000000000000000000000000000000	: (1888) (1895) (1975) -	00.0°00.00000	Anderson in	1 41000
Hexachlorobutadiene	0.5	ND										
2-Hexanone	10	ND			ETTORONOMAN A	e a grandencia c	1 200 1 200 100 20	- 166 (1.00 (1.00 (1.00))	1. 1999/1999/4/59	ikan Militaryan jar	700000	\$6.500X
Isopropylbenzene	0,5	ND		tonections 100galage e		13 (200 c) 20 (200 c) 10 (200 c)					ri Kina	
p-Isopropyttoluene	0.5	ND		*	i en en en en en en en	126 A 21 To 2	1,61604,5664	14747600		W. W.S.	avimulit.	1,17
Methylene chloride	20	ND		Andreum Statistics		. 2 XX i				v., 4., 5.		
4-Methyl-2-pentanone	5.0	ND			V		. 12 -14-41	Harana N.		1.27		
Methyl-tert-butyl ether (MtB)	A processing the Company of the Comp	ND						1975 - 1984 1984 - 1983				4 3
Napthalene	0.5	1.7							A. 400000-01.0	200.c. M. 11115.	trous, save	7 - 7
n-Propyibenzene	0.5	ND			41 800 39 86 4 00 868 44			Marketin Adamski			1,900A.). Wales	
Styrene	0.5	ND						-	- Construction mode	ionocoe e gelle.	agri serri.	15,8%
1,1,1,2-Tetrachloroethane	0:5	ND					10000000000000000000000000000000000000					
1,1,2,2-Tetrachloroethane	1.0	ND				,						
Tetrachloroethene	0.5	ND			· · · · · ·	re ye	. UM W.					. 4
Toluene	0.5	ND								•		
1,2,3-Trichlorobenzene	0.5	ND					i i	7 - 4	. Yaki		1.4	
1,2,4-Trichlorobenzene	0.5	ND										
1,1,1-Trichloroethane	0.5	ND				. V						
1,1,2-Trichloroethane	0.5	ND										
Trichloroethene	0.5	ND		100								
1,2,3-Trichloropropane	0.5	ND									••	
Trichlorofluoromethane	0.5	ND									•	-
Trichlorotrifluoroethane	5.0	ND								·		:
1,2,4-Trimethylbenzene	0.5	ND		72.	÷. •	•						
1,3,5-Trimethylbenzene	0.5	ND								•		
Vinyl chloride	0.5	ND										
Xylenes (total)	1.5	ND										

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	CF-3	
Dibromofluoromethane	t a fuer	107	
Toluene-d8		109	
Bromofluorobenzene		98	



Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.: Matrix: 16393 Water

Analyst

JMR

Date Sampled:

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number: M4S8260W2096

	Sample ID:	CF-10									
Compounds	DL	μg/L					······································				
Acetone	1250	ND	·							-	Λ
tert-Amyl Methyl Ether (TAI	ИE) 125	ND				-2003/1904/19 -2003/1904/3					
Benzene	13	270				- September -	2 d 0.500 0 0 000	antic successories	. • 4004000000	to traidesegnesu -	 Assessminates in the
Bromobenzene	25	ND		3000						5.6888.58 8.888.88	
Bromochloromethane	25	- ND					70.000.000	tion standardicities	4.1.44.45 0 40000 100	eri bay esa tara .	20000-7
Bromodichloromethane	13	. ND				200000			- 78 82		
Bromoform	13	ND		. , , , , , , , , , , , , , , , , , , ,			**			+ 00 · version ser	- 100 (St. 1. 100)
Bromomethane	13	ND									, #\$\delta\q\delta\q
tert-Butanol (TBA)	1250	DN									
2-Butanone (MEK)	250	ND									
n-Butylbenzene	13	ND									
sec-Butylbenzene	13	ND.						la Maria Maria La Carrella Basa I			
tert-Butylbenzene	13	ND								2.	
Carbon disulfide	250	ND		. # 4800 k.: 4 - 99.20) 1000 on 1 1 7000		is i programa. Anglarings		er in Grade Sand College	
Carbon tetrachloride	13	ND									
Chlorobenzene	13	ND									
Chloroethane	13	ND									·
Chloroform	13	ND									
Chloromethane	13	ND									
2-Chiorotoluene	13	ND		2000	194	e ilogile					
4-Chlorotoluene	13	ND									
Dibromochloromethane	13	ND		14.5					in Ti		- S
1,2-Dibromoethane	13	ND									
1,2-Dibromo-3-chloropropa	ne 250	ND		is is at		eguarit. Gira		15 \$2			
Dibromomethane	13	ND									
1,2-Dichlorobenzene	13	ND		e Nove					1,24.0		
1,3-Dichlorobenzene	13	ND									
1,4-Dichlorobenzene	13	ND		1000							T 447
Dichlorodifluoromethane	13	ND			-						
1,1-Dichloroethane	13	ND			10 to	¥4.			. 1. <i>1</i> 11 + 1	1.5	
1,2-Dichloroethane	13	ND									
1,1-Dichloroethene	13	ND							, A	4	
cis-1,2-Dichloroethene	13	ND									
trans-1,2-Dichloroethene	13	ND			177					,	
1,2-Dichloropropane	13	ND									
1,3-Dichloropropane	13	ND	7								
2,2-Dichloropropane	13	ND									
1,1-Dichloropropene	13:	ND									



Client: PSI 1

Project: CT J&A Truck/Container Freight

Job No.: 16393 Matrix: Water Analyst: JMR

Date Sampled:

05/02/00 Date Received: 05/03/00 Date Analyzed: 05/04-12/00

Batch Number:

M4S8260W2096

Sa	mple ID:	CF-10	
Compounds	DL	μg/L	
cis-1,3-Dichloropropene	13	ND	
trans-1,3-Dichloropropene	13	ND	
Diisopropyl Ether (DIPE)	125	ND -	\$4080)
Ethylbenzene	13	13	g i
Ethyl tert-Butyl Ether (EtBE)	125	ND	2019 (c) 1
Hexachlorobutadiene	13	ND	
2-Hexanone	250	ND	
Isopropylbenzene	13	ND	- 4,80
p-Isopropyltoluene	13	ND	M. O.
Methylene chloride	500	ND	Abj 4
4-Methyl-2-pentanone	125	ND	***
Methyl-tert-butyl ether (MtBE)	25	ND	
Napthalene	13	1,600	2.5118
n-Propyibenzene	13	ND	ja. Sasas
Styrene	13	ND	
1, 1, 1, 2-Tetrachioroethane	13		
1,1,2,2-Tetrachloroethane	25	ND	
Tetrachloroethene	13	ND	
Toluene	13	14	
1,2,3-Trichlorobenzene	13		
1,2,4-Trichlorobenzene	13	ND	841 %
1,1,1-Trichloroethane	13		4 4
1,1,2-Trichloroethane	13	ND	
Trichloroethene	13	184. ND S - 1821 - 1823 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885 - 1885	
1,2,3-Trichloropropane	13	ND	
Trichlorofluoromethane	13	CANDADA ABAN ABAN ABAN ABAN ABAN ABAN ABA	
Trichlorotrifluoroethane	125	nna a n ibela de la visa de visa de la composition de la composition de la visa de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition dell	
1,2,4-Trimethylbenzene	13		
1,3,5-Trimethylbenzene	13	nda notak banda kana kana kana kana banda kana banda kana banda kana kana kana kana kana kana kana	
Vinyl chloride	13		,
Xylenes (total)	38	nteres in total es i la susception de la seconda de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia de la conferencia del conferencia de la conferencia de la conferencia del conf	

Guirogates 176 recove	Sample ID:	CF-10	·			
Dibromofluoromethane		111		 ·		
Toluene-d8		109			· .	
Bromofluorobenzene		101	*		* .	

(800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client;

PSI

Project:

CT J&A Truck/Container Freight

Job No.: Matrix: 16393 Water

Analyst:

JMR

Date Sampled:

05/02/00

Date Received:

05/03/00 05/04-12/00

Date Analyzed: Batch Number:

M4S8260W2096

	Sample ID:	CF-1									
Compounds	DL	μ g/L			<u></u> -					 -	
Acetone	5000	ND									
tert-Amyl Methyl Ether (TAM	E) 500	ND	180000000								
Benzene	50	34,000	-		neurone con po	- Last premariadas y an	- 197 5000 Jorn 5	1111011111	1541445	mamilia activ	. 1 4 1004
Bromobenzene	100	ND		2000 (800 17 2000 (800 17)				1 3 3 3 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1		r Cythicia 1 Sant -	
Bromochloromethane	100	ND						1.00 (1.00)	11.000	500 100 000	
Bromodichloromethane	50	ND			13,080,068	- 18.20	. 3000	2434			307330
Bromoform	50	ND							Andrew Ingention	1015 180101	**********
Bromomethane	50	ND							3%		
tert-Butanol (TBA)	5000	ND									
2-Butanone (MEK)	1000	ND		1000 1000 1000 1000						1 1.W.	
n-Butylbenzene	50	ND								•	
sec-Butylbenzene	50	ND								a file	14.73
tert-Butylbenzene	50	ND		~				. , ,			
Carbon disulfide	1000	ND						or property.			
Carbon tetrachloride	50	ND									
Chlorobenzene	50	ND									
Chloroethane	50	ND	1.00								
Chloroform	50	ND		11							-
Chloromethane	50	ND	4.5.4	5.1				·			
2-Chlorotoluene	50	ND									
4-Chlorotoluene	50	ND	e de la compania								
Dibromochloromethane	50	ND				• 1::-				٠.	
1,2-Dibromoethane	50	ND	16.1		4.7						
1,2-Dibromo-3-chloropropan Dibromomethane	· 10 0 4 4 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	ND	,080 s							-: "	
	50	ND					٠,				
1,2-Dichlorobenzene 1,3-Dichlorobenzene	50	ND	- 10 to	J							
1,4-Dichlorobenzene	50 50	ND	. ** .		-						
Dichlorodifluoromethane	50 50	NO	* 12.54					·			:
1,1-Dichloroethane	50	ND								•	
1,2-Dichloroethane	50 50	NO	(· ·	V1	-		•	*			
1,1-Dichloroethene	50	ND	. 4	1511.41			٠,	•			
	50 50	ND		40(4)	* .* *		:				
cis-1,2-Dichloroethene trans-1,2-Dichloroethene	50 50	ND	.:				•	<u> </u>			
1,2-Dichloropropane	50	ND			æ	٠.				•	
1,3-Dichloropropane	50 50	ND									
2,2-Dichloropropane		ND									
	50	ND			•						
1,1-Dichloropropene	50	ND						•			



Client:

Project:

CT J&A Truck/Container Freight

Job No.: Matrix:

16393

Analyst:

Water JMR²

Date Sampled:

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number: M4S8260W2096

	Sample ID:	CF-1	
Compounds	DL	μg/L	
cis-1,3-Dichloropropene	50	ND	
trans-1,3-Dichloropropene	50	ND	
Diisopropyl Ether (DIPE)	500	ND	and a stand beam de ninden as dit behange a beden me blandet. Lithred, bit in die 112 July George ig
Ethylbenzene	50	340	
Ethyl tert-Butyl Ether (EtBE)	500	ND ;	
Hexachlorobutadiene	150	ND	
2-Hexanone	1000	ND	
tsopropylbenzene	50	ND	
p-Isopropyltoluene	50	ND	and the second s
Methylene chloride	2000	ND	
4-Methyl-2-pentanone	500	ND	
Methyl-tert-butyl ether (MtBF	E) 100	NO	
Napthalene	50	19,000	
n-Propylbenzene	50	ND	
Styrene .	50	590	
1,1,1,2-Tetrachloroethane	50	ND	
1,1,2,2-Tetrachloroethane	100	ND	
Tetrachloroethene	50	ND	
Toluene	50	1,600	
1,2,3-Trichlorobenzene	50	ND	
1,2,4-Trichlorobenzene	50	ND	
1,1,1-Trichloroethane	50	ND	
1,1,2-Trichloroethane	50	ND	
Trichloroethene	50	190	
1,2,3-Trichloropropane	50	ND	
Trichlorofluoromethane	50	ND	
Trichlorotrifluoroethane	500	ND	
1,2,4-Trimethylbenzene	50	ND	
1,3,5-Trimethylbenzene	50	ND	
Vinyl chloride	50	NO	하였다면서 이 학생의 등 기고 온
Xylenes (total)	150	ND	

Surrogates (% recovery) Limits: 80 - 130

	Sample ID: CF-1	
Dibromofluoromethane	110 - 110 -	
Toluene-d8	115	
Bromofluorobenzene	98	

QC Sample Report - EPA Method 8260

Matrix: Water

Batch #: MS48260W2096

Batch Accuracy Results

Sample	ID:	Laboratory	y Control Sample
--------	-----	------------	------------------

Analyte	Spike Concentration µg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
1,1-Dichloroethene	. 20	113	59 - 172	Pass
Benzene	20	122	66 - 142	Pass
Trichloroethene	20	120	71 - 137	Pass
Toluene	20	113	59 - 139	Pass
Chlorobenzene	20	96	60 - 133	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery µg/L	Spike Duplicate Recovery µg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
1,1-Dichloroethene	22.7	24.5	8%	22%	Pass
Benzene	24.4	26.4	8%	21%	Pass
Trichloroethene	23.9	25.0	4%	24%	Pass
Toluene	22.8	24.6	8%	21%	Pass
Chlorobenzene	19.2	21.2	10%	21%	Pass

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Analytical Notes:



Client PSI -Date Sampled: 05/02/00 CT J&A Truck/Container Freight Project: Date Received: 05/03/00 Job No.: 16393 Date Extracted: 05/05/00 Matrix: Water Dates Analyzed: 05/06-08/00 Analyst: TPW Batch Number: 8270W0622

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	_
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
Acenaphthene	0.0011	ND	ND	ND	ND	ND	:
Acenaphthylene	0:0011	ND	ND	ND	ND	NO	
Anthracene	0.0011	ND	ND ·	ND	ND	ND ·	
Benzo(a)anthracene	0.0022	ND	ND	ND	ND	NO	
Benzo[a]pyrene	0.0022	- ND	ND	ND	ND	ND	
Benzo[b]fluoranthene	0.0011	ND	ND	ND	ND	ND	
Benzo[g,h,i]perylene	0.0033	ND	ND	ND	ND	ND	
Benzo[k]fluoranthene	0.0011	ND	ND	ND	ND	ND	
Benzyl alcohol	0.0044	ND	ND	ND	ND	ND	
bis(2-Chloroethoxy)metha		ND	ND	ND	ND	ND	
bis(2-Chloroethyl)ether	0.0022	ND	ND	ND	ND	ND	are a riversia la
bis(2-Chloroisopropyl)eth		ND	ND	NO.	ND	ND	
bis(2-Ethylhexyl)phthalate		ND	ND	ND	ND	ND	a i i i i i i i i i i i i i i i i i i i
4-Bromophenylphenyleth	er 0.0011	ND	ND	ND	ND	ND	w
Butylbenzylphthalate	0.0011	ND	ND	ND	ND	ND	The property
4-Chloro-3-methylphenol	0.0055	ND	ND	ND	ND	ND	
4-Chloroaniline	0.0055	ND	ND	ND	ND	ND	
2-Chloronaphthalene	0.0011	ND	ND	ND	ND	ND	
2-Chlorophenol	0.0044	ND	ND	ND	ND	ND	•
4-Chiorophenylphenyleth	er 0.0011	ND	ND	ND	ND	ND	100
Chrysene	0.0011	ND	ND	ND	ND	ND	
Di-n-butylphthalate	0.011	ND	ND	ND	ND	ND	
Di-n-octylphthalate	0.0011	ND	ND	ND	ND	ND	
Dibenzo[a,h]anthracene	0.0033	ND	ND	ND	ND	ND	
Dibenzofuran	0.0011	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.0011	ND	ND	ND	ND	NO	
1,3-Dichlorobenzene	0.0011	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.0011	NO	ND	ND	ND	ND	
3,3-Dichlorobenzidine	0.0044	ND	ND	ND	ND	ND	
2,4-Dichlorophenol	0.0055	ND	ND	ND	ND	ND	
Diethylphthalate	0.011	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	0.0033	ND	D	ND	ND	ND	
Dimethylphthalate	0.0011	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylphen		ND:	ND	ND	ND	ND	
2,4-Dinitrophenol	0.055	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene	0.0011	.ND	ND	ND ND	ND	ND	



Client:

Matrix:

Analyst

PSI

Project: CT J&A Truck/Container Freight

Job No.: 16393 Water **TPW**

Date Sampled:

Batch Number:

05/02/00

Date Received: Date Extracted: Dates Analyzed: 05/03/00 05/05/00

05/06-08/00 8270W0622

· · · · · · · · · · · · · · · · · · ·	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
2,6-Dinitrotoluene	0.0033	ND	ND	ND	ND	ND	
Fluoranthene	0.0011	ND	ND	ND	ND	ND	
Fluorene	0.0011	ND	ND	ND	ND	ND	
Hexachlorobenzene	0.0011	ND	ND	ND	ND	ND	905 - 1 7 13 13
Hexachlorobutadiene	0.0011	ND	ND	ND	ND	ND	tytytera tytä
Hexachlorocyclopentadier	ne 0,055	ND	ND	ND	ND	ND	
Hexachloroethane	0.0011	ND	ND	ND	ND	ND	1 % 4-143
Indeno[1,2,3-cd]pyrene	0.0044	ND	ND	ND	ND	ND	
Isophorone	0.0011	ND	ND	ND	ND	ND	-150 Mg
2-Methylnaphthalene	0.0011	ND	ND	ND	ND	ND	
2-Methylphenol	0.0055	ND	ND	ND	ND	ND	#15 (#12)# -
4-Methylphenol	0.0055	ND	ND	ND (ND	ND	
N-Nitroso-di-n-propylamir	ne 0.0011	ND	ND	ND	ND	ND	1.11
N-Nitrosodiphenylamine	0.0011	ND	ND	ND	ND	ND	4.00
Naphthalene	0.0011	ND	0.002	ND	ND	ND	
2-Nitroaniline	0.0033	ND	ND	ND	ND	ND	7 9.
3-Nitroaniline	0.0033	ND	ND	ND	ND	ND	
4-Nitroaniline	0,011	ND	ND	ND	ND	ND	, , <i>it is</i>
Nitrobenzene	0.0033	ND	ND	ND	ND	ND	
2-Nitrophenol	0.0044	ND	ON	ND	ND	NO	
4-Nitrophenol	0.011	ND	ND	ND	ND	ND	
Pentachiorophenol	0.055	ND	ND	ND	ND	ND	
Phenanthrene	0.0022	ND	ND	ND	ND	ND	
Phenol	0.0044	ND	ND /	ND	ND	ND	
Pyrene	0.0011	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.0011	ND	ND	ND	ND	ND	
2,4,5-Trichlorophenol	0.0066	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	0.011	ND	ND	ND :	ND	ND	

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4
2-Fluorophenol (21 - 100%)	104	52	59	59	52
Phenol-D5 (10 - 94%)	82	34	38	39	34
Nitrobenzene-D5 (35 - 114%)	108	62	60	60	59
2-Fluorobiphenyl (43 - 116%)	90	72	75	71	69
2,4,6-Tribromophenol (10 - 123%)	97	82	103	96	89
p-Terphenyl-D14 (33 - 141%)	108	85	90	88	85



Client: PSI

Project: CT J&A Truck/Container Freight Job No.: 16393

Matrix: Water Analyst: TPW Date Sampled: Date Received:

05/02/00

Date Extracted:

Dates Analyzed:

05/03/00 05/05/00

Dates Analyzed: 05/06-08/00 Batch Number: 8270W0622

	Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
Compound	DL.	mg/L	mg/L	mg/L	mg/L	mg/L	
Acenaphthene	0.001	ND	800.0	0.004	ND	0.004	
Acenaphthylene	0.001	ND	ND	0.069	ND	0.031	
Anthracene	. 0.001	ND	0.006	0.007	0.001	0.006	er e en en en en en en en en en en en en e
Benzo[a]anthracene	0.002	ND	ND	ND	0.004	ND	
Benzo[a]pyrene	0.002	ND	ND	0.003	800.0	0.002	ali Programa
Benzo(b)fluoranthene	0.001	ND	ND	0.003	0.010	0.003	
Benzo[g,h,i]perylene	0.003	ND	МD	ND	0.009	ND	25 - 13 - 13 - 13 - 13 - 13 - 13 - 13 - 1
Benzo(k)fluoranthene	0.001	ND	ND	0.003	0.010	0.003	
Benzyl alcohol	0.004	ND	ND	ND	ND	ND	en lang mases
bis(2-Chloroethoxy)metha	ine 0.002	ND	ND	ND	ND	ND	8880233
bis(2-Chloroethyl)ether	0.002	ND	ND	ND	ND	ND	AND THE DRIVE
bis(2-Chloroisopropyl)eth	er 0.003	ND	ND	/ ND	ND	ND	
bis(2-Ethylhexyl)phthalate	0.01	ND	ND	ND	ND	ND	
4-Bromophenylphenylethe	er :: 0.001	ND	ND :	ND	ND ND	ND	grani. Ne
Butylbenzylphthalate	0.001	ND	ND	ND	ND	ND	
4-Chloro-3-methylphenol	0.005	ND	ND	ND	ND	ND	
4-Chloroaniline	0.005	ND	ND	ND	ND	ND	
2-Chloronaphthalene	0.001	ND	ND	ND	ND	ND	يدائي ولا الخ إدائي:
2-Chiorophenol	0.004	ND	ND	ND	ND	ND	
4-Chlorophenylphenylethe	er 0.001	ND	ND	ND	ND	ND	
Chrysene	0.001	ND	ND	0.003	0.006	0.002	
Di-n-butylphthalate	0.01	ND	ND	ND	ND	ND	
Di-n-octylphthalate	0.001	ND	ND	ND	ND	ND	
Dibenzo[a,h]anthracene	0.003	ND	ND	ND	ND	ND	
Dibenzofuran	0.001	ND	0.003	0.003	ND	0.003	
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND	ž. Ž
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND:	ND	
3,3-Dichlorobenzidine	0.004	ND	ND	ND	ND	ND	* *.
2,4-Dichlorophenol	0.005	ND	ND	ND	ND	ND:	
Diethylphthalate	0.01	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	0.003	ND:	ND	S ND	ND	ND ND	
Dimethylphthalate	0.000	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylpheno		ND.	ND	ND ND	ND ND		
2,4-Dinitrophenol	0.05	21.000	and the second of the second o			ND	
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	
z,+-Dillidutoluerie	0.001	ND	ND	ND	ND	ND	



Client: PSI Date Sampled: 05/02/00 Project: CT J&A Truck/Container Freight Date Received: 05/03/00 Job No.: 16393 Date Extracted: 05/05/00 Matrix: Water Dates Analyzed: 05/06-08/00 Analyst: TPW Batch Number: 8270W0622

	Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
2,6-Dinitrotoluene	0.003	ND	ND	ND:	ND	ND	
Fluoranthene	0.001	ND	0.007	0.014	0.012	0.011	
Fluorene	0.001	ND	0.013	0.016	ND	0.014	
Hexachlorobenzene	0.001	ND	ND:	ND	NÐ	ND	
Hexachlorobutadiene	0.001	ND	ND -	ND	ND	ND	
Hexachlorocyclopentadien	ie 0:05	ND	ND	ND	ND	ND	
Hexachloroethane	- 0.001	ND	ND	ND	ND	ND	i e e e e e e e e e e e e e e e e e e e
Indeno[1,2,3-cd]pyrene	0.004	ON	ND	ND	0.006	ND	
Isophorone	0.001	ND	ND	ND	ND	ND	
2-Methylnaphthalene	0.001	ND	0.067	0.022	ND :	0.008	
2-Methylphenol	0.005	ND	ND	ND	ND	ND	is North for Mass.
4-Methylphenol	0,005	ND	ND	0.17	ND	0.041	
N-Nitroso-di-n-propylamin	e 0.001	ND	ND	ND	ND	ND	is a sever records left
N-Nitrosodiphenylamine	0.001	ND	ND	ND	ND	ND	. KEREN AS
Naphthalene	0.001	ND	5.5	1.2	0.007	0.52	tan anaka di basa
2-Nitroaniline	0.003	ND	ND	ND	ND	ND	e Special
3-Nitroaniline	0.003	ND	ND	ND	ND	ND	
4-Nitroaniline	0.01	ND	ND	ND	ND.	ND	
Nitrobenzene	0.003	ND	ND	ND	ND	ND	
2-Nitrophenol	0.004	ND	ND	ND	ND .	ND	
4-Nitrophenol	0.01	ND	ND	ND	ND	ND	
Pentachlorophenol	0:05	ND	ON	ND	ND	NO	il al el le
Phenanthrene	0.002	ND	0.055	0.048	0.004	0.033	
Phenol	0.004	ND	0.024	0.046	ND	0.011	
Pyrene	0.001	ND	0.011	0.018	0.016	0.013	
1,2,4-Trichlorobenzene	0.001	ND	NO	ND	ND	ND	
2,4,5-Trichlorophenol	0.006	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	0.01	ND	ND	ND	ND	ND	

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
2-Fluorophenol (21 - 100%)	104	30	59	37	49	
Phenol-D5 (10 - 94%)	82	40	40	25	37	
Nitrobenzene-D5 (35 - 114%)	108	38	65	39.	51	
2-Fluorobiphenyl (43 - 116%)	90	59	64	62	56	•
2,4,6-Tribromophenol (10 - 123%)	97	32	89	40.	79	
p-Terphenyl-D14 (33 - 141%)	108	44	83	67	72	



QC Sample Report - EPA 8270

Batch #: 8270W0622

Matrix: Water

Batch Accuracy Results

Sample ID:	Laboratory	y Control Sample	,
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Analyte	Spike Concentration µg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Phenol	80	43	5 - 112	Pass
2-Chiorophenol	80	106	23 - 134	Pass
1,4-Dichlorobenzene	. 40	94	20 - 124	Pass
N-Nitrosodi-n-propylamine	40	79	0 - 230	Pass
1,2,4-Trichlorobenzene	40	83	44 - 142	Pass
4-Chloro-3-Methylphenol	80	84	22 - 147	Pass
Acenaphthene	40	84	47 - 145	Pass
4-Nitrophenol	80	48	0 - 132	Pass
2,4-Dinitrotoluene	40	88	39 - 139	Pass
Pentachlorophenol	80	132	14 - 176	Pass
Pyrene	40	103	52 - 115	Pass

Analyti	cal Notes	: :		
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	-			
	•	-		:
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Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery µg/L	Spike Duplicate Recovery µg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Phenol	34.7	31.8	9%	35%	Pass
2-Chlorophenol	85.2	75.5	12%	50%	Pass
1,4-Dichlorobenzene	37.4	34.3	9%	27%	Pass
N-Nitrosodi-n-propylamine	31.8	29.8	6%	38%	Pass
1,2,4-Trichlorobenzene	33.3	35.8	7%	28%	Pass
4-Chloro-3-Methylphenol	66.9	73.0	9%	33%	Pass
Acenaphthene	33.7	33.9	1%	23%	Pass
4-Nitrophenol	29.7	37.8	24%	50%	Pass
2,4-Dinitrotoluene	35.1	37.9	8%	47%	Pass
Pentachlorophenol	105.7	105.4	0%	47%	Pass
Pyrene	41.2	41.1	0%	36%	Pass

Anah	ytical	Notes:
------	--------	--------

Centrum Analytical Laboratories, Inc.

Centrum Job# 16368
Page 1 of ____

290 TENNESSEE STREET

REDLANDS, CA 92373 www.centrum-labs.com

(909) 798-9336 • (800) 798-9336

FAX (909) 793-1559 lab@centrum-labs.com

Chain of Custody Record

	- w,				•		_		P	<u>eas</u>	e C	irci	<u>e A</u>	naly	/Ses	Keq	uest	ea			
Project Mar	IVL POSS	4.	Phone:	TRUC. 785-	CONTAINER FRE. FAX: 1111 510 785-1 20 W. WINTON A AVWARD CA. 94545	1192	Diesel Fuel Screen, Carbon Chain	Gas only	8021B: BTEX/MIBE Quly	418.1 (TRPH), 413.2	TPHMO-EP48015 M	260B 8021B, 624, 524.2	GCMS: MIBE Conf. Only	270C.) 625	8080: Pesticides, PCB4 PestiPCB	Hetals: (Title 22 (CAMI), RCRA, PP		it, Hex Cr			Turn-Around Time 24 Hr. RUSH* 48 Hr. RUSH* Normal TAT *Requires PRIOR approval, additional charges apply Requested due date:
Centrum ID	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M:(Di	8015M: G	8021B: B	418.1 (TR)	10/100	SCMS: (8	GCMS: M	GCMS:	8080: Pes	Metals:(T	PH, TDS,				Remarks/Special Instructions
1	CF3-015	4-25-10	0905	SOIL		the	X	X			X	X		X		X					
	CF3-1.0	1	0928	"		1	X	X			X	X		X		X		L.			
	CF3-2.0		0936	"			Х	X			X	X		X		X					
4	CF2-0.5		1104	1			X	X			X	X		X		\bot X					·
b	CF2-1.0	Y	1116				X	X		ľ	X	X		X	\perp			_			
ھا	CF2-2.0		1137				X	X			X	X		X	_	_ <u> </u> X	_	L.	ļ	Ш	(<u> </u>
4	CFZ-3.0		1156									X						_			
8	CF1-0.5		1330				X	X			X	<u>X</u>		X	<u>XL</u>	X					
9	CF1-1,0		357	6.0			么	X			X	凶		X	X	<u></u>					·
ΙŪ	CF1-20 hed by: (Sampler's Signature)	V	1424	* **		٧	X	义			X	X		X	<u> </u>	丛	<u> </u>	_			
1) Relinquis	hed by: (Sampler's Signature) IS MERRITT		Date:	Time:	3) Relinquished by:		Date	i	Time	۱ ٔ	То	be c	ompl	eted i	by Lab	orato	y per	sonn	el:		Sample Disposal
2) Received			Date:	Time:	4) Received by:		Date		Time	╝					¥Ø•	_		Fron	ı Field	1	☐ Client will pick up ☐ Return to client
constitutes	of samples and the signature of authorization to perform the an and Conditions set forth on the t	alyses spec	ified abov	dy lorm	5) Relinquished by: B) Received for Laboratory by:		Date) ;	Time	-	All	eam	pie c	ontal	ners in	tact?	¥Υ	es () i car	No ried		Lab disposal
Laboratory	Notes:					0	L.f	- • 1	· • • •	- 1.										丁	Sample Locator No.
																	,				E-5

Centrum Analytical Laboratories, Inc.

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY . CHEMICAL AND BIOLOGICAL ANALYSES

Client:

PSI

1320 W. Winton Ave.

Hayward, CA 94545

Date Sampled:

04/25/00

Date Received:

04/27/00

Job Number:

16368

Project: J&A Truck/Container Freight

CASE NARRATIVE

The following information applies to samples which were received on 04/27/00:

The samples were received at the laboratory chilled and sample containers were intact.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested.

8260: Some surrogate recoveries were outside the acceptance limits due to reproducible sample matrix effects.

8270: The samples were run at a dilution due to high levels of hydrocarbons in the sample; consequently, detection limits were raised.

Report/arproved by:

Robert R. Clark, Ph.D. Laboratory Director

ELAP #1184

DL: Detection Limit - The lowest level at which the compound can reliably be detected under normal laboratory conditions.

ND: Not Detected - The compound was analyzed for but was not found to be present at or above the detection limit.

NA: Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.



Metals

Client: PSI

Project: J&A Truck/Container Freight

Job No: 16368 Matrix: Soil Analyst: RLB/TLR Date Sampled:

04/25/00

Date Received:

04/27/00

Date Digested:

05/01/00

Date Analyzed:

05/02-06/00

Batch Number:

601081551

Method # 6010B 6010B 6010B 6010B	DL 2.5 0.50 0.50 0.50	Blank mg/Kg ND ND ND	CF3-0.5 mg/Kg ND 2,5	Mg/Kg ND 6,0	CF3-2.0 mg/Kg ND 5:1	CF2-0.5 mg/Kg ND 5.9	CF2-1.0 mg/Kg ND 5.4
6010B 6010B 6010B 6010B	0.50 0.50 0.50	ND ND	ND 2.5	ND 6,0	ND	ND	ND
6010B 6010B 6010B	0.50 0.50	ND	CONTROL OF THE ASSESSMENT OF THE		5.1	and the same of the same of the same of the same of the same of the same of the same of the same of the same of	Linguist of the gar
6010B 6010B	0.50	976990000000000000000	77	#1000000000000000000000000000000000000	পি পিছিল কেপ্টেরিক্ট্রিন	GO GROGETE CONTRACTOR	
6010B		NIE C		18	50	71	99
2 - 656 1,866,5-15	rassie indernocednoseingebet	ND	ND	ND	ND	ND .	ND
المستراني والمتحالية المتحالية المتحالية المتحالية	0.50	ND	ND	ND	ND	ND	ND
6010B	0.50	DM	22	2.9	32	20	29
6010B	0.50	ND	POWN THOUSAND A	ere nederleni	DATE OF THE SERVICE		6.6
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6010B	the progression of	godood a las armana e	grand double and the	Artist Control	. 993		31
6010B	10		ara di Pala di Cini	e sa de Prima		200 200 200	31 87
6 6	6010B 6010B 7471 6010B 6010B 6010B 6010B 6010B	6010B 0.50 6010B 0.50 7471 0.10 6010B 0.50 6010B 1.0 6010B 2.5 6010B 1.0 6010B 2.5 6010B 0.50	6010B 0.50 ND 5010B 0.50 ND 7471 0.10 ND 5010B 0.50 ND 5010B 1.0 ND 5010B 2.5 ND 5010B 1.0 ND 5010B 2.5 ND 5010B 2.5 ND 5010B 0.50 ND	6010B 0.50 ND 14 5010B 0.50 ND 73 7471 0.10 ND 0.18 5010B 0.50 ND ND 5010B 1.0 ND 16 5010B 2.5 ND ND 5010B 1.0 ND ND 5010B 1.0 ND ND 5010B 2.5 ND ND 5010B 2.5 ND ND 5010B 0.50 ND 19	6010B 0.50 ND 14 71 6010B 0.50 ND 73 22 7471 0.10 ND 0.18 ND 6010B 0.50 ND ND ND ND 6010B 1.0 ND 16 7.6 6 6010B 2.5 ND ND ND ND 6010B 1.0 ND ND ND ND 6010B 2.5 ND ND ND ND 6010B 2.5 ND ND ND ND 6010B 0.50 ND 19 25	6010B 0.50 ND 14 71 34 5010B 0.50 ND 73 22 48 7471 0.10 ND 0.18 ND ND 5010B 0.50 ND ND ND ND 0.67 5010B 1.0 ND 16 7.6 38 5010B 2.5 ND ND ND ND 5010B 1.0 ND ND ND ND 5010B 2.5 ND ND ND ND 5010B 2.5 ND ND ND ND 5010B 0.50 ND 19 25 28	5010B 0.50 ND 14 71 34 41 5010B 0.50 ND 73 22 48 65 7471 0.10 ND 0.18 ND ND 0.24 5010B 0.50 ND ND ND ND 0.67 ND 5010B 1.0 ND 16 7.6 38 19 5010B 2.5 ND ND ND ND ND ND 5010B 1.0 ND ND ND ND ND ND 5010B 2.5 ND ND ND ND ND ND 5010B 2.5 ND ND ND ND ND ND 5010B 0.50 ND 19 25 28 28



Metals

Client: PSI:,

Project: J&A Truck/Container Freight

Job No: 16368 Matrix: Soil Analyst: RLB/TLR Date Sampled:

04/25/00

Date Received:
Date Digested:

04/27/00 05/01/00

Date Analyzed:

05/02-06/00

Batch Number: 6010S1551

		imple ID:	CF2-2.0	CF1-0.5	CF1-1.0	CF1-2.0	
Element	Method #	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	· · · · · · · · · · · · · · · · · · ·
Antimony -	6010B	2.5	ND	ND	ND	ND	
Arsenic	6010B	0.50	12	4.7	8.8	5.8	
Barium	6010B	0.50	`55	130	120	130	
Beryllium	6010B	0,50	ND	ND :	ND	ND	
Cadmium	6010B	0.50	0.62	ND	ND	0.82	
Chromium	60108	0.50	7.1	30	35	27	
Cobalt	6010B	0.50	2.5	7.8	8.8	6.4	
Copper	6010B	0:50	80	30	51	36	
Lead	6010B	0.50	48	49	49	74	
Mercury	7471	0.10	ND	ND	0.30	0.23	
Molybdenum	6010B	0.50	ND	0.66	1.0	1.4	
Nickel	6010B	1.0	12	33	41	25	-
Selenium	6010B	2.5	ND	ND	ND	ND	
Silver	6010B	1.0	ND	ND	ND	ND	
Thallium	6010B	2.5	ND	ND	ND	ND	(State) Little Control
Vanadium	6010B	0.50	13	32	37	26	garan kalije de Le
Zinc	6010B	10	230	89	87	Camera tames of the con-	
ar er Sarrak jak d			200			150	1990: All Carlos (1980)



QC Sample Report - Metals

Matrix: Soil

Batch #: 6010S1551

MS/MSD Sample ID: 16373-1

	Batch	recision	Result	5: ,		Batch A	ccurac	y Results:	
Metal	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fail	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits Percent Recovery	Pass / Fail
Antimony	53.5	53.0	1%	20%	Pass	50	113	7 5 - 125	Pass
Arsenic	51.8	52.0	0%	20%	Pass	50	107	75 - 125	Pass
Barium La Tabloromonos da Harra o Laborrada	85.9	86.4	1%	20%	Pass	50	105	75 - 125	Pass
Beryllium	50.7	52.3	3%	20%	Pass	50	107	75 - 125	Pass
Cadmium	48.2	48.6	1%	20%	Pass	50	107	75 - 125	Pass
Chromium	79.1	81.5	3%	20%	Pass	50	108	75 - 125	Pass
Cobalt	53.0	53.9	2%	20%	Pass	50	108	75 - 125	Pass
Copper	57.4	58.2	1%	20%	Pass	50	108	75 - 125	Pass
Lead	50.7	50.6	0%	20%	Pass	50	107	75 - 125	Pass
Mercury	2.74	2.80	2%	20%	Pass	2.5	111	75 - 125	Pass
Molybdenum	52.2	52.2	0%	20%	Pass	50	113	75 - 125	Pass
Nickel	73.7	75.1	2%	20%	Pass	50	107	75 - 125	Pass
Selenium	48.1	48.9	2%	20%	Pass	50	103	75 - 125	Pass
Silver	49.1	50.1	2%	20%	Pass	50	104	75 - 125	Pass
Thallium	48.0	48.8	2%	20%	Pass	50	107	75 - 125	 ***
Vanadium	70.3	71.2	1%	20%	Pass	50	109	75 - 125 75 - 125	Pass
Zinc	69.0	70.1	2%	20%	Pass	50	115	75 - 125 75 - 125	Pass Pass

Analytical Notes		
	•	

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

MS: Matrix Spike

RPD: Relative Percent Difference

MSD: Matrix Spike Duplicate



Modified 8015 - Fuel Screen

Client:

PSI

Project:

J&A Truck/Container Freight

Job No.:

16368

Matrix:

Soil

Analyst:

JĿ

Date Sampled:

04/25/00

Date Received:

04/27/00

Date Extracted:

05/01/00

Date Analyzed:

Batch Number:

05/01-02/00 8015DS1909

8015DS1910

Fuel Identified:	Diesel	Motor	Detection
		Oil	Limits
Units:	mg/kg	mg/kg	mg/kg
Blank	ND	T NO	10
CF3-0.5	22	23	10
CE3-1.0	140	78	10
CF3-2.0	110	58	er frankriger og en er skallet fillere frankriger for til frankriger for til frankriger for til frankriger for til f
CF2-0,5	STEET STATES AND THE SECOND PROPERTIES AND A SECOND	Bit te 1000 og stil kilosofte kilosoft i transpiritation og store	
	60	44	20
CF2-1.0	220	520	20
CF2-2:0	140	ND	100
CF1-0.5	370	630	
<u>and the second of the first parabolish and the reserve</u>	1985-a Millat Davidson amagazaran bahin da ila bira		100 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
가방하는 경찰이 되는 그는 불리 되는 다양을 느꼈다면?	70	100	20
CF1-2.0	19	35	10
이 시민부의 지급이 되고되고 가운 관약		일다한 기념자리 강립했던 11 1501 AC	atticipal Kintegration (Feb. 1997)

QC Sample Report - EPA 8015M Diesel

Matrix: Soil

Batch #: 8015DS1909

Batch Accuracy Results

•				
	tration	တ္သ	mits	•
	Concen	very L	ance Lii wery	<u>.</u>
	Spike (mg/Kg	% Reco	Accepta % Reco	Pass/Fa
	100	82	70 - 130	Pass
		Spike Concentration mg/Kg	Spike Concent mg/Kg % Recovery LC	Spike Concentration mg/Kg % Recovery LCS Acceptance Limits % Recovery

Analytical Notes:	
	:

Batch Precision Results

Spike Sample Recovery mg/Kg Spike Duplicate Retative Percent Difference (RPD) Upper Control Lir RPD
MS/MSD Sample ID:Laboratory Control Sample Big Mg/Kg

MS:	Matrix	Spike S	Sample
MSC): Matri	x Spike	Duplicate

Analytical Notes:	
	-

QC Sample Report - EPA 8015M Diesel

Matrix: Soil

Batch #: 8015DS1910

Batch Accuracy Results

Sample ID: Laboratory Conf	Concentration	ecovery LCS	ceptance Limits Recovery	Pass/Fail
Analyte	Spike (mg/Kg	% ~	Acc R	Pas
Diesel	100	104	70 - 130	Pass

	•
	•
	·•
•	
•	
	76.
•	•

Batch Precision Results

Diesel	104	97	7%	29%	Pass
Control Sample	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Analytical Notes:	
	•
· ·	



Modified 8015 - Total Volatile Hydrocarbons as Gasoline

Client: PSI

Project: J&A Truck/Container Freight

Job No.: 16368 Matrix: Soil Analyst: CP Date Sampled: 04/25/00
Date Received: 04/27/00
Date Analyzed: 05/01/00

Batch Number: 8015GS2591

	Detection Limit	Petroleum Hydroca Gasoline	rbons as
Sample ID	mg/kg	mg/kg	
Method Blank	0.50	ND	
CF3-0.5	0.50	ND	rando de montenara e e mantenara que en como en como en como en como en como en como en como en como en como e Como en como e
CF3+1:0	0.50	NO	
CF3-2.0	0.50	ND	eregge and or every 10 and Sapara Superior Super-
CF2-0.5	0.50	ND	
CF2-1.0	0.50	ND	
CF2-2:0	0.50	0.69	
CF1-0.5	0.50	ND	Auf Buder Jakes — Alb Alb Alb Alb Sald -
CF1-1:0	0.50	0.77	
CF1-2.0	0.50	ND	
ang Managan and Amerikan sa kabupatèn di Kabupatèn Amerikan Salah Salah Salah Salah Salah Salah Salah Salah Sa Salah Salah n number 1996 haket sen en anger e sse univer-	1、2016年1月1日東州(韓海安) - 12 年 - 1 -	(HFP) () (HP) () (H) () () (12)	
	1250年 (1941年) (1952年) -		



EPA 8080 - Organochlorine Pesticides & PCBs

Client: PSI Date Sampled: 04/25/00 Project: J&A Truck/Container Freight Date Received: 04/27/00 Job No.: 16368 Date Extracted: 05/01/00 Matrix: Soil Date Analyzed: 05/05/00 Analyst: TPW Batch Number: PESTS0249

	Sample ID:	Blank	CF1-0.5	CF1-1.0	CF1-2.0							
Pesticides	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg							
Aldrin	0.001	ND	ND	ND	ND							
Alpha-BHC	0.001	ND	ND	ND	ND							
Beta-BHC	0.001	ND	ND	ND	ND .							
Delta-BHC	0,001	ND	ND	NO	ND							
Gamma-BHC (Lindane)	0.001	ND	ND	ND	ND	esaka dan 1860 kerapadan dipakan dibantuk di Profesiona. Tanggaran						
Chlordane	0.010	ND	ND	ND	ND							
4,4'-DDD	0.002	ND	ND	0.003	ND							
4,4'-DDE	0.002	ND	0.018	0.009	ND							
4,4'-DDT	0.002	ND	ND	_ ND	ND							
Dieldrin	0.002 -	~ ND	ND	0.002	ND							
Endosulfan I	0.001	ND	0.006	ND	ND							
Endosulfan II	0.002	ND	ND	ND	ND							
Endosulfan sulfate	0.002	ND	ND	ND	ND	n Karamatan Papanan dan dilibit di Mirit Ka						
Endrin	0.002	ND	ND	ND	ND							
Endrin Aldehyde	0.002	ND	ND	ND	ND	um ediatora do se destrá il funcio a unidió						
Endrin Ketone	0.010	ND	ND	ND	ND							
Heptachlor	0.001	ND	ND	ND	ND	For Control of the Montrol of the Annual Control Heptachtor Epoxide	0.001	ND	ND	ND	ND	
Methoxychlor	0.010	ND	ND	ND	ND							
Toxaphene	0.020	ND.	ND	ND	ND							
PCBs					· · · · · · · · · · · · · · · · · · ·							
Aroclor-1016	0.050	ND	ND	ND	ND							
Aroclor-1221	0.050	ND	ND	ND	ND							
Aroclor-1232	0.050	ND	ND	ND	ND	医囊体的 透热 化二烷						
Aroclor-1242	0.050	ND	ND	ND	ND							
Aroclor-1248	0.050	ND	ND	ND	ND							
Aroclor-1254	0.050	ND	ND	ND	ND	· · · · · · · · · · · · · · · · · · ·						
Aroclor-1260	0.050	ND	0.082	ND	ND	100000						

Surrogates (% recovery) Limits: 50 - 150

· · · · · · · · · · · · · · · · · · ·	Sample ID:	Blank	CF1-0.5	CF1-1.0	CF1-2.0		·
	i sa kandada ji					14. 4.	
Tetrachioro-m-xylene		117	77	86	100		•

EPA 8080 - Organochlorine Pesticides & PCBs

Client: PSI Date Sampled: 04/25/00
Project: J&A Truck/Container Freight Date Received: 04/27/00
Job No.: 16368 Date Extracted: 05/01/00

