

January 5, 2007

881.060.01.004

Ms. Donna Drogos Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502 Mr. Leroy Griffin Oakland Fire Prevention Bureau Hazardous Materials Unit 250 Frank H. Ogawa Plaza, Ste 3341 Oakland, California 94612

TRANSMITTAL REMEDIAL ACTION WORKPLAN VOLUNTARY SOIL REMEDIATION SPARKLE CLEANERS EASTMONT TOWN CENTER 7000 BANCROFT AVENUE OAKLAND, CALIFORNIA

Dear Ms. Drogos & Mr. Griffin:

Enclosed please find the Remedial Action Workplan (RAW) for the Sparkle Cleaners facility located in Oakland, California. The workplan describes the results of site investigations that have identified dry-cleaner solvent (i.e., tetrachloroethene) and several degradation products (i.e., trichloroethylene and cis-1.2-dichloroethene) in soil and groundwater beneath and in the vicinity of the dry cleaner. In addition, the RAW presents proposed remedial actions to address the identified contamination.

From recent telephone conversations with Mr. Barney Chan of the Alameda County Health Care Services Agency, we understand that the county will likely be the lead agency providing oversight of remediation activities. We further understand that the county will consult with San Francisco Bay Regional Water Quality Control Board staff and obtain its concurrence for approval of the RAW, and its implementation. I will call you next week to discuss the report and remediation project.

We trust this is the information that you require at this time. Please contact either of the undersigned with any questions.

Very truly yours,

PES ENVIRONMENTAL, INC.

William W. Mast, P.G. Associate Engineer

Robert S. Creps, P.E. Principal Engineer

cc: John Wolfenden – San Francisco Bay Regional Water Quality Control Board Todd Gooding - ScanlanKemperBard Companies



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REMEDIAL ACTION WORKPLAN VOLUNTARY SOIL REMEDIATION SPARKLE CLEANERS EASTMONT TOWN CENTER 7000 BANCROFT AVENUE OAKLAND, CALIFORNIA

Dear Ms. Drogos & Mr. Griffin:

PES Environmental, Inc. (PES) is pleased to present this Remedial Action Workplan (RAW) to conduct a voluntary cleanup of soil beneath the Sparkle Cleaners facility (Site) at the Eastmont Town Center shopping mall in Oakland, California (Plates 1 and 2). This RAW is being submitted to the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) on behalf of ScanlanKemperBard Companies (SKB), a prospective purchaser of Eastmont Town Center. The shopping center is currently owned by Eastmont Town Center Company, LLC.

Sparkle Cleaners is an active dry-cleaning facility that has historically and currently uses tetrachloroethene (PCE) as a dry-cleaning solvent. Historical and recent subsurface investigations performed by PES and others have identified PCE and its degradation products¹ in soil and groundwater beneath the Site. The results of these investigations are summarized in the following sections. The remedial actions specified in this RAW are being voluntarily proposed by SKB to mitigate potential adverse health effects to current and future tenant space users and potential threats to human health and the environment that may be caused by the migration of PCE and related volatile organic compounds (VOCs) to groundwater.

¹ Primarily trichloroethylene (TCE) and cis-1,2-Dichloroethene (c-1,2-DCE).

INTRODUCTION

Sparkle Cleaners is located in the Eastmont Town Center shopping mall at 7000 Bancroft Avenue, Suite 11, Oakland, California (Plates 1 and 2). Eastmont Town Center is bordered by Foothill Boulevard to the north, Church Street to the northwest, Bancroft Avenue to the westsouthwest, and 73rd Avenue to the southeast. PES' historical research indicates that the site was originally developed in approximately 1916 by the Chevrolet Motor Company of California. Activities included testing and storing, chassis drying and final assembly, fender enameling, body assembly and truck painting, woodworking, sanding, and cleaning. Railroad lines serviced the property from the current Bancroft Avenue. The facility later was identified as Fisher Body St. Louis Company, Oakland Plant and was reportedly an assembly plant for Chevrolet closed car bodies. In the early 1960s, the buildings at the facility were demolished and the railroad tracks were removed. The property began to be converted to retail and commercial office uses in approximately 1966 with the construction of retail stores in the south-central portion of the property. Additional retail structures at the shopping center and a gasoline service station at the southern corner of the property (currently a Union 76, at 7210 Bancroft Avenue) were added in the late 1960s.

Historical occupant information indicates that Sparkle Cleaners has operated at the mall since approximately 1970. The current owner of the dry cleaner, Mr. Jung Shin, purchased the facility in approximately 1988. According to Mr. Shin, the current closed-loop dry-cleaning unit (DCU) was purchased in about 1991. He was not familiar with historical dry-cleaning operations conducted by prior owner/operators.