 Job No.:
 16368
 Date Extracted:
 05/01/00

 Matrix:
 Soil
 Date Analyzed:
 05/05/00

 Analyst:
 TPW
 Batch Number:
 PESTS0249

	Sample ID:	Blank	CF1-0.5	CF1-1.0	CF1-2.0	
Pesticides	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Aldrin	0.001	ND .	ND	ND	ND	
Alpha-BHC	0.001	ND	ND	ND	ND	
Beta-BHC	0.001	ND	ND	ND	ND	
Delta-BHC	0.001	ND.	ND	ND	ND	
Gamma-BHC (Lindane)	0.001	ND	ND	ND	ND	
Chlordane	0.010	ND	ND	ND	ND	ente enichasi (da
4,4'-DDD	0.002	ND	ND	0,003	ND	klindire i kalifakklik materjärjä (j.k. 1979).
4,4'-DDE	0.002	" ND	0.018	0.009	ND	
4,4'-DDT	0.002	ND	ND	ND	ND	de Calo VI. Teu Ento, entre
Dieldrin	0.002	::ND::::	ND	0.002	ND	
Endosulfan I	0.001	ND	0.006	ND	ND	
Endosulfan II	0,002	. ND	ND	ND	ND	
Endosulfan sulfate	0.002	ND	. ND	ND	ND	
Endrin	0.002	ND	ND	ND	ND	
Endrin Aldehyde	. 0.002	ND	ND	ND	ND	and the first property of the second of the first second of the second o
Endrin Ketone	0.010	ND	ND	OM .	ND	
Heptachlor	0.001	ND	ND	ND	ND	edi eleg 1 p 14. – edi – .
Heptachlor Epoxide	0.001	ND	ND	ND	ND	
Methoxychlor	0.010	ND	ND	ND	ND	
Toxaphene	0.020	ND	ND	ND	ND	
PCBs						
Aroclor-1016	0.050	ND	МD	ND	ND	
Aroclor-1221	0.050	ND	ND	ND	ND	
Aroclor-1232	0.050	ND	ND	ND	ND	gen green as the til
Aroclor-1242	0.050	ND	ND	ND	ND	
Aroclor-1248	0.050	ND	ND	ND	ND	
Aroclor-1254	0.050	ND	ND	ND	ND	**
Aroclor-1260	0.050	ND	0.082	ND	ND	

Surrogates (% recovery) Limits: 50 - 150

	Sample ID:	Blank	CF1-0.5	CF1-1.0	CF1-2.0	·
					en de la versione	
Tetrachloro-m-xylene		117	77	86	100	•



QC Sample Report - EPA 8080 Pesticides

Matrix: Soil

Batch #: PESTS0249

Batch Accuracy Results

Sample ID:	Laboratory	Control Sample
------------	------------	----------------

	a directinpic			
Analyte	Spike Concentration mg/Kg	% Recovery LCS.	Acceptance Limits % Recovery	Pass/Fail
Lindane	0.0066	90	32 - 127	Pass
Heptachior	0.0066	98	- 34 - 111	Pass
Aldrin	0.0066	109	42 - 122	Pass
Dieldrin	0.026	88	36 - 146	Pass
Endrin	0.026	102	30 - 147	Pass
DDT	0.026	93	25 - 160	Pass
Aroctor 1242	0.0667	83	75 - 127	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Lindane	0.0030	0.0028	7%	25%	Pass
Heptachlor	0.0033	0.0036	9%	25%	Pass
Aldrin	0.0036	0.0035	3%	25%	Pass
Dieldrin	0.0117	0.0108	8%	25%	Pass
Endrin	0.0135	0.0117	14%	25%	Pass
DDT	0.0124	0.0112	10%	25%	Pass

Analytical Notes:

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate



Client:

PSI

Project;

J&A Truck/Container Freight

Job No.: Matrix: 16368

Analyst:

Soil JMR

Date Sampled:

04/25/00

Date Received:

04/27/00

Date Analyzed:

05/03-12/00

Batch Number:

MS48260S2093

	Sample ID:	Blank	CF3-0.5	CF3-1.0	CF3-2.0	CF2-0.5	CF2-1.0
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Acetone	0.05	ND	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAM		ND	ND	ND	: DD	ND	ND.
Benzene	0.001	ON	ND	ND	ND	ND	ND
Bromobenzene	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND	NO	ND
Bromoform	0.005	ND	ND	ND	ND	ND	ND
Bromomethane	0.01	ND	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.05	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.01	ND	ND	ND	ND	ND	NĐ
n-Butylbenzene	0.002	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	0,002	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	ND	ND	ND	ND	ND	ND
Carbon disulfide	0.01	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND	ND	ND
Chloroethane	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	ND	ND	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	e 0.01	ND	ND	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND:	ND
1,3-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	ND
1;4-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.005	ND	ND	ND '	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND	ND	ND ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.005	ND	ND	ND	ND	ND	ND.
cis-1,2-Dichloroethene	0.002	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	ND	ND.	ND	ND 1	ND	ND
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND	
1,3-Dichloropropane	0.001	ND:	ND	ND	ND	ND ND	ND
2,2-Dichloropropane	0.001	ND			•		ND
1,1-Dichloropropene	0.001 0:001s		ND	ND	ND	ND	ND
i, i-olemotopropelle	9.00E	ND	ND	ND	ND	ND:	NĐ

Client;

PSI

Project:

J&A Truck/Container Freight

Job No.: Matrix:

16368

Analyst

Soil

JMR

Date Sampled:

Date Received: ...

04/25/00 04/27/00

Date Analyzed:

05/03-12/00

Batch Number:

MS48260S2093

	Sample ID:	Blank	CF3-0.5	CF3-1.0	CF3-2.0	CF2-0.5	CF2-1.0
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
cis-1,3-Dichloropropene	0.001	. ND	ND	ND	ND	ND	ND ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND.	ND	NO	NĐ	ND	ND
Ethyl tert-Butyl Ether (EtBE	0.005	ND	ND	.ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ON	ND	ND
2-Hexanone	0.01	ND	ND	ND	ND	ND	ND
Isopropyibenzene	0.001	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	ND	ND	ND	ND	ND	ND
Methylene chloride	0.02	ND	ND	ND	ND /	ND O	August and annual section of the
4-Methyl-2-pentanone	0.01	ND	ND	ND	ND	ND	NÐ ND
Methyl tert-Butyl Ether (MtE	BE) 0.005	ND	ND	ND	ND.	ND.	ND ND
Napthalene	0.002	ND	0.008	0.009	ND	0.009	0.005
n-Propylbenzene	0.001	ND	ND	ND	ND	0.009 ND	0.005 ND
Styrene	0.001	ND	. ND	ND	ND	ND	www.esect.com/esecularity.com/esecularity
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND ND	ND ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND:	ND
Tetrachloroethene	0.001	ND	ND ND	ND	ND	ND	ND New
Toluene	0.001	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	ND	ND	. מא	ND	ND ND	ND
1,2,4-Trichlorobenzene	0.002	ND	ND	ND	ND	The first property of the	ND ND
1,1,1-Trichloroethane	0.001	ND	ND ND	ND	ND .	ND ND	ND
1,1,2-Trichloroethane	0.003	ND	ND	ND	ND	ND	ND
Trichloroethene	0.001	ND	ND	ND	ND O	ND	ND
1,2,3-Trichloropropane	0.003	ND	ND	ND	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ND	ND
Trichlorofluoromethane	0.001	OND 6	ND	the second second	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND:	ND
1,2,4-Trimethylbenzene	0.001	ND		ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND	MÐ
Vinyl chloride	0.001	A Committee of the second	ND Section 1	ND	ND	ND	ND
Xylenes (total)		ND	ND	ND	ND	ND	ND
Aylones (total)	0.003	ND	ND	ND	ND	ND	ND

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	Blank	CF3-0.5	CF3-1.0	CF3-2.0	CF2-0.5	CF2-1.0
Dibromofluoromethane		106	112	174*	111	112	115
Toluene-d8		104	103	99	103	103	104
Bromofluorobenzene		101	96	45*	90	98	96

^{*}See Case Narrative regarding surrogate recoveries outside the acceptance limits.

Client:

PSI

Project:

J&A Truck/Container Freight

Job No.: Matrix:

16368

Analyst:

Soil

JMR

Date Sampled:

04/25/00 04/27/00

Date Received: Date Analyzed:

05/03-12/00

Batch Number.

MS48260S2093

	Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0		
Compounds	DL	mg/Kg	mg/Kg	mg/Kg		
Acetone	0.05	ND	ND ·	ND	•	· · · · · · · · · · · · · · · · · · ·
tert-Amyl Methyl Ether (T/	The second of th	ND	ND	ND		
Benzene	0.001	ND	ND	0.001	and the commentation of the contraction of the	andere taken in der ver eine partiet for von de 186 185 19
Bromobenzene	0.005	ND	ND	ND		
Bromochloromethane	0.005	ND	ND	ND		andana antara da interior de la companya de la companya de la companya de la companya de la companya de la comp La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co
Bromodichloromethane	0.001	ND	ND	ND +		
Bromoform	0.005	ND	ND	ND	en en en en en en en en en en en en en e	www.googon.common.com.u
Bromomethane	0.01	ND	ND	ND.		
tert-Butanol (TBA)	0.05	ND	ND	, ND	esit eleb i til moodumi. Eur maddani — + 0	interpretation in the state of
2-Butanone (MEK)	0.01	ND	ND	ND		
n-Butylbenzene	0.002	ND	ND	ND	and other than it builded in a	
sec-Butylbenzene	0.002	ND	ND	ND		
tert-Butylbenzene	0.002	ND	ND	ND	r er i - Freedrijske Stock 196 (dipte je ober 19	entigate in les palities in legérals.
Carbon disulfide	0.01	ND	ND	ON		
Carbon tetrachloride	0.001	ND	ND	ND	in a limitare cooler recognition of little (i diwi da — Kalender Kilina i "
Chlorobenzene	0.001	ND	NĐ	ND		and Japane
Chloroethane	0.005	ND	ND	ND	· Carlotte Control	enters of the leaf of the enter of the first
Chloroform	0.002	ND	ND	ND		
Chloromethane	0.001	ND	ND	ND		e was a service of the service of th
2-Chlorotoluene	0.002	ND	ND	ND		
4-Chlorotoluene	0.002	ND	ND	ND	Taking a single sa	
Dibromochloromethane	0.002	ND	ND	ND	• 44 1 (4)	- <u>1</u>
1,2-Dibromoethane	0.002	ND	ND	ND		
1,2-Dibromo-3-chloroprop	ane 0.01	ND	ND	ND		10.00
Dibromomethane	0.001	ND	ND	ND		Texas and the second
1,2-Dichlorobenzene	0.001	ND	ND	ND		
1,3-Dichlorobenzene	0.002	ND	ND	ND	er er i de trevière de de de de de la fili	Acceptance of the Control of the Con
1,4-Dichlorobenzene	0.002	NO	ND	ND		A STATE OF THE STA
Dichlorodifluoromethane	0.005	ND	ND	ND		
1,1-Dichloroethane	0.001	ND	ND	ND		W.
1,2-Dichloroethane	0.001	ND	ND	ND	en en en en en en en en en en en en en e	
1,1-Dichloroethene	0.005	ND	ND	ND	general de la companya de la company	e s e e e e e
cis-1,2-Dichloroethene	0.002	ND	ND	ND		
trans-1,2-Dichloroethene	0.002	ND	ND	ND		
1,2-Dichloropropane	0.001	ND	ND	ND	•	. "
1,3-Dichloropropane	0.001	ND	ND:	ND		
2,2-Dichloropropane	0.001	ND	ND	ND		·.
1,1-Dichloropropene	0.001	ND:	: ND	ND		



Client:

PSI

Project: Job No.:

Analyst:

J&A Truck/Container Freight

16368

Matrix:

Soil

JMR

Date Sampled:

Batch Number:

Date Received:

Date Analyzed:

04/27/00 05/03-12/00

04/25/00

MS48260S2093

	Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0	
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	
cis-1,3-Dichloropropene	0.001	ND	ND	ND	
trans-1,3-Dichloropropene	0.001	ND	ND	ND	
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	
Ethylbenzene	0.001	ND	ND	ND	
Ethyl tert-Butyl Ether (EtBE	0.005	ND	ND	ND	
Hexachlorobutadiene	0.001	ND	ND	ND	
2-Hexanone	0.01	ND	ND	ND	
isopropylbenzene	0.001	ND	ND	ND	
p-isopropyitoluene	0.002	ND	ND ·	ND	en lie bestellt in bestellt und de Liebert in de Liebert in de Liebert in de Liebert in de Liebert in de Liebe De Liebert in de bestellt in de Liebert in de Liebert in de Liebert in de Liebert in de Liebert in de Liebert
Methylene chloride	0.02	ND	ND	ND	
4-Methyl-2-pentanone	0.01	ND .	ND -	ND	
Methyl tert-Butyl Ether (Mt	3E) 0:005	· ND	ND	ND	
Napthalene	0.002	ND	: ND	0.098	
n-Propylbenzene	0.001	ND	ND	ND	
Styrene	0.001	ND	ND	ND	en en en en en en en en en en en en en e
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	(### 왕기는 하게 ###) - "얼마다
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	
Tetrachloroethene	0.001	ND	ND	ND	
Toluene	0.001	ND	ND	ND	
1,2,3-Trichlorobenzene	0.002	ND	ND	ND	- B
1,2,4-Trichlorobenzene	0.002	ND	ND	ND	
1,1,1-Trichloroethane	0.001	ND	ND	ND	도 1200년 전 1200년 - 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1 - 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년 1200년
1,1,2-Trichloroethane	0.003	ND	ND	ND	
Trichtoroethene	0.001	ND	ND	ND	
1,2,3-Trichloropropane	0.003	ND	ND	ND	
Trichlorofluoromethane	0.001	ND	ND	ND	144. 346 · 104.4
Trichlorotrifluoroethane	0.005	ND	ND	ND	
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	
Vinyl chloride	0.002	ND 💮	ND	ND	《微》的"如《我没有名的》。""
Xylenes (total)	0.003	ND	ND	ND	

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0	•		
Dibromofluoromethane		109	107	112		•	
Toluene-d8		110	105	101			
Bromofluorobenzene		99	96	94	••		



Client:

PSI

Project:

J&A Truck/Container Freight

Job No.: Matrix: 16368

Analyst:

Soil JMR Date Sampled:

04/25/00

Date Received:

04/27/00

Date Analyzed:

05/03-12/00

Batch Number:

MS48260S2093

	Sample ID:	CF1-2.0
Compounds	DL	mg/Kg
Acetone	5.0	ND
tert-Amyl Methyl Ether (T/	WE 0.5	ND
Benzene	0.1	ND
Bromobenzene	0.5	ND
Bromochloromethane	0.5	ND
Bromodichloromethane	0.1	ND
Bromoform	0.5	ND
Bromomethane	0:5	ND
tert-Butanol (TBA)	5.0	ND
2-Butanone (MEK)	1.0	ND
n-Butylbenzene	0.2	ND
sec-Butylbenzene	0.2	ND
tert-Butylbenzene	0.2	ND
Carbon disulfide	1.0	ND
Carbon tetrachloride	0.1	ND
Chlorobenzene	0.1	ND
Chloroethane	0.5	ND
Chloroform	0.2	N D
Chloromethane	0.1	ND
2-Chlorotoluene	0.2	ND ND
4-Chiorotoluene	0.2	ND
Dibromochloromethane	0.2	ND ND
1,2-Dibromoethane	0.2	ND
1,2-Dibromo-3-chloroprop	ane 1.0	ND
Dibromomethane	0.1	ND
1,2-Dichlorobenzene	0.1	ND
1,3-Dichlorobenzene	0.2	ND
1,4-Dichlorobenzene	0.2	
Dichlorodifluoromethane	0.5	ND
1,1-Dichloroethane	0.1	
1,2-Dichloroethane	0.1	ND
1,1-Dichloroethene	0.5	
cis-1,2-Dichloroethene	0.2	ND
trans-1,2-Dichloroethene	0.2	ND WEST CONTROL OF THE CONTROL OF TH
1,2-Dichloropropane	0.1	ND
1,3-Dichloropropane	0.1	na ND y dia na ang ang ang ang ang ang ang ang ang
2,2-Dichloropropane	0.1	ND
1,1-Dichloropropene	0.1	ND



Client:

PSI

Project:

J&A.Truck/Container Freight

Job No.: Matrix:

16368

Analyst:

Soil **JMR** Date Sampled:

Date Received:

Date Analyzed: Batch Number: 04/27/00 05/03-12/00

04/25/00

MS48260S2093

	Sample ID:	CF1-2.0
Compounds	DL	mg/Kg
cis-1,3-Dichloropropene	0.1	ND
trans-1,3-Dichloropropene.	0.1	ND
Diisopropyl Ether (DIPE)	0.5	ND
Ethylbenzene	0.1	ND
Ethyl tert-Butyl Ether (EtBE) 0.5	ND
Hexachlorobutadiene	0.1	ND
2-Hexanone	1.0	ND
Isopropylbenzene	0.1	ND
p-Isopropyitoluene	0.2	ND
Methylene chloride	2.0	ND
4-Methyl-2-pentanone	1.0	ND
Methyl tert-Butyl Ether (MtB	(E) 0.5	ND
Napthalene	0.2	1.5
n-Propylbenzene	0.1	NO
Styrene	0.1	ND
1,1,1,2-Tetrachloroethane	0.1	ND
1,1,2,2-Tetrachloroethane	0.2	ND
Tetrachloroethene	0.1	ND
Toluene	0.1	ND
1,2,3-Trichlorobenzene	0.2	
1,2,4-Trichlorobenzene	0.2	ND
1,1,1-Trichloroethane	0.1	ND ND
1,1,2-Trichloroethane	0.3	ND
Trichloroethene	0.1	AND NO. TO SEE THE SECOND OF T
1,2,3-Trichloropropane	0.3	ND
Trichlorofluoromethane	0.1	. N D
Trichlorotrifluoroethane	0.5	ND
1,2,4-Trimethylbenzene	0.1	
1,3,5-Trimethylbenzene	0.1	ND
Vinyl chloride	0.2	等。 ND 等等的需要的多数,以此一点的方式的表面的一点的方
Xylenes (total)	0.3	ND

Surrogates (% recovery) Limits: 80 - 130

	Sample ID: CF1-2.0
Dibromofluoromethane	
Toluene-d8	105
Bromofluorobenzene	101

(800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client

PSI

Project:

J&A Truck/Container Freight

Job No.:

Matrix: Analyst: Soil JMR

16368

Date Sampled: Date Received:

04/25/00 04/27/00

Date Analyzed:

05/03-12/00

Batch Number

MS48260S2093

	Sample ID:	CF2-3.0
Compounds	DL	mg/Kg
Acetone	13	ND
tert-Amyl Methyl Ether (TAI	VE 1.3	ND
Benzene	0.3	0.4
Bromobenzene	1.3	ND
Bromochloromethane	1.3	ND
Bromodichloromethane	0.3	ND
Bromoform	1.3	ND
Bromomethane	1.3	ND
tert-Butanol (TBA)	13	ND
2-Butanone (MEK)	2.5	
n-Butylbenzene	0.5	n na ND
sec-Butylbenzene	0.5	ND
tert-Butylbenzene	0.5	ND
Carbon disulfide	2.5	ND
Carbon tetrachloride	0.3	ND
Chlorobenzene	0.3	
Chloroethane	1.3	un in Madama de Lavo Harrian (1986) de la vicingación in la superior de Lavo Harrian de Michael de Lavo de La Harrian de La Michael (1986) de la vicingación de Lavo de Lavo de Lavo de Lavo Harrian de Lavo d
Chleroform	0.5	HANDERS SEE A SEE EEN SEE HEELE EEN EEN EEN EEN EEN EEN EEN EEN EK EN EEN E
Chloromethane	0.3	ND
2-Chlorotoluene	0.5	
4-Chlorotoluene	0.5	ND
Dibromochloromethane	0.5	uni <mark>nd</mark> er sam en en en en en en en en en en en en en
1,2-Dibromoethane	0.5	The Mark of American State of the Control of the Co
1,2-Dibromo-3-chloropropa		
Dibromomethane	0.3	ND
1,2-Dichlorobenzene	0.3	
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	
Dichlorodifluoromethane	1.3	ND
1,1-Dichloroethane	0.3	
1,2-Dichloroethane	0.3	to <u>Maria Maria Pili</u> van Bara de Pira
1,1-Dichloroethene	1.3	The Notice of the Agreement of the Control of the C
cis-1,2-Dichloroethene	0.5	ND
trans-1,2-Dichloroethene	0.5	·
1,2-Dichloropropane		
	0.3	ND
1,3-Dichloropropane	0.3	ND
2,2-Dichloropropane	0.3	ND
1,1-Dichtoropropene	0.3	ND

(800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client:

PSI

Project:

J&A Truck/Container Freight

Job No.: Matrix:

16368 Soil **JMR**

Analyst:

Date Sampled:

04/25/00

Date Received:

04/27/00 05/03-12/00

Date Analyzed:

Batch Number: MS48260S2093

S	ample ID:	CF2-3.0						1.			-
Compounds	DL	mg/Kg				-					
cis-1,3-Dichloropropene	. 0.3	ND		<u> </u>						ů.	
trans-1,3-Dichloropropene	0.3	ND		1004010000114	10.88000000 40.88000000	######################################		200 (\$0.000) \$300,000		tijnski sajskali Svijski kalekti	1000 1000 1000
Diisopropyl Ether (DIPE)	1.3	ND				.00100000000000000000000000000000000000		. 12. 1 200 1 7 1 200	W 274000 - 70		
Ethylbenzene	0.3	ND									
Ethyl tert-Butyl Ether (EtBE)	1.3	ND			* .			e a la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della compo			4
Hexachlorobutadiene	0.3	ND									
2-Hexanone	2.5	ND					*****		2 16 66 2 60 A	and the second of	. X
Isopropylbenzene	0.3	ND						2000 C		iv Jør	
p-Isopropyltoluene	0.5	ND					************************	a transfer of	A AFTY TO		
Methylene chloride	5	ND									er ye. Wata
4-Methyl-2-pentanone	2.5	ND				12271 9 2 4 4		20.000 %		4	1197
Methyl tert-Butyl Ether (MtBI	≣) 1.3.	ND									2 N
Napthalene	0.5	390									
n-Propylbenzene	0.3	ND		99.752366878.w 92.3623627.7523			60305.11 8030.31	90000000000000000000000000000000000000			
Styrene	0.3	ND		٠.	•				•		
1,1,1,2-Tetrachloroethane	0.3	ND								3.0	Autoria Autoria
1,1,2,2-Tetrachloroethane	0.5	ND .									
Tetrachloroethene	0.3	ND					arega Maria	tojuj.			
Toluene	0.3	ND									
1,2,3-Trichlorobenzene	0:5	ND				N-				11/1/11	. :
1,2,4-Trichlorobenzene	0.5	ND	•								
1,1,1-Trichloroethane	0≀3⊜	ND					gest 19 Mart		1		13.
1,1,2-Trichloroethane	0.8	ND									
Trichloroethene	0.3	ND			9334 Y						1.0
1,2,3-Trichloropropane	0.8	ND									
Trichlorofluoromethane	0.3	ND					41.		d.		 Ve
Trichlorotrifluoroethane	1.3	ND									
1,2,4-Trimethylbenzene	0.3	ND			• '.						
1,3,5-Trimethylbenzene	0.3	ND									
Vinyl chloride	0.5	ND		· %.?	1.0		in di				
Xylenes (total)	0.8	ND				•					

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	CF2-3.0
Dibromoffuoromethane		106 (10) (10)
Toluene-d8		104
Bromofluorobenzene		102



QC Sample Report - EPA Method 8260

Matrix: Soil .