Site Description

The Sparkle Cleaners tenant space (Suite 11) occupies approximately 1,800 square feet in the northwest portion of Eastmont Town Center (Plate 2). The area in front (north) of the Site includes storefront parking and a mall driveway. The rear (south) of the tenant space opens into a common hallway that traverses the width of the building from east to west.

The ground surface elevation at Sparkle Cleaners is approximately 60 feet above mean seal level (MSL). The topography is relatively level and slopes slightly to the southwest. To the east and northeast of the site, the topography steepens and continues to rise to approximately 360 feet MSL over approximately one-half mile; a topographic gradient of more than 0.1 vertical feet per horizontal foot (Plate 1).

In the vicinity of the Site, groundwater was first encountered between approximately 40 and 44 feet below ground surface (bgs) during drilling performed during PES' investigation in November 2006. However, the groundwater levels rose relatively quickly in the borings to depths ranging from 23 to 40 feet bgs, suggesting that the aquifer at 40 to 44 feet bgs is semi-

confined or confined. The current direction of groundwater flow in the vicinity of Sparkle Cleaners is unknown due to the absence of groundwater monitoring wells. The direction of groundwater flow at the site was previously observed to be westerly², as described below. Groundwater flow at the adjacent Union 76 station has been consistently to the north-northeast (Broadbent & Associates, 2006).

Dry-Cleaning Operations

As discussed above, dry-cleaning operations have apparently occurred at the site from at least 1970 until the present.

Currently, Sparkle Cleaners operates a PCE-based dry cleaning unit (DCU) located in the eastsoutheast rear corner of Suite 11. During an inspection in September 2006, PES observed that this DCU is a closed-loop dry-to-dry system with a secondary containment pan. The solvent used in the DCU was confirmed to be PCE. Waste condensate, sludge, and filters from the DCU are stored in 55-gallon drums (without containment) and disposed off the site. The current operator of Sparkle Cleaners uses spotting liquids containing VOCs at a spotting station located towards the rear of the tenant space. Spotting fluid containers are stored on the floor or on open shelving near the spotting station.

Stains are present on the floor throughout the work areas of the Site and the facility floor has no sealant coating. Cracks are present in the floor slab at several areas. The current Site layout, including the location of the currently operating DCU, the spotting station, and the waste drum storage locations are shown on Plate 3.

In addition to the currently operating DCU, PES identified the location of a former DCU near the south-southeast (rear) wall of the Site (Plate 3). This former DCU location was identified by markings on the floor and from discussions with the current facility operator.

Summary of Previous Subsurface Investigations

Environmental investigations have been conducted at Eastmont Center since the late 1980s. The focus of these prior investigations appears to have been related to general characterization of soil and groundwater beneath the site, underground storage tanks at two former auto service centers, and Sparkle Cleaners. Alameda County Health Care Services Agency (ACHCS) closed the underground storage tank cases at the subject property in letters dated February 10, 1995 and April 16, 1998 (ACHCS, 1995; 1998). Copies of these letters are provided in

² According to an August 27, 1983 Groundwater Gradient Map, contained within an April 16, 1998 Alameda County Health Care Services letter providing case closure for historical underground storage tank sites at the property.

Appendix A. The 1998 ACHCS letter provided a summary of historical investigations and results conducted up to that date and includes portions of the prior reports from 1989, 1993, and 1995 that are described below; no other copies of these documents was identified.

1989 Investigation by Hunter Environmental Services

In 1989, three groundwater monitoring wells were installed at the site, one of which (MW-2) was located at the front exterior (northwest) of Sparkle Cleaners. Soil samples collected at 10 and 20 feet below ground surface (bgs) were analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene and xylenes (BTEX), and Stoddard solvent; no analytes were detected above laboratory reporting limits. Groundwater was present at approximately 29 feet bgs. A groundwater sample from the well was analyzed for VOCs, TPH, BTEX, and Stoddard solvent. The dry-cleaning solvent PCE, and its degradation products TCE and 1,2-DCE were detected at concentrations of 210, 19, and 8 micrograms per liter (μ g/L), respectively. In addition, TPH was detected at 200 μ g/L. This well was decommissioned in 1998.

1993 Investigation by Artesian Environmental Consultants

In 1993, two wells (MW-5 and MW-6) were installed northwest of Sparkle Cleaners as part of a site-wide investigation. Groundwater was encountered at approximately 37 feet bgs. Local groundwater flow at the shopping center was observed to be to the west-northwest. Soil samples were collected from the capillary fringe at approximately 35 feet bgs; soil and groundwater samples were analyzed for TPHd, TPHg, BTEX, and VOCs. No analytes were detected in excess of the laboratory reporting limits during the period of September 1993 to September 1996.

1995 Investigation by AllWest Environmental

In October 1995, two soil borings were advanced in front of Sparkle Cleaners, and soil samples were collected for analysis for VOCs from depths of ranging from 6 to 46 feet bgs. No VOCs were detected in the samples.

2004 Investigation by EBI Consulting

In December 2004, a limited Phase II investigation was performed at Sparkle Cleaners (EBI Consulting, 2004). A copy of the investigation report is provided in Appendix A. Two soil borings were advanced within the interior of the cleaner near the DCU and waste storage area, one boring was in the hallway at the rear of the facility, and one boring was at the front exterior. Soil matrix and soil vapor samples were collected from depths ranging from 5 to 25 feet bgs and analyzed for the presence of VOCs. PCE was detected at concentrations up to

237 micrograms per kilogram (μ g/kg) in soil (at 5 feet bgs) and in soil vapor at concentrations up to 19 μ g/L (at 7 feet bgs). The highest soil concentration was just less than the San Francisco Bay - Regional Water Quality Control Board's industrial setting Environmental Screening Level (ESL) for PCE of 240 μ g/kg.

2006 Investigation by PES Environmental, Inc.

On October 9 and 10, 2006, PES conducted a limited subsurface investigation at Sparkle Cleaners. Limited access drilling equipment was used to collect soil gas samples from the interior and exterior of Sparkle Cleaners. Soil gas samples were collected at: (1) six interior locations in the vicinity of the current DCU, the former DCU location, chemical waste storage, spotting chemical storage, and the inferred sanitary sewer line; and (2) four exterior locations in the parking lot northwest of the dry-cleaning facility and near the utility corridor along the northeast side of the building. These sampling locations are shown on Plate 3 (interior locations) and Plate 4 (exterior locations). Soil gas samples were collected from approximately 2.25 to 19 bgs and analyzed for VOCs using U.S. EPA Method 8260B by Mobile Chem Labs laboratory of Lafayette, California.

PCE was detected in three of the exterior and all six interior soil gas samples. TCE and cis-1,2-DCE were also detected in several of the soil gas samples. The soil gas sample results are summarized in Table 1.

In addition to the soil gas samples, soil matrix samples were collected from the ten borings described above at depths of approximately 4.5 feet bgs and at 19.5 feet bgs at the four exterior borings. Groundwater was identified in one exterior boring (B-3) at a depth of 17 feet bgs but was not encountered in the remaining exterior borings to a depth of 40 feet bgs. The soil matrix samples from all the borings and the grab groundwater sample from the one exterior boring were analyzed for VOCs by U.S. EPA Method 8260B. PCE was detected in the three interior soil matrix samples near the former DCU (boring locations B-8, B-9 and B-10; Plate 3) at concentrations ranging from 1,400 to 3,000 μ g/kg (Table 2). No VOCs were detected in the other interior soil matrix samples, the exterior soil matrix samples, or the exterior groundwater sample from location B-3 (Table 3).

On November 13 through 15, 2006, PES conducted a supplemental investigation at Sparkle Cleaners to further define the extent of PCE-affected soil and groundwater. Limited access drilling equipment was used to collect soil matrix core samples from the interior of Sparkle Cleaners, the interior of a vacant suite adjacent to the cleaners, and an interior hallway behind the cleaners (Plate 3). These locations were sited to assess the extent of PCE-affected soils associated with elevated concentrations of PCE, as identified in samples collected from B-8 through B-10. Soil matrix samples were collected at depths of approximately 2, 6, and 10 feet bgs; when possible, samples were also collected from interior borings at 18 feet bgs. The

samples were collected in acetate sleeves that were sealed on each end with Teflon sheets and capped with low-density polyethylene (LDPE) end caps. The end caps were sealed with Teflon tape and placed in an iced cooler under chain-of-custody protocols.

In addition to the interior sampling locations, a truck-mounted direct-push drill rig was used to collect groundwater samples from four borings located in the parking lot and driveway areas to the northwest and southwest of Sparkle Cleaners. These boring locations (B-16, B-19, B-21 and B-22) are shown on Plate 4. A fifth boring (B-17) was advanced to refusal at 42 feet bgs but did not produce free water. For borings B-16, B-19, B-21 and B-22, a grab sample of the first groundwater encountered during drilling was collected using new polyethylene tubing fitted with a check valve, which was lowered into the water column through a temporary polyvinyl (PVC) well fitted with a minimum of 10 feet of screened casing. The sample was transferred to laboratory-supplied 40-milliliter VOA sample jars preserved with hydrochloric acid. The jars were sealed using a Teflon-lined screw cap and placed on ice under chain-of-custody protocols.