Batch #: MS48260S2093

Batch Accuracy Results

Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	⊃ass/Fail
1,1-Dichloroethene	0.020	96	59 - 172	Pass
Benzene	0.020	103	66 - 142	Pass
Trichloroethene	0.020	100	71 - 137	Pass
Toluene	0.020	99	59 - 139	Pass
Chlorobenzene	0.020	86	60 - 133	Pass

Analytical	Notes:			. •
		-	: .	
<u> </u>				
· '				
:			-	
			•	
	•			

Batch Precision Results

MS/MSD Samp	ile ID: 16379-1
-------------	-----------------

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
1,1-Dichloroethene	0.0259	0.0255	2%	22%	Pass
Benzene	0.0243	0.0247	2%	21%	Pass
Trichloroethene	0.0225	0.0226	0%	24%	Pass
Toluene	0.0216	0.0214	1%	21%	Pass
Chlorobenzene	0.0197	0.0197	0%	21%	Pass

Analytical Notes:
·

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate



Client: PSI

Project: J&A Truck/Container Freight

Job No.: 16368 Matrix: Soil Analyst: TPW Date Sampled: Date Received:

Date Extracted:

04/25/00

04/27/00

Dates Analyzed: 05/04-05/00 Batch Number: 8270S0620

· · · · · · · · · · · · · · · · · · ·	Sample ID:	Blank	CF3-0.5	CF3-1.0	CF3-2.0	CF2-0.5	CF2-1.0
Compound	DL*	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Acenaphthene	0.33	ND .	. ND	ND	ND	0.34	ND
Acenaphthylene	0.33	ND	ND	2.0	1.8	0.85	ND
Anthracene	0.33	ND	ND	4.6	2.0	1.5	ND
Benzo(ajanthracene	0.66	ND	ND :	16	5.5	1.7	ND
Benzo(a)pyrene	0.66	ND	ND	40	9.4	3.2	1.2
Benzo(b)fluoranthene	0,33	ND	ND	47	12	4.0	1.8
Benzo[g,h,i]perylene	0.99	ND	ND	33	10	3.5	1.6
Benzo[k]fluoranthene	0.33	ND	ND	47	12	4.0	1.8
Benzyl alcohol	1.3	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)metha	ine 0.66	ND	ND	ND	ŇD	ND	ND
bis(2-Chloroethyl)ether	0.66	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)eth	er 0.99	ND	ND	ND	ND	ND	NO
bis(2-Ethylhexyl)phthalate	3.3	ND	ND	ND	ND	ND	ND
4-Bromophenylphenylethe	er 0.33	ND	ND	ND	NO	ND	ND
Butylbenzylphthalate	0.33	ND	ND	ND	ND	ND-	ND
4-Chloro-3-methylphenol	1,6	ND	ND	ND	ND	ND	ND
4-Chloroaniline	1.6	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	0.33	ND	ND	ND	ND	ND	ND
2-Chlorophenol	1.3	ND	ND	ND	ND	ND	ND
4-Chlorophenylphenylethe	er 0:33	NO	ND	ND	NO	ND	ND.
Chrysene	0.33	ND	ND	19	7.1	2.1	0.76
Di-n-butylphthalate	3.3	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	0.33	ND	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	0.99	ND	ND	6.3	1.2	ND	ND
Dibenzofuran	0.33	ND	ND	ND	ND	ND	ND .
1,2-Dichlorobenzene	0.33	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.33	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.33	ND:	ND	ND:	ND	ND.	ND
3,3-Dichlorobenzidine	1.3	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.6	ND	ND	ND	ND	ND	ND.
Diethylphthalate	3.3	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	0.99	ND	ND	ND.	ND	ND	ND:
Dimethylphthalate	0.33	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylpheno		ND	ND	ND	ND:	ND ·	ND
2,4-Dinitrophenol	16	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.33	ND	ND	ND	ND	ND	ND



Client: PSI
Project: J&A Truck/Container Freight

Job No.: 16368 Matrix: Soil Analyst: TPW Date Sampled: 04/25/00
Date Received: 04/27/00
Date Extracted: 05/02/00

Dates Analyzed: 05/04-05/00 Batch Number: 8270S0620

DL* 0.99	mg/Kg	mg/Kg		CF3-2.0	CF2-0.5	CF2-1.0
erineren er allelen et e			mg/Kg	mg/Kg	mg/Kg	mg/Kg
	ND	ND	ND	ND	ND	ND ND
0.33	ND	ND	62	20	7.6	ND
0.33	ND	ND	0.53	e was appropriate the company of the filter		ND
0.33	ND	ND	ND		M. AMAMACA I TO DOCUMENT OF	NO
0.33	ND	ND	ND	and the second s	A CONTRACTOR OF THE CONTRACTOR	ND
e 16	NO	ND		and the same of the same of the same of	white the source of the source of	ND
0.33	ND	ND	son on how a sopphysode at 1000	States are to a subsequence to 1900s	and the department of the desired	ND
1.3	ND	ND	Contraction of the contraction o			ND
0.33	ND	ND	payor in contact which are also	The time of the property of		ND
0.33	ND.		and a service of the contract	Activities to the control of the con	the survey of the second	ND
1.6	ND	a de la constitución de la const	disebblika i debbedan seni se		and the second of the second of the second	ND
1,6	ND	COCCOCCOCCA * * * * * * * * * * * * * * * * * *	to control a real and a		and the second of the second	ND
0.33	ND	a ser a caracteristic productive exercicity to "	ANTERNATION PROPERTY OF A PARTY OF A STATE O		Control of Michigan Control of the State of the Control of the Con	ND
0,33	ND	wa ili wakazi wa kazazi		A. A. S. Santana and A. S. Santana	Colored State Colored	ND.
0.33	ND	en automobilite er u. 2460°	a las es con especializações com l	and the second control of		ND
0.99	ND		444 14 1 1 1 1 1	Annual Control of the	Service Advanced to the service of	ND
0.99	ND	8 1. 1 13 800 00 8 4 6 1 1 7 93	and the state of t		100	ND
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1.3	4 44 5 11 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5					ND.
3.3	44 1111 A 4 4 4 4 4 4 5 5 5 5	a companie e es	the second second second	and the first of the first of the first	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ND
16						ND
0.66	ND		A STATE OF THE STA			0.81
1.3	and the second second	1,500,000,000,000,000,000,000	4			ND
* 48 CF * 4 CF		refusion 800 - F				2.7
						ND
***	4.5	The state of the s				ND
						ND CN
	0.33 0.33 0.33 1.3 0.33 1.6 1.6 0.33 0.33 0.33 0.33 0.99 0.99 1.3 3.3 0.99 1.3 3.3 16 0.66 1.3 0.33 0.33 2 3.3	0.33 ND 0.33 ND 0.33 ND 0.33 ND 0.33 ND 1.3 ND 0.33 ND 0.33 ND 1.6 ND 1.6 ND 1.6 ND 0.33 ND 0.33 ND 0.33 ND 0.33 ND 0.33 ND 0.33 ND 0.33 ND 0.99 ND 0.99 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 1.3 ND 0.99 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 ND 0.90 N	0.33 ND ND 0.33 ND ND 0.33 ND ND 0.33 ND ND 0.33 ND ND 0.33 ND ND 0.33 ND ND 1.6 ND ND 0.33 ND ND 0.99 ND ND 0.99 ND ND 0.99 ND ND 1.3 ND ND 3.3 ND ND 16 ND ND 0.66 ND ND 0.33 ND ND 0.33 ND ND 0.33 ND ND 0.066 ND ND 0.33 ND ND 0.	0.33 ND ND 0.53 0.33 ND ND ND 1.6 ND ND ND 1.6 ND ND ND 0.33 ND ND ND 0.99 ND ND ND 0.99 ND ND ND 0.99 ND ND ND 1.3 ND ND ND 1.3 ND ND ND 0.66<	0.33 ND ND 0.53 0.74 0.33 ND ND ND ND ND 1.6 ND ND ND ND ND 0.33 ND ND ND ND ND 0.99 ND ND ND ND ND 0.99 ND ND ND </td <td>0.33 ND ND 0.53 0.74 0.65 0.33 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 16 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 1.3 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 1.6 ND ND ND ND ND ND 1.6 ND ND ND ND ND ND 0.33 ND ND ND ND ND</td>	0.33 ND ND 0.53 0.74 0.65 0.33 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 16 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 1.3 ND ND ND ND ND ND 0.33 ND ND ND ND ND ND 1.6 ND ND ND ND ND ND 1.6 ND ND ND ND ND ND 0.33 ND ND ND ND ND

* See Case Narrative regarding higher than usual detection limits.

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	CF3-0.5	CF3-1.0	CF3-2.0	CF2-0.5	CF2-1.0
2-Fluorophenol (25 - 121%)	98	101	106	101	100	92
Phenol-D5 (24 - 113%)	96	101	104	98	97	94
Nitrobenzene-D5 (23 - 120%)	79	81	87	79	80	75
2-Fluorobiphenyl (30 - 115%)	94	102	105	99	102	97
2,4,6-Tribromophenol (19 - 122%)	103	107	107	103	103	105
p-Terphenyl-D14 (18 - 137%)	107	100	90	110	102	97



Client: PSI
Project: J&A Truck/Container Freight

Job No.: 16368 Matrix: Soil Analyst: TPW Date Sampled: 04/25/00
Date Received: 04/27/00
Date Extracted: 05/02/00

Dates Analyzed: 05/04-05/00 Batch Number: 8270S0620

	Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0	CF1-2.0	
Compound	DL*	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Acenaphthene	0.33	ND	ND	ND	ND	·
Acenaphthylene	0.33	0.69	ND	ND	0.67	
Anthracene	0.33	1.4	ND	ND	0.50	
Benzo(a)anthracene	0.66	5.7	ND	NO	0.91	Prima sa manana ing panggananan na ka
Benzo[a]pyrene	0.66	12	ND	0.79	1.7	
Benzo[b]fluoranthene	0.33	17	0.59	1.0	2.0	
Benzo[g,h,i]perylene	0.99	17	ND	1.0	2.0	
Benzo(k)fluoranthene	0.33	17	0.61	1.0	2.0	
Benzyl alcohol	1.3	ND	ND	ND	ND	
bis(2-Chloroethoxy)metha	ne 0.66	ND	ND	ND:	ND	Bris wallo ili limine e e e
bis(2-Chloroethyl)ether	0.66	ND	ND	ND	ND	
bis(2-Chloroisopropyl)ethe	er 0.99	ND	ND.	ND:	ND	TAS ABADZAT AND AND AND AND A
bis(2-Ethylhexyl)phthalate		ND	ND	ND	ND	
4-Bromophenylphenylethe	ır 0:33	ND	ND	ND	ND	CONSINCO A DEPOS O
Butylbenzylphthalate	0.33	ND	ND	ND	ND	
4-Chloro-3-methylphenol	1.6	ND	ND	ND	ND	erentation in the contract of the
4-Chloroaniline	1.6	ND	ND	ND	ND	
2-Chloronaphthalene	0.33	ND	ND	ND	ND A	P. March Co. Company
2-Chlorophenol	1.3	ND	ND	ND	ND	· · · · · · · · · · · · · · · · · · ·
4-Chlorophenylphenylethe		ND	ND	ND:	Saw D.E. Salar	enn mae o ee verkeere.
Chrysene	0.33	8.7	ND	0.62		
Di-n-butylphthalate	3.3	ND .	ND	ND ND	1.4 ND	system to the
Di-n-octylphthalate	0.33	ND	ND	ND	ND	
Dibenzo[a,h]anthracene	0.99	1.8	ND /	ND	ON	
Dibenzofuran	0.33	ND	ND	ND		
1,2-Dichlorobenzene	0.33	ND	ND	ND	ND NO	Takin Hasa da di dina di 1
1,3-Dichlorobenzene	0.33	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.33	ND	ND	and the second second	ND	in this to be a second
3,3-Dichlorobenzidine	1,3	ND	ND	ND	ND	
2,4-Dichlorophenol	1.6	ND.		ND	ND	
Diethylphthalate	3.3	ND	ND:	ND	ND	
2,4-Dimethylphenol	0.99	ND ON	ND	ND	ND	
Dimethylphthalate	0.33	· · · · · · · · · · · · · · · · · · ·	ND	ND	i ND	
4,6-Dinitro-2-methylpheno		ND	ND	ND	ND	
2,4-Dinitrophenol	16	ND	ND	ND	ND	
2,4-Dinitrotoluene		ND	ND	ND	ND	
	0.33	ND	ND	ND	ND_	



Client:

PSI

Project: J&A Truck/Container Freight Job No.: 16368

Matrix: Soil Analyst: **TPW**

Date Sampled:

04/25/00

Date Received:

04/27/00

Date Extracted:

05/02/00

Dates Analyzed:

05/04-05/00

Batch Number: > 827080620

	Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0	CF1-2.0	
Compound	DL*	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
2,6-Dinitrotoluene	0.99	ND	· ND	ND	ND .	
Fluoranthene	0,33	22	0.59	1.5	3.3	
Fluorene	0.33	1.6	ND	ND	ND	4833 C
Hexachlorobenzene	0.33	ND	ND	ND	ND .	
Hexachlorobutadiene	0.33	ND	ND	ND	ND	99 X. 1
Hexachlorocyclopentadie	ne 16	ND	ND	ND	ND	
Hexachloroethane	0.33	ND	ND	ND	ND	
Indeno[1,2,3-c,d]pyrene	1,3	14	ND	ND		(5) (5)
Isophorone	0.33	ND	ND	ND	ND	. 3
2-Methylnaphthalene	0.33	ND	ND	ND	ND	
2-Methylphenol	1.6	ND	ND	ND	ND	2811.11
4-Methy/phenol	1.6	ND	ND	ND	ND	
N-Nitrosodi-n-propylamin	e 0.33	ND	ND	ND	ND	
N-Nitrosodiphenylamine	0.33	ND	- ND	ND	ND	
Naphthalene	0.33	2.4	ND	0.83	2.2	y-'-
2-Nitroaniline	0,99	ND	ND	ND	ND	
3-Nitroaniline	0.99	ND	ND	ND	ND	y i
4-Nitroaniline	3.3	ND	ND	ND	ND	<u>.</u>
Nitrobenzene	0.99	ND	ND	ND	ND	1171
2-Nitrophenol	1.3	ND	ND	ND	AND ALL VETE TREE K	Jan.
4-Nitrophenol	3.3	ND	ND	ND	ND	W
Pentachlorophenol	16	ND	ND	ND	ND TO THE RESERVE OF THE PERSON OF THE PERSO	
Phenanthrene	0.66	7.8	ND	1.0	2.6	
Phenol	1.3	ND	ND	ND	ND	
Pyrene	0.33	29	0.85	2.2	4.8	
1,2,4-Trichlorobenzene	0.33	ND	ND	ND	ND	
2,4,5-Trichlorophenol	2	ND	ND	ND	ND	
2,4,6-Trichlorophenot	3.3	ND	ND	· ND	* ND	

See Case Narrative regarding higher than usual detection limits.

Surrogates (Limits) in Percent Recovery

Sample ID:	CF2-2.0	CF1-0.5	CF1-1.0	CF1-2.0			-
2-Fluorophenol (25 - 121%)	82	71	89	89	• .		•
Phenol-D5 (24 - 113%)	84	93	92	90			
Nitrobenzene-D5 (23 - 120%)	70	78	75	73		:	
2-Fluorobiphenyl (30 - 115%)	91	96	95	93		•	
2,4,6-Tribromophenol (19 - 122%)	105	31	90	101			
p-Terphenyl-D14 (18 - 137%)	96	104	110	107			



QC Sample Report - EPA 8270

Batch #: 8270S0620

Matrix: Soil

Sample ID:	Laboratory	/ Control	Sample
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Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Phenol	2.66	91	5 - 112	Pass
2-Chlorophenol	2.66	102	23 - 134	Pass
1,4-Dichlorobenzene	1.33	100	20 - 124	Pass
N-Nitrosodi-n-propylamine	1.33	81	0 - 230	Pass
1,2,4-Trichlorobenzene	1.33	105	44 - 142	Pass
4-Chloro-3-Methylphenol	2.66	103	22 - 147	Pass
Acenaphthene	1.33	100	47 - 145	Pass
4-Nitrophenol	2.66	108	0 - 132	Pass
2,4-Dinitrotoluene	1.33	103	39 - 139	Pass.
Pentachlorophenol	2.66	132	14 - 176	Pass
Pyrene	1.33	101	52 - 115	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Phenoi	2.42	2.38	1%	35%	Pass
2-Chlorophenoi	2.71	2.70	0%	50%	Pass
1,4-Dichlorobenzene	1.34	1.06	23%	27%	Pass
N-Nitrosodi-n-propylamine	1.08	1.06	2%	38%	Pass
1,2,4-Trichlorobenzene	1.40	1.35	4%	23%	Pass
4-Chloro-3-Methylphenol	.2.74	2.58	6%	33%	Pass
Acenaphthene	1.33	1.28	4%	23%	Pass
4-Nitrophenol	2.89	2.75	5%	50%	Pass
2,4-Dinitrotoluene	1.37	1.31	4%	47%	Pass
Pentachlorophenol	3.51	3.49	0%	47%	Pass
Pyrene	1.35	1.34	1%	36%	Pass

Analytical Notes:



Metals

Client PSI

Project: CT J&A Truck/Container Freight

Job No: 16393 Matrix: Water Analyst RLB/TLR Date Sampled:

05/02/00

Date Received:

05/03/00

Date Digested: Date Analyzed: 05/04/00

Batch Number:

05/04-15/00 6010W1555

					• •		*	
		Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	
Element	Method #	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
Antimony	6010B	0.015	ND	ND	ND	ND	ND	
Arsenic	60108	0.010	ND	GN	ND	ND	DN	
Barium	6010B	0.010	ND	0.16	0.15	0.18	0.12	erred Jean II tilag
Beryllium	6010B	0.010	ND	ND	ND	ND	ND	
Cadmium	6010B	0.010	ND	ND	ND	ND	ND	and the first
Chromium	6010B	0.010	ND	ND	0.010	ND	. ND	
Cobalt	6010B	0.010	ND	ND	ND	ND	ND	l Mederbere i fig
Copper	6010B	0.010	ND	ND	ND	ND	ND	g tanggayat sa b azulan sa sa bakir
Lead	6010B	0.010	ND	ND	ND	ND	ND	Hally II Mari a la Alac
Mercury	7470	0.0002	ND	ND	ΝD	ND	ND	Yerra
Molybdenum	6010B	0.010	ND	ND	ND	ND	ND	
Nickel	6010B	0.010	ND	0.045	0.035	0.030	0.027	araij ru
Selenium	6010B	0.015	ND	ND	ND	ND	ND	
Silver	6010B	0.010	ND	DO	ND.	ND	ND	9 (121) - 75
Thallium	6010B	0.010	ND	ND	ND	ND	ND	
Vanadium	6010B	0.010	ND	ND	ND	NO	ND	
Zinc	6010B	0,10	ND	0.12	0,10	0.12	ND	nua kirin ar
[[[] [] [] [] [] [] [] [] []		\$25 p. 17.		ng gyi Tala	inflate lifter			



Metals

Client: PSI

Project: CT J&A Truck/Container Freight

Job No: 16393 Matrix: Water Analyst: RLB/TLR Date Sampled:

05/02/00

Date Received: Date Digested: 05/03/00

Date Analyzed:

05/04/00 05/04-15/00

Batch Number: 6010W1555

	Sa	mple ID:	CF-1	CF-2	CF-3	CF-10	
Element	Method #	DL*	mg/L	mg/L	mg/L	mg/L	
Antimony	6010B	0.30	ND	ND	ND	ND	- 1
Arsenic	6010B	0.20	ND	ND	ND	ND	
Barium	6010B	0.20	0.28	ND	ND	ND	a escretas escentir a de Cuca (PS III - EL - El
Beryllium	6010B	0.20	ND	ND	ND	ND	
Cadmium	6010B	0.20	ND	ND	ND	ND	era eragga produktiva (h. 1960). L
Chromium	6010B	0.20	ND	NO	ND	ND	
Cobalt	6010B	0.20	ND	ND	ND	ND	al region of Disenteen lines
Соррег	6010B	0.20	ND	ND	ND	ND	
Lead	6010B	0.20	ND	ND	ND	ND	III vii ilen eele il ja ji Dyin
Mercury	7470	0.0002	NĐ	DN	ND	ND	
Molybdenum	6010B	0.20	ND	ND	ND	ND	
Nickel	6010B	0.20	ND	ND	ND	ND	
Selenium	60108	0.30	ND	ND	ND	ND	
Silver	60108	0.20	ND	ND.	ND	ND	en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co
Thallium	60108	0.20	ND	ND	ND	ND	en per Maria e en 1900 de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición dela composición del composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela co
Vanadium	6010B	0.20	ND	ND	ND	ND	
Zinc	60108	2.0	ND	ND	ND	ND	일 : 설렜을 보이기 :
i Santa da Aba							i per est int

^{*}See Case Narrative regarding raised reporting limits.



QC Sample Report - Metals

Matrix: Water

Batch #: 6010W1555 MS/MSD Sample ID: JA-1

	Batch P	recision	Results	s: ·	· · · · · · ·	Batch A	ccurac	y Results:	
Metal	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fail	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits Percent Recovery	Pass / Fail
Antimony	1.01	1.07	6%	20%	Pass	1.0	101	75 - 125	Pass
Arsenic	0.99	1.05	5%	20%	Pass	1.0	97	75 - 125	Pass
Barium	1.21	1.21	1%	20%	Pass	1.0	102	75 - 125	Pass
Beryllium	0.95	1.01	6%	20%	Pass	1.0	98	75 - 125	Pass
Cadmium	1.02	1.02	0%	20%	Pass	1.0	103	75 - 125	Pass
Chromium	1.00	1.02	2%	20%	Pass	1.0	101	75 - 125	Pass
Cobalt	1.01	1.02	1%	20%	Pass	1.0	103	75 - 125	Pass
Copper	1.05	1 06	1%	20%	Pass	1.0	103	75 - 125	Pass
Lead	0.97	1.03	6%	20%	Pass	1.0	100	75 - 125	Pass
Mercury	2.51	2.59	3%	20%	Pass	0.005	110	75 - 125	Pass
Molybdenum	1.01	1.07	6%	20%	Pass	1.0	101	75 - 125	Pass
Nickel	1.02	1.06	4%	20%	Pass	1.0	101	75 - 125	Pass
Selenium	0.97	1.03	6%	20%	Pass	1.0	98	75 - 125	Pass
Silver**	1.03	1.06	3%	20%	Pass	1.0	103	75 - 125	Pass
Thallium	0.96	1.00	4%	20%	Pass	1.0	98	75 - 125	Pass
Vanadium	1.05	1.06	0%	20%	Pass	1.0	104	75 - 125	Pass
Zinc	1.13	1.13	0%	20%	Pass	1.0	113	75 - 125	Pass

Analytical Notes

**The MS/MSD for this analyte did not meet the acceptance criteria due to a sample matrix effect. The LCS / LCSD pair was used to provide precision data for this batch.

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

MS: Matrix Spike

RPD: Relative Percent Difference

MSD: Matrix Spike Duplicate



Modified 8015 - Fuel Screen

Client: PSI Date Sampled: 05/02/00
Project: CT J&A Truck/Container Freight Date Received: 05/03/00
Job No.: 16393 Date Extracted: 05/08/00
Matrix: Water Date Analyzed: 05/09/00

Matrix: Water Date Analyzed: 05/09/00

Analyst: JL Batch Number: 8015DW1914

	Fuel Identifie	d:			Diese	· .			Moto				Detec	
	Unit	s:			mg/L				mg/	L .			mg	/L
Blank					ND				NO				0,4	0
JA-1		v 18 46. sen 110 merekansak	Salator	585580×4	ND	::34688888888	S-1267-9880.2	- 10000000000000	NC	مد ممددی	2014. 221 282 27	tii Toddoda d	 0.4	
JA-2 JA-3					0.8 ND		unidad Unidad		NE	COSSES.40			0.4	- Santifaci
JA-4					. NĐ			- 10.00	ND NE	1200000-000	1866.	Water Salas	0.4 0.4	
CF-1	왕이에는 하나는 말이다.				21				NC				4.0	
7F-2 2F-3			1 460 (A)		2.8				NE				0.4	0
.г-> СF-10					ND 1.8				NC NC				0.4 0.4	
											- 1478-28 - 1435-15	- 04.84 - 0.484 - 0.486		50.1 1.13
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QC Sample Report - EPA 8015M Diesel

Matrix: Water

Batch #: 8015DW1914

Batch Accuracy Results

l a S to S	Analyte Diesel	Spike mg/L	77	70 - 130	Pass
		e Concentration	, LC		/Fail

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Batch Precision Results

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate

Analytic	al Note	s:	
		•	



Modified 8015 - Total Volatile Hydrocarbons as Gasoline

Client: PSI
Project: CT J&A Truck/Container Freight
Job No.: 16393

Job No.: 16393 Matrix: Water Analyst: CP Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/04/00
Batch Number: 8015GW2593

						· ·	ction		F	Petrol			arbons	as :		
Sample ID							nit ···	<u> </u>		•		soline	·			
Method Bla	ink		- Sonia Sonia Line Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia Sonia		GC 869 851	22000000000000000000	<i>j</i> . 5				de la constitución	ng/L ND			45 1 1 4 1 (2.) 1 2	
JA-1	ensuces III	A Military Co.					.5					ND			(1000) (1000)	
JA-2	, 7080 as 800 as 500	S. 12835522. - 3578662.				000000000000000000000000000000000000000	5	8880 (8. 3		120 - 130 - 130 130 - 15	errecudesses).77			Grand.	
JA-3	3 (1966)					04/08/00/1000	.5				81.00V88898	S TOMPON				
JA-4		a i in ante. A rightaga	4 8 78 A 4 0 8 6 8	3.29		7344375-0560	.3 5	46 23			s musaggy	ND		· Dec	nga r	
CF-1												ND .				
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CF-3						tana pin 366),O					54				
CF-10	Biside 71:	i a jikiba	e garage Sarahan	William.	elita No	Petalget reemiseer	. 5 తాడు కా	de de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	a (taku i	i salan) Presidentia).50	De Jüleyir			e a sta
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QC Sample Report - EPA 8015M Gasoline

Matrix: Water

Batch #: 8015GW2593

Batch Accuracy Results

Analyte	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Gasoline	10.0	100	70 - 130	Pass

Anabet	ant Matan		
Analyti	cal Notes:	•	
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Batch Precision Results

MS: Matrix Spike Sample MSD: Matrix Spike Duplicate

Analytical Notes:					
	1				



EPA 8080 - Organochlorine Pesticides & PCBs

Client: PSI

Project: CT J&A Truck/Container Freight

Job No.: 16393 Matrix: Water Analyst: TPW Date Sampled: 05/02/00
Date Received: 05/03/00

Date Extracted: 05/06/00 Date Analyzed: 05/08/00

Batch Number: PESTW0251

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-1
Pesticides	DL	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aldrin	0.0001	ND	ND .	ND	. ND	ND	ND
Alpha-BHC	0.0001	ND	ND	ND	ND	ND	ND
Beta-BHC	0.0001	ND	ND	ND	ND	ND	ND
Delta-BHC	0:0001	ND	ND	ND .	ND	ND	ND
Gamma-BHC (Lindane)	0.0001	ND	ND	ND	ND	ND	ND
Chlordane	0:0001	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.0002	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.0002	ND	ND.	ND	ON /	ND	ND
4,4'-DDT	0.0002	ND	ND	ND	ND	ND	ND
Dieldrin	0.0002	ND	. ND	ND	ND	ND	ND
Endosulfan I	0.0001	ND	ND	ND	ND	ND	ND
Endosulfan II	0.0002	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	0.0002	ND	ND	ND .	ND	ND	ND
Endrin	0.0002	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	0.0002	ND	ND	ND	ND	ND	ND
Endrin Ketone	0.001	ND	ND	NO	NO .	ND	ND
Heptachlor	0.00005	ND	ND	ND	ND	ND	ND
Heptachtor Epoxide	0.00005	ND	ND	ND .	ND	ND	ND
Methoxychlor	0.0005	ND	ND	ND	ND	ND	ND
Toxaphene	0.001	ND	// ND	ND	ND	ND	ND
PCBs							
Araciar-1016	0.001	ND	ND	ND	ND	ND	. ND
Aroclar-1221	0.001	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.001	ND	ND	ND.	ND	ND	ND
Aroclor-1242	0.001	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.001	. ND	ND	ND	ND	ND	ND
Aroclor-1254	0.001	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.001	ND	ND	ND	ND	ND	ND

Surrogates (% recovery) Limits: 50 - 150

Sample	ID: Blank	JA-1	JA-2	JA-3	JA-4	CF-1
etrachioro-m-xylene	126	117	93	102	105	121

QC Sample Report - EPA 8080 Pesticides

Matrix: Soil

Batch #: PESTW0251

Batch Accuracy Results

Sample ID: Laboratory Con	trol Sample			
Analyte	Spike Concentration µg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Lindane	0.1	87	32 - 127	Pass
Heptachlor	0.1	108	34 - 111	Pass
Aldrin	0.1	103	42 - 122	Pass
Dieldrin	0.4	76	36 - 146	Pass
Endrin	0.4	86	30 - 147	Pass
ТООТ	0.4	73	25 - 160	Pass
Aroclor 1242	20	93	75 - 127	Page

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Lindane	0.087	0.085	2%	25%	Pass
Heptachlor	0.108	0.107	1%	25%	Pass
Áidrin	0.103	0.102	1%	25%	Pass
Dieldrin	0.300	0.290	3%	25%	Pass
Endrin	0.340	0.330	3%	25%	Pass
DDT	0.290	0.290	0%	25%	Pass

MS: Matrix Spike Sample	
MSD: Matrix Spike Duplic	ate

Analytical Notes:

Centrum
(800) 798-9336

EPA 8260 - Volatile Organics with Oxygenates

Client:

PSI

Project;

CT J&A Truck/Container Freight

Job No.: Matrix: 16393

Analyst:

Water JMR Date Sampled:

05/02/00

Date Received: Date Analyzed: 05/03/00 05/04-12/00

Batch Number:

M4S8260W2096

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-2
Compounds	DL	μg/L	μg/L	μg/L	μg/L	μg/L.	μg/L
Acetone	50	ND	ND	ND.	ND	ND	ND
tert-Amyl Methyl Ether (T	AME) 5.0	ND	ND	ND	ND	ND	ND .
Benzene	0.5	ND .	ND	ND	ND-	0.7	330
Bromobenzene	1.0	ND	-NĐ	ND .	ND	ND	ND
Bromochloromethane	1.0	ND.	ND	ND	ND:	ND	ND
Bromodichloromethane	0.5	ND	ND	ND	ND	ND	ND
Bromoform	0.5	ND	ND	ND	ND	ND	ND
Bromomethane	0.5	ND	MD	ND	ND	ND	NO
tert-Butanol (TBA)	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	10	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	ND	ND	ND	ND	ND	NO
tert-Butylbenzene	. 0.5.	. ND	ND	ND ·	ND	ND	ND
Carbon disulfide	10	ND	ND	ND	ND	ND	68
Carbon tetrachloride	0.5	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.5	ND	ND	ND	ND	ND	ND
Chloroethane	0.5	ND	ND	ND	ND	ND	ND
Chloroform	0.5	ND	ND	ND	ND	1.7	ND
Chloromethane	0.5	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0,5	ND.	ND	ND -	ND	ND	ND
1,2-Dibromoethane	0.5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloroprop	oane 10	ND	ON .	ND .	ND	ND	ND
Dibromomethane	0.5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	ND	ND	. ND	ND	ND	ND
Dichlorodifluoromethane	0.5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	ND	ND	ND	ND	8.2	ND
1,2-Dichloroethane	0.5	ND	ND	8.8	ND	ND	ND
1,1-Dichloroethene	0.5	ND	ND	ND	ND	6.2	ND
cis-1,2-Dichloroethene	0.5	ND	ND	ND	ND	57	ND
trans-1,2-Dichloroethene		ND	ND	ND	ND	0.8	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	ND	ND	ND	ND:	ND.	ND



Client:

PSI

. Project: .

CT J&A Truck/Container Freight

Job No.:

16393

Matrix: Analyst: Water **JMR**

Date Sampled:

05/02/00

Date Received:

05/03/00 05/04-12/00

Date Analyzed:

Batch Number:

M4S8260W2096

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-2
Compounds	DL	μ g/ L	μg/L	μg/L	μg/L	μg/L	μg/L
cis-1,3-Dichloropropene	0.5	ND .	ND	. ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	ND	ND	ND	ND	ND	ON .
Diisopropyl Ether (DIPE)	5.0	ND	ND	ND	ND	ND	ND .
Ethylbenzene	0.5	ND	ND	ND	ND	ND	12
Ethyl tert-Butyl Ether (EtBE)	5.0	ND	ND	ND	ND	ND	" ND
Hexachlorobutadiene	0.5	ND	D	ND	ND	ND	ND
2-Hexanone	10	ND	ND	. ND	ND	ND	ND
fsopropylbenzene	0.5	ND	NO	ND	ND	ND	ND
p-Isapropyitaluene	0.5	ND	ND	ND	ND	ND	ND
Methylene chloride	20	ND	ND .	ND	ND	ND	ND
4-Methyl-2-pentanone	5.0	ND	ND	ND:	ND	ND	ND
Methyl-tert-butyl ether (MtBf	E) 1.0	ND	ND	ND	ND	ND	ND
Napthalene	0.5	ND	8.3	8.3	2.4	1.3	2,900
n-Propylbenzene	0.5	ND	NĐ	ND	ND	ND	ND .
Styrene	0.5	ND	ND	ND	ND	ND	0.8
1,1,1,2-Tetrachloroethane	0.5	ND	ND	ND	ND:	ND	OM
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	ND	NÐ	ND	ND.	130	ON
Toluene	0.5	ND	DN	ND	ND	ND	10
1,2,3-Trichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	ND	NÐ	.ND	ND	4.2	ND
1,1,2-Trichloroethane	0.5	ND	ND	ND	ND	0.6	ND
Trichloroethene	0.5	ND	ND	0.7	ND	630	ND
1,2,3-Trichloropropane	0.5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	5.0	ND	ND	ND	ND	7.5	ND
1,2,4-Trimethylbenzene	0.5	ND	ND	ND	" ND	ND	1.4
1,3,5-Trimethylbenzene	0.5	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.5	ND	ND .	ND	ND	1.1	ND
Xylenes (total)	1.5	ND	ND	ND	ND	ND	11

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	CF-2
Dibromofluoromethane		106	107	108	107	104	112
Toluene-d8		104	106	107	105	105	112
Bromofluorobenzene		102	100	101	101	101	98



Client:

PSI.

Project:

CT J&A Truck/Container Freight

Jab No.:

16393

Matrix:

Water

Analyst

JMR -

Date Sampled: Date Received:

05/02/00 05/03/00

Date Analyzed:

05/04-12/00

Batch Number:

M4S8260W2096

	Sample ID:	CF-3
Compounds	DĿ	μg/L
Acetone	50	ND
tert-Amyl Methyl Ether (TAM		ND
Benzene	0.5	0.9
Bromobenzene	1.0	ND
Bromochloromethane	1.0	ND
Bromodichloromethane	0,5	ND
Bromoform	0.5	ND
Bromomethane	0.5	ND
tert-Butanol (TBA)	50	ND
2-Butanone (MEK)	10	ND
n-Butylbenzene	0.5	ND
sec-Butylbenzene	0,5	ND
tert-Butylbenzene	0.5	, ND
Carbon disulfide	10	ND
Carbon tetrachloride	0.5	ND
Chlorobenzene	0.5	ND
Chloroethane	0.5	ND
Chloroform	0.5	NO
Chloromethane	0.5	ND
2-Chlorotofuene	0.5	NO
4-Chlorotoluene	0,5	ND
Dibromochloromethane	0.5	ND
1,2-Dibromoethane	0.5	ND
1,2-Dibromo-3-chloropropan	e 10	ND ND
Dibromomethane	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	
Dichlorodifluoromethane	0.5	ND
1,1-Dichtoroethane	0,5	
1,2-Dichloroethane	0.5	ND
1,1-Dichtoroethene	0.5	ND ND
cis-1,2-Dichloroethene	0.5	ND
trans-1,2-Dichloroethene	0.5	WENDS AND THE RESERVE OF THE RESERVE
1,2-Dichloropropane	0.5	ND
1,3-Dichloropropane	0.5	BENDER SERVER SE
2,2-Dichloropropane	0.5	ND
1,1-Dichloropropene	0:5	ND



Client: **PSI**

Project: CT J&A Truck/Container Freight

Job No.: Matrix:

16393 Water

JMR

Analyst

Date Sampled:

Date Received:

05/02/00 05/03/00

Date Analyzed:

05/04-12/00

Batch Number: . M4S8260W2096

	Sample ID:	CF-3	
Compounds	DL	μg/L	
cis-1,3-Dichloropropene	0.5	ND	
trans-1,3-Dichloropropene	0.5	ND-	
Diisopropyl Ether (DIPE)	5.0	ND	
Ethylbenzene	0.5	מא	
Ethyl tert-Butyl Ether (EtBE)	5.0	ND	
Hexachlorobutadiene	. 0,5	ND	
2-Hexanone	10	ND	
Isopropylbenzene	0.5	ND	
p-Isopropyltoluene	0.5	ND	
Methylene chloride	20	ND	
4-Methyl-2-pentanone	5.0	ND	
Methyl-tert-butyl ether (MtBl	E) 1.0	ND	
Napthalene	0.5	1.7	
n-Propylbenzene	0.5	ND	
Styrene	0.5	ND	
1,1,1,2-Tetrachloroethane	0.5	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	
Tetrachloroethene	0,5	ND	
Toluene	0.5	ND	
1,2,3-Trichlorobenzene	0.5	ND	
1,2,4-Trichlorobenzene	0.5	ND	
1,1,1-Trichloroethane	0.5	ND	
1,1,2-Trichloroethane	0.5	ND	and the second s
Trichloroethene	0.5	ND	
1,2,3-Trichloropropane	0.5	ND	
Trichlorofluoromethane	0.5	ND	
Trichlorotrifluoroethane	5.0	ND	
1,2,4-Trimethylbenzene	0.5	ND	
1,3,5-Trimethylbenzene	0.5	ND	
Vinyl chloride	0.5	ND	
Xylenes (total)	1.5	ND	· · · · · · · · · · · · · · · · · · ·

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	CF-3
Dibromofluoromethane		1107 (Cont.) 180 (Cont.)
Toluene-d8		109
Bromofluorobenzene		98



Client

PSI

Project:

CT J&A Truck/Container Freight

Job No.:

16393

Matrix: Analyst: Water

JMR

Date Sampled:

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number:

M4S8260W2096

	Sample ID:	CF-10
Compounds	DL	μg/L
Acetone	1250	ND
tert-Amyl Methyl Ether (TAM	IE) 125	ND
Benzene	13	270
Bromobenzene	25	ND
Bromochloromethane	25	ND
Bromodichloromethane	13	ND
Bromoform	13	ND
Bromomethane	13	ND
tert-Butanol (TBA)	1250	ND
2-Butanone (MEK)	250	ND
n-Butylbenzene	13	ND
sec-Butylbenzene	13	ND
tert-Butylbenzene	13	ND
Carbon disulfide	250	ND
Carbon tetrachloride	13	ND
Chlorobenzene	13	ND -
Chloroethane	13	ND
Chloroform	13	ND CONTRACTOR OF THE CONTRACTO
Chloromethane	13	ND
2-Chlorotoluene	13	ND
4-Chlorotoluene	13	ND
Dibromochloromethane	13	ND
1,2-Dibromoethane	13	ND
1,2-Dibromo-3-chloropropar	ne 250	ND
Dibromomethane	13	ND
1,2-Dichlorobenzene	- 13	HI ND 102 BEAUTH HE WAS TO BE
1,3-Dichlorobenzene	13	ND
1,4-Dichlorobenzene	13	THE NO. S. A. S. S. S. S. S. S. S. S. S. S. S. S. S.
Dichlorodifluoromethane	13	ND
1,1-Dichloroethane	13	ND
1,2-Dichloroethane	13	ND
1,1-Dichloroethene	13	A PND TO THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE P
cis-1,2-Dichloroethene	13	ND
trans-1,2-Dichloroethene	13	
1,2-Dichloropropane	13	ND
1,3-Dichloropropane	13	TO NOTE OF SECTION OF
2,2-Dichloropropane	13	ND
1,1-Dichloropropene	13	ND As the second of the second



Client:

Project:

CT J&A Truck/Container Freight

Job No.: Matrix:

16393

Analyst:

Water

Date Sampled:

Date Received:

05/02/00 05/03/00

Date Analyzed: Batch Number:

05/04-12/00

- M4S8260W2096

. Sa	mple ID:	CF-10							···		
Compounds	DL	μg/L			•						
cis-1,3-Dichloropropene	13	ND ·		·	··· ·· ·· ·· ··						· · · · ·
trans-1,3-Dichloropropene	13	ND		- 00018300151-11 - 12008-1008-1	20090000000000000000000000000000000000				No Hagaria Santasanaka	riese	
Diisopropyl Ether (DIPE)	125	ND	NOVER POR COME DE COME DE	> 10001 60400 000000	cc1600406-61.0.	5-01-00398 A 001	e december de see :	rigeroagge too	5.000000000000000000000000000000000000	1000000	65 - 4.05M
Ethylbenzene	13	13		180,000,008		74000 T			ger arað:	. 2004 2004 - 100	rvija (jera) verskosta
Ethyl tert-Butyl Ether (EtBE)	125	ND			wasaanaa w	nananan sasuntan ta	v e a v deci 30 335c.	200000000000000000000000000000000000000		uses in the second	er er er og bli bliger
Hexachlorobutadiene	13	ND						300000000000000000000000000000000000000			
2-Hexanone	250	ND		• •		s de bee baeer a	nononayan sayas	reneamentario (1900)	u 200. no govore	0404.1111.11.11	Maria de la como de la como de la como de la como de la como de la como de la como de la como de la como de la
isopropyibenzene	13	ND									
p-Isopropyltoluene	13	ND					TO SECURE U.S.	SOOT LONG TO LAND	ne de la ferencia de la composición de la composición de la composición de la composición de la composición de	1 1 204 1 11	1 41554
Methylene chloride	500	ND									
4-Methyl-2-pentanone	125	ND				- ice edit		0.00			
Methyl-tert-butyl ether (MtBE)	25	ND		-200 BB 66.38						vy is,	s rej
Napthalene	13	1,600						er dyna er yn y	i nama		•
n-Propylbenzene	13	ND		1 :03:00,100,00 1 :03:00 :00:00		115 000000 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		ri, sperger Taliforniae			21 M
Styrene	13	ND								·	
1,1,1,2-Tetrachloroethane	13	NO									
1,1,2,2-Tetrachioroethane	25	ND									
Tetrachloroethene	13	- ND			::::::::::::::::::::::::::::::::::::::					1	e (
Toluene	13	14				,	•				
1,2,3-Trichlorobenzene	13	ND			35				100		
1,2,4-Trichlorobenzene	13	ND		•							
1,1,1-Trichloroethane	13	ND							일본.		
1,1,2-Trichloroethane	13	ND					• • •				
Trichloroethene	13	ND					a bright				4
1,2,3-Trichloropropane	13	ND					• • • • •				
Trichlorofluoromethane	13	ND	aray (Calura) CCC Yestacoeta				talian Talian				
Trichlorotrifluoroethane	125	ND					****			-	
1,2,4-Trimethylbenzene	13	ND		N38 NJ	34.3		13.15	v : 15° +	· "}.		
1,3,5-Trimethylbenzene	13	ND				•		. •		•	
Vinyl chloride	:13	ND		1 17 15 17			- N	14.			
Xylenes (total)	38	ND									

Surrogates (% recovery) Limits: 80 - 130

	Sample ID: CF-10			
Dibromofluoromethane	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•	
Toluene-d8	109	·		
Bromofluorobenzene	101	 +		

Page 16 of 24



Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.:

Matrix:

Analyst:

16393

Water JMR -

Date Sampled:

05/02/00

Date Received:

05/03/00

Date Analyzed:

05/04-12/00

Batch Number:

M4S8260W2096

	Sample ID:	CF-1
Compounds	DL	μg/L
Acetone	5000	ND
tert-Amyl Methyl Ether (TAN	ИE) 500	ND
Benzene	50	34,000
Bromobenzene	100	ND
Bromochloromethane	100	ND
Bromodichloromethane	50	ND
Bromoform	. 50	ND
Bromomethane	50	ND
tert-Butanol (TBA)	5000	ND.
2-Butanone (MEK)	1000	ND
n-Butylbenzene	50	ND
sec-Butylbenzene	50	ND
tert-Butylbenzene	50	ND
Carbon disulfide	1000	ND
Carbon tetrachloride	50	ND
Chlorobenzene	50	NO
Chloroethane	50	ND
Chloroform	50	ND
Chloromethane	50	ND
2-Chlorotoluene	50	ND
4-Chlorotoluene	50	recommendation of the following services and the following services and the services of the first of the following services of the first of the following services of the first of the firs
Dibromochloromethane	50	
1,2-Dibromoethane	50	ND
1,2-Dibromo-3-chloropropa	ne 1000	TO NO. 1944 S. T. 1488 S. M. M. A. A. B. B. M. B. B. B. B. B. B. B. B. B. B. B. B. B.
Dibromomethane	50	ND
1,2-Dichlorobenzene	50	
1,3-Dichlorobenzene	50	ND
1,4-Dichlorobenzene	50	
Dichlorodifluoromethane	50	ND
1,1-Dichloroethane	50	
1,2-Dichloroethane	50	ND
1,1-Dichloroethene	50	
cis-1,2-Dichloroethene	50	ND
trans-1,2-Dichloroethene	50	
1,2-Dichloropropane	50	ND
1,3-Dichloropropane	50	
2,2-Dichloropropane	50	ND
1,1-Dichloropropene	50 50	NO NO CONTRACTOR CONTR
151 Diotabiopropolie	30	<u>NU</u>



Client:

PSI

Project:

CT J&A Truck/Container Freight

Job No.: Matrix

16393 Water

Analyst

JMR _

Date Sampled:

Date Received:

05/02/00 05/03/00

Date Analyzed: Batch Number: 05/04-12/00

M4S8260W2096

	Sample ID:	CF-1	
Compounds	DL	μg/L	
cis-1,3-Dichloropropene	50	ND	
trans-1,3-Dichloropropene	50	ND	
Diisopropyl Ether (DIPE)	500	ND	
Ethylbenzene	50	340	
Ethyl tert-Butyl Ether (EtBE)	500	ND	
Hexachlorobutadiene	50	NO	
2-Hexanone	1000	ND	and the state of the state of the state of the state of the state of the state of the state of the state of the
Isopropylbenzene	50	ND	
p-IsopropyItaluene	50	ND	
Methylene chloride	2000	ND	
4-Methyl-2-pentanone	500	ND	
Methyl-tert-butyl ether (MtBl	E) 100	, ND	
Napthalene	50	19,000	
n-Propylbenzene	50	ND	
Styrene	50	590	
1,1,1,2-Tetrachloroethane	50	מא	
1,1,2,2-Tetrachioroethane	100	ND	
Tetrachloroethene	50	ND	사람보다 강경화 나는 말이 없었다면 하는 것이다.
Toluene	50	1,600	
1,2,3-Trichlorobenzene	50	ND	종류 19. 스플라 및 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.
1,2,4-Trichlorobenzene	50	ND	
1,1,1-Trichloroethane	50	ND	방송하는 사람들은 어느로 가면 됐다. 그렇게 되어 있다.
1,1,2-Trichloroethane	50	ND	
Trichloroethene	50	190	잃어 음악 딱 하면 없는데 되면 가다니다.
1,2,3-Trichloropropane	50	ND	
Trichlorofluoromethane	50		
Trichlorotrifluoroethane	500	ND	
1,2,4-Trimethylbenzene	50	ND	
1,3,5-Trimethylbenzene	50	ND	
Vinyl chloride	50	ND	
Xylenes (total)	150	ND	The second secon

Surrogates (% recovery) Limits: 80 - 130

	177	100	
	Sample ID:	CF-1	
Dibromofluoromethane		110	
Toluene-d8		115	
Bromofluorobenzene		98	•

QC Sample Report - EPA Method 8260

Matrix: Water

Batch #: MS48260W2096

Batch Accuracy Results

Samp	e IL): La	ibora	tory	Control	Sample	;

Analyte	Spike Concentration µg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
1,1-Dichloroethene	20	113	59 - 172	Pass
Benzene	20	122	66 - 142	Pass
Trichloroethene	20	120	71 - 137	Pass
Toluene	20	113	59 - 139	Pass
Chlorobenzene	20	96	60 - 133	Pass

Analytical Notes:

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Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery µg/L	Spike Duplicate Recovery μg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
1,1-Dichloroethene	22.7	24.5	8%	22%	Pass
Benzene	24.4	26.4	8%	21%	Pass
Trichloroethene	23.9	25.0	4%	24%	Pass
Toluene	22.8	24.6	8%	21%	Pass
Chlorobenzene	19.2	21.2	10%	21%	Pass

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Analytical Notes:



Client: Date Sampled: 05/02/00 Project: CT J&A Truck/Container Freight Date Received: 05/03/00 Job No.: 16393 Date Extracted: 05/05/00 Matrix: Water . Dates Analyzed: 05/06-08/00 Analyst: **TPW** Batch Number: 8270W0622

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	
Compound	. DL	mg/L	mg/L	mg/L	mg/L	mg/L	
Acenaphthene	0.0011	ND	ND	ND	ND	ND	
Acenaphthylene	0.0011	ND	.ND	ND	ND	ND:	
Anthracene	0.0011	. ND	ND	ND	ND	ND	and factories and an analysis
Benzo(ajanthracene	0.0022	ND	ND	ND	ND	ND	
Benzo[a]pyrene	0.0022	ND '	ND	· ND ·	ND	ND	
Benzo[b]fluoranthene	0.0011.	ND	ND .	ND	ND	ND	
Benzo[g,h,i]perylene	0.0033	ND	ND	ND	ND	ND	
Benzo[k]fluoranthene	0.0011	ND	ND	ND	ON	ND	
Benzyl alcohol	0.0044	ND	ND .	ND	ND	ND	
bis(2-Chloroethoxy)metha		ND	ND	ND	ND	ND	
bis(2-Chloroethyl)ether	0.0022	ND	ND	ND	ND	ND	
bis(2-Chtoroisopropyl)eth		ND	ND	ND	ND	ND.	operation of the second of the
bis(2-Ethylhexyl)phthalate		ND	ND	ND	ND	ND	
4-Bromophenylphenylethe	ente il interes producedes resistent dell'es	ND	ND.	ND	ND	ND	
Butylbenzylphthalate	0.0011	ND	ND	ND	ND	ND	
4-Chloro-3-methylphenol	0.0055	ND	ND	ND	ND	ND	
4-Chloroaniline	0.0055	ND	ND	ND	ND	ND	
2-Chloronaphthalene	0.0011	ND	ND	ND	ND	ND	
2-Chlorophenol	0.0044	ND	ND	ND	ND	ND	
4-Chlorophenylphenylethe	er 0.0011	ND	ND	ND	ND	ND .	
Chrysene	0.0011	ND	ND	ND	ND	ND	
Di-n-butyiphthalate	0.011	ND	ND	ND	ND	ND	
Di-n-octylphthalate	0.0011	ND	ND	ND	ND	ND	
Dibenzo[a,h]anthracene	0.0033	ND	ND	ND	ND	ND	
Dibenzofuran	0.0011	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.0011	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.0011	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.0011	ND	ND	ND	ND	ND	
3,3-Dichlorobenzidine	0,0044	ND	ND	ND	ND	ND	•
2,4-Dichlorophenol	0.0055	ND	ND	ND	ND	ND	
Diethylphthalate	0.011	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	0.0033	ND	ND	ND	ND	ND	
Dimethylphthalate	0.0011	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylphen		NO	ND	ND	ND	ND	
2,4-Dinitrophenol	0.055	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene	0:0011	ND	ND	ND	ND	ND	



Client: PSI Date Sampled: 05/02/00 CT J&A Truck/Container Freight Project: Date Received: 05/03/00 Job No.: .16393 Date Extracted: 05/05/00 Matrix: Water Dates Analyzed: 05/06-08/00 Analyst. TPW : Batch Number: 8270W0622

	Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
2,6-Dinitrotoluene	0.0033	ND -	ND	ND	ND	ND	
Fluoranthene	0.0011	ND	ND	ND	ND	ND .	
Fluorene	0.0011	ND	ND	ND	ND	ND	
Hexachtorobenzene	0.0011	ND	ND	ND ·	ND	ND	
Hexachlorobutadiene	0.0011	ND	ND	ND	ND	ND	
Hexachlorocyclopentadier	ne 0.055	ND	ND	סוא	ND	ND	
Hexachloroethane	0.0011	ND	ND	ND	ND	ND	
Indeno[1,2,3-cd]pyrene	0.0044	ND	ND	ND	ND	ND	
Isophorone	0.0011	ND	ND	ND	ND	ND	
2-Methylnaphthalene	0.0011	ND	ND	ND	ND	ND	
2-Methylphenol	0.0055	ND	ND	ND	ND	ND	• • • •
4-Methylphenol	0.0055	ND	ND	ND	ON.	ND	\$2.32 \$2.32
N-Nitroso-di-n-propylamin	ne 0.0011	ND	ND	ND	ND	ND	
N-Nitrosodiphenylamine	0.0011	DI	ND	ND	ND	ND	
Naphthalene	0.0011	ND	0.002	ND	ND	ND	
2-Nitroaniline	0.0033	ND	ND	ND	ND	ND	. 5
3-Nitroaniline	0.0033	ND	ND	ND	. ND	ND	
4-Nitroaniline	0.011	ND	ND	ND	ND	DM	
Nitrobenzene	0.0033	ND	ND	ND	ND	ND	
2-Nitrophenol	0.0044	CM	ND	ND	ND	ND	
4-Nitrophenol	0.011	ND	ND	ND	ND	ND	
Pentachlorophenol	0.055	ND	ND	ND	ND	ND	. ::
Phenanthrene	0.0022	ND	ND	ND	ND	ND	
Phenol	0.0044	ND	ND :	ND	" ND	NO	i si
Pyrene	0.0011	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.0011	ND	ND	ND	ND	ND	
2,4,5-Trichlorophenol	0.0066	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	0.011	ND	ND	ND	ND	מא	6. 1

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	JA-1	JA-2	JA-3	JA-4	
2-Fluorophenol (21 - 100%)	104	52	59	59	52	
Phenol-D5 (10 - 94%)	82	34	38	39	34 *	
Nitrobenzene-D5 (35 - 114%)	108	62	60	60	59	
2-Fluorobiphenyl (43 - 116%)	90	72	75	71	69	
2,4,6-Tribromophenol (10 - 123%)	97	82	103	96	89	
p-Terphenyl-D14 (33 - 141%)	108	85	90	88	85	



Client; PSI Date Sampled: 05/02/00 Project: CT J&A Truck/Container Freight Date Received: 05/03/00 Job No.: 16393 Date Extracted: 05/05/00 Matrix: Water Dates Analyzed: 05/06-08/00 TPW Analyst: Batch Number: 8270W0622

	Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
Acenaphthene	0.001	ND	0.008	0,004	ND .	0.004	. , -
Acenaphthylene	0,001	ND	ND	0.069	ND	0.031	
Anthracene	0.001	ND .	0.006	0.007	0.001	0.006	
Benzo[a]anthracene	0:002	ND	ND	ND	0.004	ND	
Benzo[a]pyrene	0.002	ND	ND	0.003	800.0	0.002	•
Benzo[b]fluoranthene	0.001	ND.	ND	0.003	0.010	0.003	
Benzo(g,h,i]perylene	0.003	ND	ND	ND	0.009	ND	
Benzo[k]fluoranthene	0.001	ND	ND	0.003	0.010	0.003	
Benzyl alcohol	0.004	ND	ND	ND	ND	ND	
bis(2-Chloroethoxy)methai	ne 0,002	ND	ND	ND	ND	NO	
bis(2-Chloroethyl)ether	0.002	ND	· ND	ND	ND	ND	
bis(2-Chloroisopropyl)ethe		ND	ND	ND	ND	ND	
bis(2-Ethylhexyl)phthalate	0.01	, ND	ND	ND	ND	ND -	
4-Bromophenylphenylethe	r 0.001	ND	ND:	ND	ND	ND	
Butylbenzylphthalate	0.001	ND .	ND	ND	ND	ND	
4-Chloro-3-methylphenol	0.005	ND	ND	ND	ND	ND	
4-Chloroaniline	0.005	ND	ND	ND	ND	ND .	
2-Chloronaphthalene	0,001	ND	GN	ND	ND	ND	
2-Chlorophenol	0.004	ND	ND	ND	ND	ND	
4-Chlorophenylphenylethe	г 0.001	ND	ND	ND	ND	ND	
Chrysene	0.001	ND	ND	0.003	0.006	0.002	
Di-n-butylphthalate	0.01	ND	ND	ND	ND	ND	
Di-n-octylphthalate	0.001	ND	ND	ND	ND	ND	
Dibenzo[a,h]anthracene	0,003	ND	ND	ND	ND	ND	
Dibenzofuran	0.001	ND	0.003	0.003	ND	0.003	
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND:	ND	
3,3-Dichlorobenzidine	0.004	ND	ND	ND	ND	ND	
2,4-Dichlorophenol	0.005	ND	ND	ND:	ND:	ND	
Diethylphthalate	0.01	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	0.003	ND	NO	ND	ND	ND:	è
Dimethylphthalate	0.001	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylpheno	0.01	ND	ND	ND	ND	ND	
2,4-Dinitrophenol	0.05	ND	ND	ND	ND	ND	
2,4-Dinitratoluene	0.001	ND	ND	ND	ND	ND	



Client: PSI Date Sampled: 05/02/00 CT J&A Truck/Container Freight Project; Date Received: 05/03/00 Job No.: 16393 Date Extracted: 05/05/00 Matrix: Water Dates Analyzed: 05/06-08/00 Analyst: TPW Batch Number: 8270W0622

·	Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
Compound	DL	mg/L	mg/L	mg/L	mg/L	mg/L	
2,6-Dinitrotoluene	0.003	ND	ND	ND	ND	ND	
Fluoranthene	0.001	ND	0.007	0.014	0.012	0.011	
Fluorene	.0.001	ND	0.013	0.016	ND	0.014	king englada na namawa Kina
Hexachlorobenzene	0.001	ND	ND	ND	ND	ND	(10.00002) i
Hexachlorobutadiene	0.001	- ND	ND	ND	ND	ND	Approximation and the second
Hexachlorocyclopentadien	e 0.05	ND	ND	ND	[†] ND	ND 1	
Hexachloroethane	0.001	ND .	ND	ND	ND	ND	Side the wood in responsible
Indeno[1,2,3-cd]pyrene	0,004	ND	ND	ND	0.006	ND	
Isophorone	0.001	ND	ND	ND	ND	ND	
2-Methylnaphthalene	0.001	ND	0.067	0.022	ND	0.008	-Kingar
2-Methylphenol	0.005	ND	ND	ND	ND	ND	e in the Maria and Maria
4-Methylphenol	0.005	ND	ND	0.17	NO	0.041	
N-Nitroso-di-n-propylamin	e 0.001	ND	ND	ND	ND	ND	er seif fas en sa
N-Nitrosodiphenylamine	0.001	ND	ND	ND	ND	ND	No. organization
Naphthalene	0.001	ND	5.5	1.2	0.007	0.52	Tourse of Section
2-Nitroaniline	0.003	ND	ND .	ND	ND	ND	ryana ya s
3-Nitroaniline	0.003	ND	ND	ND	ND	ND	e Samuel Verlage
4-Nitroaniline	0.01	ND	ND	ND	ND	NO	er (Burger)
Nitrobenzene	0.003	ND	ND	ND	ND	ND	
2-Nitrophenol	0.004	ND	ND	ND	ND	ND	
4-Nitrophenol	0.01	ND	ND	ND	ND	ND	51.47,11.3
Pentachlorophenol	0.05	ND	ND	ND	ND	ND	45.30
Phenanthrene	0.002	ND	0.055	0.048	0.004	0.033	4175.4%
Phenol	0.004	ND	0.024	0.046	ND	0.011	
Pyrene	0.001	ND	0.011	0.018	0.016	0.013	,44 ²
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND	
2,4,5-Trichlorophenol	0.006	ND	ND	ND	ND	ND	*
2,4,6-Trichlorophenol	0.01	ND	ND	ND	ND	ND	

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	CF-1	CF-2	CF-3	CF-10	
2-Fluorophenol (21 - 100%)	104	30	59	37	49	
Phenol-D5 (10 - 94%)	82	40	40	25	37	
Nitrobenzene-D5 (35 - 114%)	108	:38	65	39	51	
2-Fluorobiphenyl (43 - 116%)	90	59	64	62	56	
2,4,6-Tribromophenol (10 - 123%)	97	32	89	40	79	
p-Terphenyl-D14 (33 - 141%)	108	44	83	67	72	



QC Sample Report - EPA 8270

Batch #: 8270W0622

Matrix: Water

Batch Accuracy Results

Sample ID: Laboratory Contr	Sample ID: Laboratory Control Sample									
Analyte	Spike Concentration μg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail						
Phenol	80	43	5 - 112	Pass						
2-Chlorophenol	80	106	23 - 134	Pass						
1,4-Dichlorobenzene	40	94 ^	20 - 124	Pass						
N-Nitrosodi-n-propylamine	40	79	0 - 230	Pass						
1,2,4-Trichlorobenzene	40	83	44 - 142	Pass						
4-Chloro-3-Methylphenol	80	84	22 - 147	Pass						
Acenaphthene	40	84	47 - 145	Pass						
4-Nitrophenol	80	48	0 - 132	Pass						
2,4-Dinitrotoluene	40	88	39 - 139	Pass						
Pentachiorophenoi	. 80	132	14 - 176	Pass						
Pyrene	40	103	52 - 115	Pass						

Α	nalytic	al N	lotes:		•	
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Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

	ample ry µg/L	Spike Duplicate Recovery µg/l.	Relative Percent Difference (RPD)	Upper Control Limit RPD	=
Analyte	Spike Sample Recovery µg/l	Spike Duplicat Recovery µg/L	Relative Po Difference	Upper (RPD	Pass/Fail
Phenol	34.7	31.8	9%	35%	Pass
2-Chlorophenol	85.2	75.5	12%	50%	Pass
1,4-Dichlorobenzene	37.4	34.3	9%	27%	Pass
N-Nitrosodi-n-propylamine	31.8	29.8	6%	38%	Pass
1,2,4-Trichlorobenzene	33.3	35.8	7%	28%	Pass
4-Chioro-3-Methylphenol	66.9	73.0	9%	33%	Pass
Acenaphthene	33.7	33.9	1%	23%	Pass
4-Nitrophenol	29.7	37.8	24%	50%	Pass
2,4-Dinitrotoluene	35.1	37.9	8%	47%	Pass
Pentachlorophenol	105.7	105.4	0%	47%	Pass
Pyrene	41.2	41.1	0%	36%	Pass

Analytical Notes:



Centrum Analytical Laboratories, Inc.

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY . CHEMICAL AND BIOLOGICAL ANALYSES

Client: PSI

1320 W. Winton Ave.

Hayward, CA 94545

Date Sampled:

04/26/00

Date Received:

04/28/00

Job Number:

16373

Project: Caltrans - J&A Trucking

CASE NARRATIVE

The following information applies to samples which were received on 04/28/00:

The samples were received at the laboratory chilled and sample containers were intact.

This report is being re-issued at the request of our client. There have been no changes in the results as previously reported. The date of re-issue is 06/14/00.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested:

Report approved by:

Robert R. Clark, Ph.D. Laboratory Director

ELAP # 2419

FOR

DL: Detection Limit -- The lowest level at which the compound can reliably be detected under normal laboratory conditions.

ND: Not Detected -- The compound was analyzed for but was not found to be present at or above the detection limit.

NA: Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.



Metals

Client: PSI

Project: Caltrans - J&A Trucking

Job No: 16373 Matrix: Soil Analyst: RLB/TER Date Sampled: Date Received: 04/26/00 04/28/00

Date Digested:

05/01/00

Date Analyzed:

05/02-06/00

Batch Number:

6010S1551

	Sa	mple ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5		
Element	Method #	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
Antimony	6010	2.5	ND	ND	- ND	ND	ND		
Arsenic	6010	0.50	ND	2.1	2.5	3.0	2,4		
Barium	6010	0.50	ND	37	47	47	56		
Beryllium	6010	0.50	ND	ND	ND	ND	ND		
Cadmium	6010	0.50	ND	ND	ND	ND	ND		
Chramium	6010	0.50	ND	30	35	38	48	n sagniya Nagniya	
Cobalt	6010	0.50	ND	4.6	5.3	5.6	5.8	•	
Copper	6010	0,50	ND	5.3	6.8	8.4	7.6		1346
Lead	6010	0.50	ND	1.5	2.0	3.9	2.5		
Mercury	7471	0.10	- ND	ND	ND	ND	ND		
Molybdenum	6010	0.50	ND	ND	ND	ND	ND		
Nickel	6010	1.0	ND	26	32	32	35		
Selenium	6010	2.5	ND	ND	ND	ND	ND		
Silver	6010	1.0	ND	ND	ND	ND	ND	i de la companya d	1
Thallium	6010	2.5	ND	ND	ND	ND	ND		
Vanadium	6010	0.5	ND	21	27	29	30		1.
Zinc	6010	10	ND	19	23	25	26	•	
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QC Sample Report - Metals

Matrix: Soil

Batch #: 6010S1551

MS/MSD Sample ID: JA1-7.0

	Batch P	recision	Results	5 :		Batch A	ccurac	/ Results:	
Metal	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fait	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits Percent Recovery	Pass / Fail
Antimony	52.2	52.0	0%	20%	Pass	50	112	75 - 125	Pass
Arsenic	51.8	52.0	0%	20%	Pass	50	107	75 - 125	Pass
Barium	85.9	86.4	1%	20%	Pass	50	105	75 - 125	Pass
Beryllium	50.7	52.3	3%	20%	Pass	50	107	75 - 125	Pass
Cadmium	48.2	48.7	1%	20%	Pass	50	107	75 - 125	Pass
Chromium	79.1	81.5	3%	20%	Pass	50	108	75 - 125	Pass
Cobalt	53.0	53.9	2%	20%	Pass	50	108	75 - 125	Pass
Capper	57.4	58.2	1%	20%	Pass	50	108	75 - 126	Pass
Lead	50.7	50.6	0%	20%	Pass	50	107	75 - 125	Pass
Mercury	2.74	2.80	2%	20%	Pass	2,5	.111	75 - 125	Pass
Molybdenum	52.2	52.2	0%	20%	Pass	50	113	75 - 125	Pass
Nickel	75.4	77.7	3%	20%	Pass	50	108	75 - 125	Pass
Selenium	48.1	48.9	2%	20%	Pass	50	103	75 - 125	Pass
Silver	49.1	50.1	2%	20%	Pass	50	104	75 - 125	Pass
Thallium	48.0	48.8	2%	20%	Pass	50	107	75 - 125	Pass
Vanadium	70.3	71,2	1%	20%	Pass	50	109	75 - 125	Pass
Zinc	69.0	70.1	2%	20%	Pass	50	115	75 - 125	Pass

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LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

MS: Matrix Spike

MSD: Matrix Spike Duplicate

RPD: Relative Percent Difference



Modified 8015 - Fuel Screen

Client:

PSI

Project:

Caltrans - J&A Trucking

Job No.:

16373 Soil

Matrix: Analyst:

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rix: So ilyst: JL Date Sampled:

04/26/00

Date Received:

04/28/00

Date Extracted:

05/01/00

Date Analyzed:

05/01/00

Batch Number:

8015DS1909

	Eval Identificate	Discol	Motor	Detection
	Fuel Identified:	Diesel	Oil	Limits
• • •	Units:	mg/kg	mg/kg	mg/kg
Blank		ND	ND	10
JA1-7.0)	ND	ND	.10
JA2-7.0	1	ND	ND:	10
JA3-7.0	0	ND	ND	. 10
JA4-6.	5	ND	ND	10

QC Sample Report - EPA 8015M Diesel

Matrix: Soil

Batch #: 8015DS1909

Batch Accuracy Results

Analyte	Spike Concentratio mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Diesel	100	82	70 - 130	Pass

	Analytical Notes:
-	

Batch Precision Results

MS/MSD Sample ID:Laboratory Control Sample

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Diesel	82	75	9%.	29%	Pass

Analytic	al Not	tes:		_
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MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

(800) 798-9336

Modified 8015 - Total Volatile Hydrocarbons as Gasoline

04/26/00 Client: PSI Date Sampled: Project: Caltrans - J&A Trucking Date Received: 04/28/00 Job No.: 16373 Date Analyzed: 05/01/00 Matrix: Soil Batch Number: 8015GS2591 CP. Analyst:

	Detection Limit	Petroleum Hydrocarbons as Gasoline	
Sample ID	mg/kg	mg/kg · ·	
Method Blank	0.50	ND	
JA1-7.0	0.50	ND	
JA2-7.0	0.50	ND	
JA3-7.0	0.50	ND	
JA4-6.5	0:50	ND:	
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QC Sample Report - EPA 8015M Gasoline

Matrix: Soil

Batch #: 8015GS2591

Batch Accuracy Results

	Concentration	covery LCS	cceptance Limits 6 Recovery	
Analyte	Spike (mg/Kg	% Re	Ассер % Re	Pass/
Gasoline	10.0	100	70 - 130	Pass

Analytic	al No	tes:			
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Batch Precision Results

MS/MSD Sample ID: 16369-1

Analyte	Spike Sample Recovery mg/	Spike Duplicate Recovery mg/K	Relative Percent Difference (RPD)	Upper Co RPD	s s s Fail
	nple mg/Kg	olicate mg/Kg	ercent (RPD)	Control Limit	

Analytical Notes:	
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MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate



EPA 8080 - Organochlorine Pesticides & PCBs

Client:

PSI

Project

Caltrans - J&A Trucking

Job No.:

16373

Matrix: Analyst

Soil

Date Sampled:

04/26/00

Date Received:

04/28/00

Date Extracted: 05/01/00

Date Analyzed:

05/05/00

Batch Number:

PESTS0249

<u> </u>	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Pesticides	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aldrin	0.001	ND	ND	ND	ND	ND
Alpha-BHC	0.001	ND	ND	DIA	ND :	ND
Beta-BHC	0.001	ND	ND	ND	ND	ND
Delta-BHC	0.001	. ND	ND	ND	ND	ND
Gamma-BHC (Lindane)	0.001	ND	ND	ND	ND	ND
Chiordane	0.010	ND	ND	ND	ND	ND
4,4'-DDD	0.002	. ND	ND	ND	ND	ND
4,4'-DDE	0.002	ND	ND	ND	ND	NO
4,4'-DDT	0.002	ND	ND	ND	ND	ND
Dieldrin	0.002	ND	ND	ND.	ND	ND
Endosulfan I	0.001	ND	ND	ND	ND .	ND
Endosulfan II	0,002	ND	ND	ND	ND	ND
Endosulfan sulfate	0.002	ND	ND	ND	ND	ND
Endrin	0.002	. ND	ND	ND	ND	ND
Endrin Aldehyde	0.002	ND	ND	ND	ND	ND
Endrin Ketone	0.010	ND	ND	ND	ND	ND
Heptachior	0.001	ND	ND	ND	ND	ND
Heptachlor Epoxide	0.001	ND	ND	ND	ND	ND
Methoxychlor	0.010	ND	ND	ND	ND	ND
Toxaphene	0.020	ND	ND	ND	ND	ND
PCBs						
Aroclor-1016	0.050	ND	ND	ND	ND	ND
Aroclor-1221	0.050	ND	ND	ND	ND	ND.
Aroclor-1232	0.050	ND	ND	ND	DI	ND
Aroclor-1242	0.050	ND	ND	ND	ND	ND
Aroclor-1248	0.050	ND	ND'	NO	ND	ND
Aroclor-1254	0.050	ND	ND	ND	ND	ND
Aroclor-1260	0.050	NO	ND	ND	ND	ND

Surrogates (% recovery) Limits: 50 - 150

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5		
						71		
Tetrachioro-m-xylene		117	135	118	118	131		
	and the least the second	y single	1985 B. 1986			ingia sa	: *	

QC Sample Report - EPA 8080 Pesticides



Matrix: Soil

Batch #: PESTS0249

Batch Accuracy Results

Sample ID: Laboratory C	ontrol Sample			
Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Lindane	0.0066	90	32 - 127	Pass
Heptachlor	0.0066	98	34 - 111	Pass
Aldrin	0.0066	109	42 - 122	Pass
Dieldrin	0.026	88	36 - 146	Pass
Endrin	0.026	102	30 - 147	Pass
DDT	0.026	93	25 - 160	Pass
Aroclor 1242	0.0667	83	75 - 127	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Lindane	0.0030	0.0028	7%	25%	Pass
Heptachior	0.0033	0.0036	9%	25%	Pass
Aldrin	0.0036	0.0035	3%	25%	Pass
Dieldrin	0.0117	0.0108	8%	25%	Pass
Endrin	0.0135	0.0117	14%	25%	Pass
DDT	0.0124	0.0112	10%	25%	Pass

Analytical Note	es:	
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MS: Matrix Spike Sample MSD: Matrix Spike Duplicate

Centrum (800) 798-9336 04/26/00

Client:

PSI

Project:

Caltrans - J&A Trucking

Job No.: Matrix:

16373 Soil

Analyst:

MBH

Date Sampled:

Date Received:

04/28/00

Date Analyzed:

05/01/00

Batch Number:

M48260S182

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Acetone	0.05	ND	ND.	ND	ИD	ND	
tert-Amyl Methyl Ether (TAI	ME 0.005	ND	ND	ND	ND	ND	
Benzene	0.001	ND	ND	ND	ND	ND	
Bromobenzene	0:005	ND	ND	ND	ND	ND	
Bromochloromethane	0.005	ND	ND	ND	ND	ND	
Bromodichloromethane	0,001	ND	NĐ	ND	NĐ	ON	
Bromoform	0.005	ND	ND	ND	ND	ND	·
Bromomethane	0.01	ND	ND	ND	ND	ND	
tert-Butanol (TBA)	0.05	ND	ND	ND	ND	ND	anna sangar un non
2-Butanone (MEK)	0,01	ND	ND	ND	ND	ND	
n-Butylbenzene	0.002	ND	ND	ND	ND	ND	sex sem commence min
sec-Butylbenzene	0,002	NO	ND	ND	ND	ND	
tert-Butylbenzene	0.002	ND	ND	ND	ND	ND	-
Carbon disulfide	0,01	ND 1	ND	ND	ND	ON .	
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND	
Chlorobenzene	0.001	ND	ND	ND	ND	ND	
Chloroethane	0.005	ND	ND	ND	ND	ND	
Chleroform	0.002	ND	ND	ND	ФИ	ND	
Chloromethane	0.001	ND	ND	ND	ND	ND	with an second
2-Chlorotoluene	0.002	. ND	ND	ND	ND	ND	en en en gran en
4-Chlorotoluene	0.002	ND	ND	ND	ND	ND	• "
Dibromochloromethane	0.002	ND	ND	ND	ND	ND	Maria da
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND	
1,2-Dibramo-3-chloropropa	ine 0,01	ND	ND	NO	ND	ND	
Dibromomethane	0.001	ND	ND	ND	ND	ND	
1,2-Dichlarobenzene	0.001	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	
1,4-Dichlarobenzene	0.002	ND	ND	ND	ND	ND	
Dichlorodifluoromethane	0.005	ND	ND	ND	ND	ND	•
1,1-Dichloroethane	0.001	ND	0.001	ND	0.001	0.001	
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND	
1,1-Dichloroethene	0.005	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene	0.002	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	0.002	and the second second	ND	ND	ND	ND	
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND	
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND	
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND	
1,1-Dichloropropene	0.001	ND	ND	≦ ND	ND	NO	f

Client:

PSI

Project: Caltrans - J&A Trucking

Job No.:

16373

Matrix: Soil

Analyst: MBH

Date Sampled:

Date Received:

Date Analyzed:

Batch Number:

05/01/00

M48260S182

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Compounds	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND	,
trans-1,3-Dichloropropene	0.001	NO	ND	ND	ND	ND	
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND	
Ethylbenzene	0.001	ND	ND	ND	ND	ND	
Ethyl tert-Butyl Ether (EtBE	0.005	ND	ND .	ND	ND	ND	
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND	
2-Hexanone	0.01	, ND	ŅD	ND	ND	ND	
Isopropylbenzene	0.001	ND	ND	ND	ND	ND	
p-Isopropyltoluene	0,002	ND	ND	ND	ND	ND	
Methylene chloride	0.02	. ND	ND	ND.	ND	ND	
4-Methyl-2-pentanone	0.01	ND	ND	ND	ND	ND	
Methyl tert-Butyl Ether (Mtf	3E) 0.005	ND	ND	ND	ND	ND	
Napthalene	0.002	ND	ND	ND	0.003	0.020	
n-Propylbenzene	0.001	NO	ND	DA	ND	ND.	
Styrene	0.001	ND	0.001	0.001	ND	0.001	
1,1,1,2-Tetrachioroethane	0.001	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.002	ND	ND	· ND	ND	ND	
Tetrachiorgethene	0.001	ND	ND	ND	ND	ND	
Toluene	0.001	ND	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.002	ND	ND	ND	ND	ND:	
1,2,4-Trichlorobenzene	0.002	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.001	ND	0.007	0.005	0.006	0.006	Salaria Salaria Januaria Salaria
1,1,2-Trichloroethane	0.003	ND	ND	ND	ND	ND	
Trichloroethene	0.001	ND	NO	ND.	ND	ND .	
1,2,3-Trichloropropane	0.003	ND	ND	ND	ND	ND	•
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND	
Trichlorotrifluoroethane	0.005	ND	0.008	0.007	0.006	0.007	•
1,2,4-Trimethylbenzene	0.001	ND	DN	ND	ND	ND	
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND	
Vinyl chloride	0.002	ND	ND	ND	ND	ND	
Xylenes (total)	0.003	ND	ND	ND	ND	ND	

Surrogates (% recovery) Limits: 80 - 130

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
Dibromoffuoromethane		102	105	98	101	104	
Toluene-d8		102	94	110	101	100	
Bromoffuorobenzene		98	97	106	102	97	<u> </u>



QC Sample Report - EPA Method 8260

Matrix: Soil

Batch #: MS48260S182

Batch Accuracy Results

Sample ID: Laboratory Conf	trol Sampi	e	* * * * * * * * * * * * * * * * * * *	
Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
1,1-Dichloroethene	0:020	107	59 - 172	Pass
Benzene	0.020	93	66 - 142	Pass
Trichloroethene	0.020	90	71 - 137	Pass
Toluene	0.020	88	59 - 139	Pass
Chlorobenzene	0.020	94	60 - 133	Pass

Analytical Notes:
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Batch Precision Results

MS/MSD Sample ID: 16350)-1				
Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
1,1-Dichloroethene	0.0225	0.0235	4%	22%	Pass
Benzene	0.0196	0.0198	1%	21%	Pass
Trichloroethene	0.0202	0.0190	6%	24%	Pass
Toluene	0.0195	0.0176	10%	21%	Pass
Chlorobenzene	0.0201	0.0201	0%	21%	Pass

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MS: Matrix Spike Sample

MSD: Matrix Spike Duplicate



Client: PSI
Project: Caltrans - J&A Truc

Project: Caltrans - J&A Trucking Job No.: 16373

Matrix: Soil Analyst: TPW

 Date Sampled:
 04/26/00

 Date Received:
 04/28/00

 Date Extracted:
 05/03/00

 Dates Analyzed:
 05/05/00

Batch Number: 8270S0621

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Compound	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Acenaphthene	0.033	ND	ND	ND	ND ·	ND
Acenaphthylene	0.033	ND	ND	ND	0.055	ND
Anthracene	0.033	, ND	ND	ND	ND	ND
Benzo[a]anthracene	0:066	ND	. ND	ND	ND	ND
Benzo[a]pyrene	0.066	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.033	ND	ND	ND	. ND	ND "
Benzo[g,h,i]perylene	0.099	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.099	ND :	ND	ND	ND	ND
Benzyl alcohol	0.13	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)metha	 A second control of a children 	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	0.066	ND	ND	ND	ND	ND
bis(2-Chloroisapropyl)eth	医克里氏征 医克里氏 化氯甲酚 化二甲基苯酚 医电影 化二氯基基基酚	ND	ND	ND	ND	NO
bis(2-Ethylhexyl)phthalate		ND	ND	ND	ND	ND
4-Bromophenylphenylethe	No. 10 Contract to the contract of the contrac	ND	ND	ND	ND	ND
Butylbenzylphthalate	0.033	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	and the second of the second o	ND	ND	ND	ND	ON
4-Chloroaniline	0,16	ND	ND	ND	ND	ND
2-Chloronaphthalene	0.033	ND	ND	ND	ND	ND
2-Chlorophenol	0.13	ND	ND	ND	ND	ND
4-Chlorophenylphenylethe	er 0.033	ND	ND	ND	ND	ND
Chrysene	0.033	ND	ND	ND	ND	ND
Di-n-buty/phthalate	0.33	ND	ND	ND	ND	ND
Di-n-octylphthalate	0.033	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	0.099	ND	ND	ND	ND	ND
Dibenzofuran	0.033	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.033	ND .	ND	ND	ND	ND
1,3-Dichlorobenzene	0.033	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.033	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	0.13	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.16	NO	ND	ND	ND	ND
Diethylphthalate	0.33	ND	ND	ND	ND	ND
2,4-Dimethylphenol	0:099	ND	ND	ND	ND	ND ND
Dimethylphthalate	0.033	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylpheno		ND	ND	ND	ND	ND
2,4-Dinitrophenol	1.6	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.033	ND	ND	ND	ND	ND:



EPA 8270 Semivolatile Organics

Client: PSI Date Sampled: 04/26/00 Project. Caltrans - J&A Trucking Date Received: 04/28/00 Job No.: 16373 Date Extracted: 05/03/00 Matrix: Soil Dates Analyzed: 05/05/00 Analyst: TPW Batch Number: 8270S0621

	Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5
Compound	DL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
2,6-Dinitrotoluene	0.099	ND	ND	ND	ND	ND
Fluoranthene	0.033	ND	ND	ND	0.072	ND
Fluorene	0.033	ND	ND	ND	ND	ND
Hexachlorobenzene	0,033	ND	ND	ND	NO.	ND
Hexachlorobutadiene	0.033	ND	ND	ND	ND	ND
Hexachlorocyclopentadier	ne 1,6	ND	ND	ND	ND	ND
Hexachioroethane	0.033	ND	ND	ND	ND	ND
Indeno[1,2,3-c,d]pyrene	0.13	ND	ND	ND	ND	ND
Isophorone	0.033	ND	ND	ND	ND	ND
2-Methylnaphthalene	0.033	ND.	ND	ND	ND	ND
2-Methylphenol	0.16	ND	ND	ND	, ND	ND
4-Methylphenol	0.16	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamin	e 0.033	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	0.033	ND	ND	ND	ND	ND
Naphthalene	0.033	ND	ND	ND	0.28	ND
2-Nitroaniline	0.099	ND	ND	NO	ND	ND
3-Nitroaniline	0.099	ND	ND	ND	ND	ND
4-Nitroaniline	0.33	ND	ND	ND	ND	NO
Nitrobenzene	0.099	ND	ND	ND	ND	ND
2-Nitrophenol	0.13	ND	ND :	. ND	ND	ND
4-Nitrophenol	0.33	ND	ND	ND	ND	ND
Pentachlorophenol	1.6	ND	ND	ND	ND.	ND
Phenanthrene	0.066	ND	ND	ND	0.10	ND
Phenol	0.13	ND:	ND	ND	ND:	ND
Pyrene	0.033	ND	ND	ND	0.14	ND
1,2,4-Trichlorobenzene	0.033	ND	ND	NĐ.	ND	ND
2,4,5-Trichlorophenol	0.2	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	0.33	ND	ND	ND	ND	NO

Surrogates (Limits) in Percent Recovery

Sample ID:	Blank	JA1-7.0	JA2-7.0	JA3-7.0	JA4-6.5	
2-Fluorophenol (25 - 121%)	75	84	81	87	79	
Phenol-D5 (24 - 113%)	73	82	80	87	77	
Nitrobenzene-D5 (23 - 120%)	60	67	65	71	64	7
2-Fluorobiphenyl (30 - 115%)	77	83	84	87	80	
2,4,6-Tribromophenol (19 - 122%)	90	92	94	95	87	
p-Terphenyl-D14 (18 - 137%)	86	82	84	108	80	



QC Sample Report - EPA 8270

Batch #: 8270S0621

Matrix: Soil

Sample	ID:	Laboratory	/ Control	Sample
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Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Phenol	2.66	80	5 - 112	Pass
2-Chlorophenol	2.66	94	23 - 134	Pass
1,4-Dichlorobenzene	1.33	91	20 - 124	Pass
N-Nitrosodi-n-propylamine	1.33	71	0 - 230	Pass
1,2,4-Trichlorobenzene	1.33	96	44 - 142	Pass
4-Chioro-3-Methylphenol	2.66	90	22 - 147	Pass
Acenaphthene	1.33	89	47 - 145	Pass
4-Nitrophenol	2.66	104	0 - 132	Pass
2,4-Dinitrotoluene	1.33	92	39 - 139	Pass
Pentachlorophenol	2.66	126	14 - 176	Pass
Pyrene	1.33	90	52 - 115	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Phenol	2.12	1.95	9%	35%	Pass
2-Chlorophenol	2.50	2.27	10%	50%	Pass
1,4-Dichlorobenzene	1.22	1.12	9%	27%	Pass
N-Nitrosodi-n-propylamine	0.95	0.88	7%	38%	Pass
1,2,4-Trichlorobenzene	1.28	1.16	10%	23%	Pass
4-Chloro-3-Methylphenol	2.39	2.23	7%	33%	Pass
Acenaphthene	1.18	1.09	8%	23%	Pass
4-Nitrophenol	2.77	2.60	6%	50%	Pass
2,4-Dinitrotoluene	1.23	. 1.15	6%	47%	Pass
Pentachlorophenol	3.36	3.11	8%	47%	Pass
Pyrene	1.20	1.11	8%	36%	Pass

Analytical Notes:	
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QC Sample Report - EPA 8015M Gasoline

Matrix: Soil

Batch #: 8015GS2591

Batch Accuracy Results

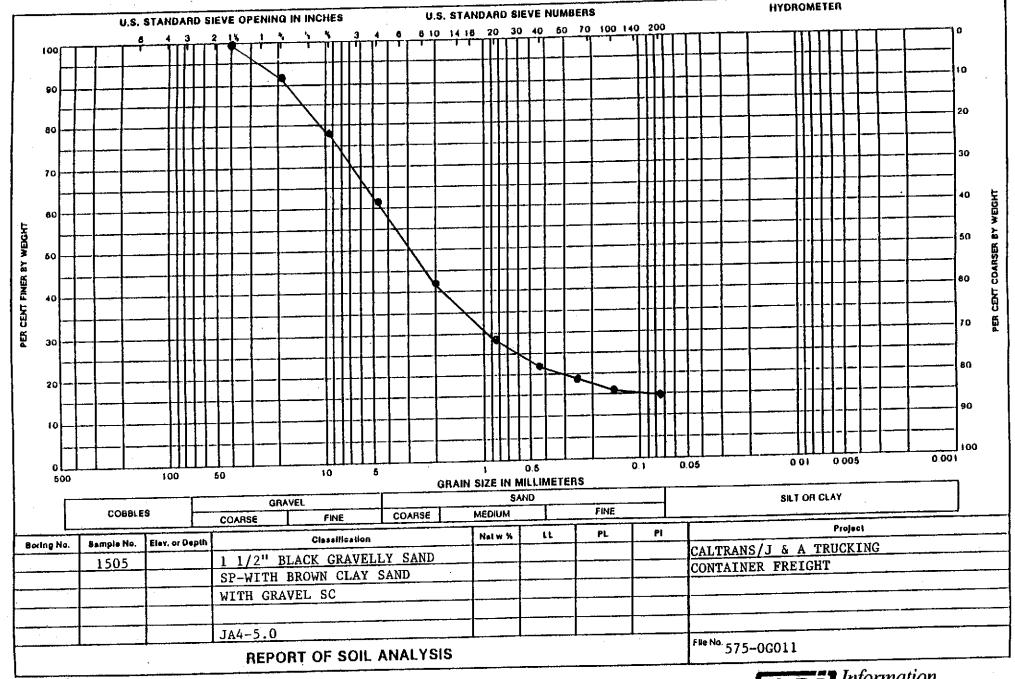
Sample ID: Laboratory Cont	roi Sampi	e			
Analyte	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits	% Recovery	Pass/Fail
Gasoline	10.0	100	70 -	130	Pass

Analytical	Notes:	•		
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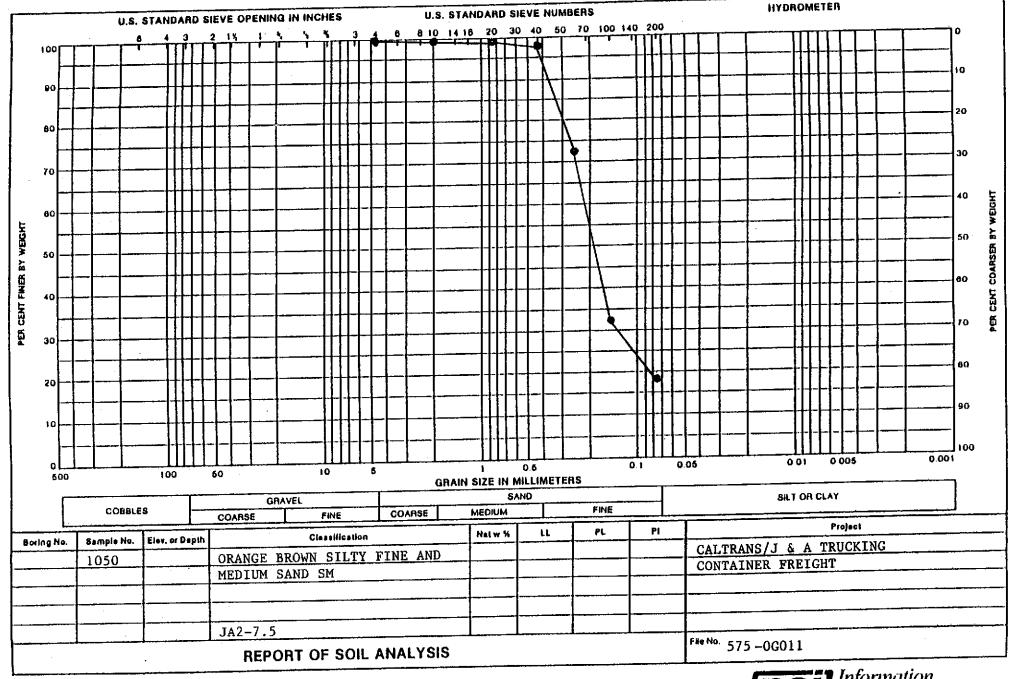
Batch Precision Results

MS/MSD Sample ID: 1636	9-1 T				
Analyte	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Gasoline	7.24	7.37	2%	30%	Pass

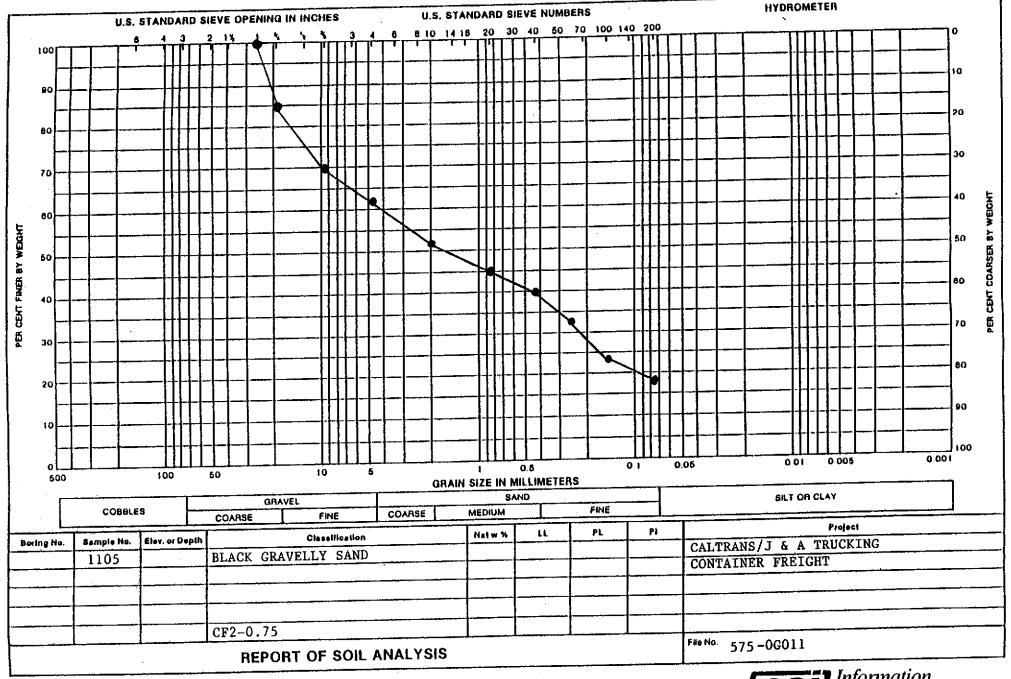
MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate













APPENDIX E PROJECT PERMITS

ATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION		4	
NCROACHMENT PERMIT	Permit N	0.	
20	0400-1	NSV-0671	
	Dist/Co/I		
T		ı-880 - 32.1	
mpliance with (Check one):			•
		4	
	Date		***
Your application of March 13, 2000	March	20, 2000	
	Fee Paid		Deposit
Utility Notice No of	\$		\$
Agreement No.	Performs	ince Bond Amount (1)	Payment Bond Amount (2)
Agreement No. of			<u> </u>
R/W Contract No. of	Bond Co	mpany	
,	Bond Nu	ımber (1)	Bond Number (2)
	John Ha	minoct (1)	Boild Number (2)
O: PSI	_		
1320 W. Winton Avenue	,		
Hayward, CA 94545			
		•	
Attn: Frank Poss			
Phone: (510) 785-1111	, PERMIT	LTEE	
	-	•	
ut subject to the following, PERMISSION IS HEREBY GRAN	TED to:		
I four holes and collect ground water complex for D			t ti ana a sama a sam
in I four holes and collect ground water samples for En	avironmental in	vestigation per C	altrans Project EA No.
92203 at Kirkham Street on State Highway 04-Ala-88	0, Post Mile 32.	l in Oakland.	
wo days before work is started under this permit, notice	ce shall be given	to, and approva	l of construction details,
perations, public safety, and traffic control shall be ob	tained from Stat	e Representative	N. Freitag, 600
elling Blvd., San Leandro, 94579, 510-614-5951, v	veekdays, betwe	en 8:00 AM and	4·30 PM
	, ,		
r mediately following completion of the work perm	itted berein th	a narmittaa sha	Il fill ant and mail the
ice of completion attached to this permit.	itted herein, in	c permittee sha	u im out and man the
1 200 or combined in refreshed to this bettill.			
Unarconnel chall man hard hate and annual to 1			
Prersonnel shall wear hard hats and orange vests, shi	rts, or jackets as	appropriate dur	ing construction.
ne following attachments are also included as part of this permit (Check	applicable):		e permittee will be billed actual
es 🔲 No General Provisions		costs for:	
es No Utility Maintenance Provisions		☐ Yes 🖾 No	Review
Yes No Special Previsions		☐ Yes 🖾 No	·
Yes No A Cal-OSHA permit required prior to beginning	g work:	⊠ Yes	Field Work
		(If any Ca	ltrans effort expended)
	<u></u>		*
Yes No The information in the environmental documen	tation has been review	wed and considered pr	ior to approval of this permit.
permit is void unless the work is completed before December 31	. 2000		
us permit is to be strictly construed and no other work other than specif		ereby authorized	
roject work shall be commenced until all other necessary permits and	d environmental clear	ances have been obtain	ned.
	APPROVED:		
1.1			
		HATA, District Dir	ector
	BY:		
1 F	_ <	105	5200 1
		101 00	
ن ا	G. J. BATTAGI	INI, District Perm	iit Engineer

PSI 0400-NSV-0671 March 20, 2000

The site of the work shall be enclosed by suitable barricades, signs and lights, as approved by State's representative, to warn and protect traffic effectively.

No excavation shall be left open overnight without written permission from the Caltrans representative or unless otherwise specified herein.

Certain details of work authorized hereby are shown on permittee's plan submitted with request for permit in conjunction with Caltrans Contract No.43A0012.

The work authorized under this permit shall also be coordinated by Jill Pollock, at (510) 286-5638 Environmental Engineering.

Any collected survey data requested by Caltrans shall be furnished to Caltrans without charge.

Any required traffic control shall be performed in accordance with provision sp-14 of Caltrans Contract No.43A0012.

The resulting holes shall be backfilled as per Caltrans requirements and as directed by the State representative.

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION ENCROACHMENT PERMIT GENERAL PROVISIONS TR-0045 (REV. 8/98)

AUTHORITY: The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.

REVOCATION: Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.

DENIAL FOR NONPAYMENT OF FEES: Failure to pay permit fees when due can result in rejection of future applications and denial of permits.

ASSIGNMENT: No party other than the permittee or permittee's authorized agent is allowed to work under this permit.

ACCEPTANCE OF PROVISIONS: Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.

BEGINNING OF WORK: When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.

STANDARDS OF CONSTRUCTION: All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications. Department Standard Plans High and Low Risk Facility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."

PLAN CHANGES: Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.

INSPECTION AND APPROVAL: All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

PERMIT AT WORKSITE: Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.

CONFLICTING ENCROACHMENTS: Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).

PERMITS FROM OTHER AGENCIES: This permit is invalidated if the permittee has not obtained all permits necessary and required by law. from the Public Utilities Commission of the State of California (PUC). California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.

PEDESTRIAN AND BICYCLIST SAFETY: A safe minimum passageway of 1.21 meter (4') shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street.

PUBLIC TRAFFIC CONTROL: As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. Day and night time lane closures shall comply with the Manuals of Traffic Controls, Standard Plans, and Standard

Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.

- 15. MINIMUM INTERFERENCE WITH TRAFFIC: Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the Manual of Traffic Controls and Instructions to Flaggers Pamphlet.
- 16. STORAGE OF EQUIPMENT AND MATERIALS: Equipment and material storage in State right of way shall comply with Standard Specifications, Standard Plans, and Special Provisions. Whenever the permittee places an obstacle within 3.63 m (12') feet of the traveled way, the permittee shall place temporary railing (Type K).
- 17. CARE OF DRAINAGE: Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications. Standard Plans and/or as directed by the Department's representative.
- RESTORATION AND REPAIRS IN RIGHT OF WAY: Permittee
 is responsible for restoration and repair of State highway right of
 way resulting from permitted work (State Streets and Highways
 Code, Sections 670 et. seq.).
- 19. RIGHT OF WAY CLEAN UP: Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.
- 20. COST OF WORK: Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.
- ACTUAL COST BILLING: When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encreachment permits.
- AS-BUILT PLANS: When required, permittee shall submit one (1) set of as-built plans in compliance with Department's requirements. Plans shall be submitted within thirty (30) days after completion and approval of work.

As-Built plans or accompanying correspondence shall not include disclaimer statements of any kind. Such statements shall constitute non-compliance with these provisions. Failure to provide complete and signed As-Built plans shall be cause for bond or deposit retention by the Department.

- 23. PERMITS FOR RECORD PURPOSES ONLY: When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.
- BONDING: The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilines, unless permittee failed to comply with the provision and conditions under a prior permit. The California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.
- 25. FUTURE MOVING OF INSTALLATIONS: Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance

TATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION SERVICE QUESTIONNAIRE	ON		•	
F 1166 (REV. 3/98)			PERMIT NUMBER	51101.71
ar Customer,			10 100 14	300011
Our goal is to provide the best service complete this questionnaire. Your commany areas which may need improvement. PLEASE TELL US I	ents will enabl	e us to see ho	Please take a w we are doing	few minutes overall and
SIDE THE OFFICE	EXCELLENT	VERY GOOD	GOOD	POOR
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LEPHONE ANSWERING			land to the stage of	<u> </u>
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NCROACHMENT PE	RIMENT OF TRANSPORTATION RMIT	Permit I	Na.		
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3 T. 12 2.00 4.00		L.	a-880-32.0		
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1.					
1 Vous and looking of the		Date			
Your application of M	arch 13, 2000		h 20, 2000	·	
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R/W Contract No.	of			<u> </u>	
	•	Bond N	umber (1)	Bond Number (2)	
o: PSI		<u> </u>			
	Vinton Avenue	ŀ			
Hayward,					
	nk Poss				
Phone: (51	0) 785-1111	, PERMI	TTEE		
nd subject to the following D	ERMISSION IS HEREBY O	The American			
a subject to die tonowing, t	EXMISSION IS HEREBY	GRANTED to:			
wo days before work is perations, public safety,	State Highway 04-Ala-88 started under this permit, and traffic control shall b ndro, 94579, 510-614-59	notice shall be given be obtained from Star	n to, and approva te Representative	N Freitag 600	
r mediately following c ice of completion att	completion of the work packed to this permit.	permitted herein, th	ie permittee sha	II fill out and mail the	
J' personnel shall wear h	nard hats and orange vests	s shirts or include a	e annronriata du-	ing construction	
i .	THE STATE WILL OF WILLY	s, simils, or jackets at	s appropriate dur	ing construction.	
	o included as part of this permit (Charles - I'm (11)	Lr 1300 cm c		
	Provisions	Спеск аррисавіе):	In addition to fee, the permittee will be billed actual costs for:		
<u> </u>	Agintenance Provisions		m., m.,	n	
]Yes 🛛 No Special:	Previsions		☐ Yes ⊠ No	Review Inspection	
] Yes 🛛 No A Cal-C	ISHA permit required prior to beg	ginning work:	⊠ Yes	- Field Work	
#			(If any Ca	itrans effort expended)	
1 v - 57 v · ·			!		
Yes No The info	ormation in the environmental doc	cumentation has been revie	wed and considered pr	for to approval of this permit.	
h, permit is void unless the wor	·	ber 31, 2000			
his permit is to be strictly construct work shall be commen	ued and no other work other than ced until all other necessary perm	specifically mentioned is h	nereby authorized.		
•	the difference of the design o	APPROVED:	Talices have oeen obtai	med.	
8 L		ALL ROYED:			
- 4					
4 4			HATA, District Dir	ector	
	•	BY:			
•		1 /5	My Lac	1297	
<u>4. 5</u>		G. J. BATTAGI	LINI, District Perm	nit Engineer	

- PSI - 400-NSV-0669 - March 20, 2000

The site of the work shall be enclosed by suitable barricades, signs and lights, as approved by State's representative, to warn and protect traffic effectively.

No excavation shall be left open overnight without written permission from the Caltrans representative or unless otherwise specified herein.

Certain details of work authorized hereby are shown on permittee's plan submitted with request for permit in conjunction with Caltrans Contract No.43A0012.

The work authorized under this permit shall also be coordinated by Jill Pollock, at (510) 286-5638 Environmental Engineering.

Any collected survey data requested by Caltrans shall be furnished to Caltrans without charge.

Any required traffic control shall be performed in accordance with provision sp-14 of Caltrans Contract No.43A0012.

The resulting holes shall be backfilled as per Caltrans requirements and as directed by the State representative.

STATE OF CALIFORNIA. DEPARTMENT OF TRANSPORTATION 'RCROACHMENT PERMIT GENERAL PROVISIONS 'R-0045' (REV. 8/98)

AUTHORITY: The Department's authority to issue encroachment permits is provided under. Div. 1, Chpt. 3, Art. 1. Sect. 660 to 734 of the Streets and Highways Code.

REVOCATION: Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.

DENIAL FOR NONPAYMENT OF FEES: Failure to pay permit fees when due can result in rejection of future applications and denial of permits.

ASSIGNMENT: No party other than the permittee or permittee's authorized agent is allowed to work under this permit.

ACCEPTANCE OF PROVISIONS: Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.

BEGINNING OF WORK: When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.

STANDARDS OF CONSTRUCTION: All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications. Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."

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PERMIT AT WORKSITE: Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.

CONFLICTING ENCROACHMENTS: Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).

PERMITS FROM OTHER AGENCIES: This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC). California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.

12.

PEDESTRIAN AND BICYCLIST SAFETY: A safe minimum passageway of 1.21 meter (4') shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street.

PUBLIC TRAFFIC CONTROL: As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. Day and hight time lane closures shall comply with the Manuals of Traffic Controls, Standard Plans, and Standard

Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.

- 15. MINIMUM INTERFERENCE WITH TRAFFIC: Perminee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the Manual of Traffic Controls and Instructions to Flaggers Pamphlet.
- 16. STORAGE OF EQUIPMENT AND MATERIALS: Equipment and material storage in State right of way shall comply with Standard Specifications, Standard Plans, and Special Provisions. Whenever the permittee places an obstacle within 3.63 m (12') feet of the traveled way, the permittee shall place temporary railing (Type K).
- 17. CARE OF DRAINAGE: Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.
- RESTORATION AND REPAIRS IN RIGHT OF WAY: Permittee
 is responsible for restoration and repair of State highway right of
 way resulting from permitted work (State Streets and Highways
 Code, Sections 670 et. seq.).
- RIGHT OF WAY CLEAN UP: Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.
- 20. COST OF WORK: Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.
- ACTUAL COST BILLING: When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.
- 22 AS-BUILT PLANS: When required, permittee shall submit one (1) set of as-built plans in compliance with Department's requirements. Plans shall be submitted within thirty (30) days after completion and approval of work.

As-Built plans or accompanying correspondence shall not include disclaimer statements of any kind. Such statements shall constitute non-compliance with these provisions. Failure to provide complete and signed As-Built plans shall be cause for bond or deposit retention by the Department.

- 23. PERMITS FOR RECORD PURPOSES ONLY: When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.
- BONDING: The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surery company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.
- FUTURE MOVING OF INSTALLATIONS: Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance

TATE OF CALIFORNIA . DEPARTMENT OF TRANSPORTATION
STOMER SERVICE QUESTIONNAIRE

PERMIT NUMBER	
0400-NSL	0669

ar Customer,

Our goal is to provide the best service possible to our customers. Please take a few minutes complete this questionnaire. Your comments will enable us to see how we are doing overall and any areas which may need improvement.

PLEASE TELL US		T	✓	
	EXCELLENT	VERY GOOD	GOOD:	POOR
raff courteous and helpful	<u> </u>			
aff quick and efficient				
xplanations and instructions clear LEPHONE ANSWERING			-	
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ceiving information or answers				
pector courteous and helpful				
re-construction meeting set and held in a nely manner				
pector at job site frequently				
spector able to answer questions and	÷			
VERALL PERFORMANCE		<u> </u>	·	
at would you say is our overall erformance?				
here a staff person you would like to immend?	STAFF'S NAME	·		
T'MENTS:	<u> </u>			
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E (Optional)		BUSINESS PHON	NUMBER	DATE



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651 PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5252 (510) 670-5248 ALVIN KAN 782-1939

DRILLING PERMI	TAPPLICATION
CALIFORNIA POR APPLICANT TO COMPLETE DESCRIPTION OF PROJECT SOO KIRKHAM CETCEL CALIFORNIA	PERMIT NUMBER USO - 109 WELL NUMBER APN
ilisamia Coordinates Source R. Accursoy ± ft. Source 12.0 Accursoy ± ft. N. 1004-049 - 001	PERMIT CONDITIONS
ME CALTRANS - DISTRICT 4	Circled Permit Requirements Apply A. GENERAL
dress GRAND Are Phone	1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date. 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Well Completion Resources.
PE OF PROJECT Well Construction Geotechnical Investigation Cathodic Protection General General Water Supply Gentamination General Monitoring Well Destruction G	B. WATER SUPPLY WELLS 1. Minimum surface seal thickness is two inches of cement grout placed by tremie. 2. Minimum seal depth is 50 feet for municipal and
OPOSED WATER SUPPLY WELL USE New Domestic O Replacement Domestic O Municipal O Irrigation O	industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
Industrial O Other O ILLING METHOD: Aid Rotary O Auger of Cable O Other O LLER'S LICENSE C-57-720904	1 Minimum surface seal thickness is two inches of cernent grout placed by tremie. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. D. GEOTECHNICAL Backfill bare hole with compacted cuttings or heavy bentonite and upper two feet with compacted material.
Drill Hole Diameter B in. Maximum Pasing Diameter 2 in. Depth 16.5 ft. Urface Seal Depth 2 ft. Number 4	In areas of known or suspected contamination, tremted cament grout shall be used in place of compacted cuttings. E. CATHODIC Fill hole above anode zone with concrete placed by tremte. F. WELL DESTRUCTION See attached. G. SPECIAL CONDITIONS
Jumber of Borings Maximum ole Diameter in. Depth ft. TIMATED STARTING DATE 3-27 - 2000 TIMATED COMPLETION DATE 3-28 - 2000	APPROVED SOME SCHOOL DATE 03-14-00

CHATURE M Contontible DATE 3-14-200

icroby agree to comply with all requirements of this permit and

ameda County Ordinance No. 73-68.

A contentineter DATE 3-14-2000

PPLICANT'S



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 310, HAYWARD, CA 94545-1651

PHONE (510) 670-5375 ANDREAS GODFREY

FAX (510) 670-5148 ALVIN KAN

782-1939

DRILLING PERM	IT APPLICATION
FOR APPLICANT TO COMPLETE	
The second secon	FOR OFFICE USE
OAKLAND, CA.	PERMIT NUMBER WOO 10
APN 000 - 0390-063 (A. Accuracy ± 10. APN 000 - 0390-063	PERMIT CONDITIONS
CLIENT 003	Circled Permit Requirements Apply
lame CALTRANS - DISTRICT 4	(A.) GENERAL
City 04 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	I. A permit application should be submitted as an
4D 746/3 - 13/3	
PPLICANT	Anabased statting date
PPLICANT S. I - ABEMANA LONSTANTINESCU	2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water
	Resources 116011 Colored to Water
ity #47/4/4 A: 1/1/2 raone (5/0) /85 - ////	Resources Well Completion Report.
10 <u>74526</u>	
TYPE OF PROJECT Well Construction (Contraduction)	2. Permit is void if project not begun within 90 days of approval date.
Cathodia Protection	B. WATER SUPPLY WELLS
Water Supply	I. Minimum surface scal thickness is two inches of
Monitoring Cuntamination	content grout placed by tremia
wen bezadenon Q	2. Minimum scal depth is 50 feet for municipal and industrial wells or 30 feet for during and
ROPOSED WATER SUPPLY WELL USE	industrial wells or 20 feet for domestic and irrigation wells unless a losser depth is specially approved.
Replacement Domestic	
Indicates	CDODING FIEZUMETERS
0	Minimum surface seal thickness is two laches of
Mud Rotary O Ale Rotter D	dement grout placed by tremie. Minimum seal depth for monitoring wells is the
Calle Auger Auger	
Uther a	- GEOTECHICAL
ILLER'S LICENSE NO. C-57-720904	Backfill bore hole with compacted cuttings or heavy
WELL PROJECTS , Drill Hote Diameter 8 in Mariana	In areas of known or suspected contamination, tremised coment grout shall be used in place of compacted cuttings.
Taking Diameter A Taking Maximum	
jurface Sesi Depth 2 ft. Number 3	Fill hole above anode zone with concrete placed by fremie. F. WELL DESTRUCTION
	See attached
GEOTECHNICAL PROJECTS Jumber of Borings July Maximum Maximum	G. SPECIAL CONDITIONS
dale Dlameter in Daniel	•
Depthft,	
STIMATED STARTING DATE 3-27-0000	APPROVED Hand & Cold p. 18-14-00
	DATE DATE
hereby agree to comply with all requirements of this permit and pe	

APPENDIX F

ON-SITE CALIBRATION AND AIR MONITORING DATA SHEET

ON-SITE CALIBRATION AND AIR MONITORING DATA

<u>Caltrans South Oakland Maitenance Station</u> <u>Oakland, CALIFORNIA</u>

PSI PROJECT NUMBER:575-9G011

Air monitoring data in the breathing zone shall be documented at the subject site. Please identify calibration dates prior to and after sampling, the type of instrumentation, calibration gas, span setting (OVA), location, and corresponding concentrations. Please sign your name as the person(s) responsible for calibration and air sampling.

SALIBRATION

PE FE CST	D A T E	TIME	INSTRU MENT SERIAL NO.	CALIBRA TION GAS (TYPE/ CONC.)	SPAN SETTING	READIN G (PPM)	SIGNATURE
	4-25-00	1000	58013-27363-2	28 ISO BUTTER	E,	0.0	icm IREA
	4-25-00	и 30		ļ		0.0	cm BZ-CFZ
	4-25.00	1330	1	1		0.0	CF I CUTTING TOS'
<u>.</u>		· · · · · · · · · · · · · · · · · · ·					

APPENDIX G CYPRESS PRELIMINARY REMEDIAL GOALS

Cypress Preliminary Remedial Goals

CHY CHUK

	PRG
henzo/alanthanana	(mg/kg soi
	0.3 ~ 30
benzo(k)fluoranthene *	0.3 - 30
	0.3 - 30
	0.03 - 3
	3 - 300
indeno(1.2.3-cd) nyrene *	0.03 - 3
benzene	0.3 - 30
	3.5 - 31
trichloroethylene	IO - 92
vinyl chloride	27 - 250
	0.1 - 0.94
	12 - 110
1,4-chlorobenzene	0.42 - 3.8 13 - 120
	. 13 - 120
fluoranthene	2300
pyrene	1700
	74
	280
-	99
	380
	470
	160
	360
naphthalene	82
A mat .	
	67
	19
	12,000
	1.8 - 0.2
	24 - 2.7
	170,000
Conner (VI)	0.68 - 0.076
Eluorina	5,000
	10,000
	840
	45
	830
	400 - 44
	<u>\$30</u>
	830
	27
Zinc	1,200 50,000
TRPH $(c_{23}-c_n)$?	000,1
Diesel	100
	tetrachloroethylene trichloroethylene vinyl chloride chloroform 1,1-dichloroethylene 1,4-chlorobenzene fluoranthene pyrene ethylbenzene toluene xylene 1,1-dichloroethane 1,1,1-trichloroethane chlorobenzene 1,2-dichlorobenzene naphthalene Antimony Arsenic ** Barium Beryllium Cadmium Chremium (III) Chromium (VI) Copper Fluorine Lead Mercury Molybdenum Nickel Selemum Silver Thallium ** Vanadium

** The Arsenic PRG is 4.6 ppm while the background level is 19 ppm.

The Thalium PRG is 14 ppm while the background level is 27 ppm.

(When there is no known human contamination at the site, the background levels are used. contamination at the site the PRG levels are used.)

06/24/99

CLU VE JURY 1941-E2