The soil matrix and groundwater grab samples collected on November 13 through 15 were analyzed for VOCs by U.S. EPA Method 8260B. Soil matrix samples from locations B-23, B-24 and B-25 were collected in EnCore[®] samplers in accordance with U.S. EPA Test Method 5035. These soil samples and the water samples from B-19 and B-22 were analyzed at Severn Trent Laboratories in Pleasanton, California. All remaining soil and water samples were analyzed on the site using a mobile laboratory operated by Mobile Chem Labs, Inc. of Lafayette, California. Copies of the analytical laboratory reports and chain-of-custody forms are included in Appendix B.

PCE was detected in soil matrix samples at nine of the ten interior boring locations. TCE was detected in one location (Table 2). The maximum detected soil matrix PCE concentration in the November 2006 samples was 140 μ g/kg. The detected TCE concentration was 6.8 μ g/kg. No other VOCs were detected in the November 2006 samples.

PCE and TCE were detected in two of the four exterior groundwater grab samples (samples B-21 and B-22) collected in November 2006 (Table 3). The detected PCE concentrations ranged from 19 to 40 μ g/L. Detected TCE concentrations in these samples ranged from 2.1 to 2.4 μ g/L.

Summary of Contamination Distribution

Distribution of VOCs in Soil

The results of the soil gas, soil matrix and groundwater samples described above indicate the presence of PCE dry-cleaning solvent in subsurface soil near the former location of the dry-

cleaning equipment. The results also show that the levels of PCE in soil gas and soil matrix attenuate significantly with distance from the former DCU location and with depth beneath the ground surface.

Concentrations of PCE in soil gas samples at four interior locations exceed the ESL of $1.4 \ \mu g/L$ for a commercial/industrial setting; the ESL for TCE was also exceeded at one location (Table 1).

The detected PCE concentrations in soil matrix samples from 4.5 feet bgs in boring locations B-7, B-8, and B-9 exceed the shallow soil matrix ESL of 240 μ g/kg in a commercial/industrial setting. The results from deeper samples in boring B-20 (Plate 3) suggest that the elevated PCE concentrations near the former DCU location attenuate to concentrations less than the ESL by approximately 6 feet bgs (Table 2).

Distribution of VOCs in Groundwater

PCE and TCE were detected in groundwater grab samples west to northwest (i.e., downgradient with respect to historically reported groundwater flow direction) of Sparkle Cleaners. The detected concentrations at two locations exceed the U. S. EPA Maximum Contaminant Levels (MCLs) for these compounds (Table 3). Historical groundwater data from a monitoring well installed in front of the Sparkle Cleaners entrance in 1989 also indicated that PCE and TCE concentrations exceeded their respective MCLs. Maximum concentrations of PCE in groundwater have decreased by approximately one order of magnitude (i.e., from 210 μ g/L to 40 μ g/L) since 1989.

REMEDIAL OBJECTIVES

The objectives of the remediation are to: (1) remove contaminant source soil with elevated concentrations of VOCs related to dry-cleaning operations; and (2) assess and monitor VOC concentrations in groundwater following removal of the source of contamination.

The proposed target soil cleanup goal is set at the RWQCB's risk-based environmental screening level concentration for PCE in surface soil (less than 3 meters [9.84 feet] bgs) in an industrial/commercial setting. ESL concentrations are provided in the RWQCB's *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater* (Table A-2, Shallow Soil Screening Levels), dated February 2005 (RWQCB, 2005). The ESLs were developed by the RWQCB to be protective of human health and the environment for potentially complete exposure pathways.

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As such, the target soil matrix cleanup goal for PCE in a commercial/industrial land use setting is 240 μ g/kg. Soil excavation will be conducted in the area of elevated PCE concentrations observed during the subsurface investigations discussed above. The target soil cleanup goal for TCE is 460 μ g/kg (RWQCB 2005); however, the maximum Site TCE concentration detected in soil matrix was 6.8 μ g/kg. Therefore, the extent of soil excavation currently anticipated is based upon the detected PCE concentrations (Table 2).

The estimated area of excavation is presented on Plate 3 and extends vertically downward to approximately 5.5 feet bgs. The estimated depth of the proposed is based on the PCE concentrations detected at 4.5 feet bgs in borings B-8, B-9 and B-10 (up to 3,000 μ g/kg) and the PCE concentration detected at 6.0 feet bgs in boring B-20 (30 μ g/kg). Soil matrix analytical results are summarized in Table 2.

Following completion of excavation activities detailed in the Remedial Action Work Plan, below, confirmation soil samples will be collected from the excavation bottom and sidewalls to verify the target soil cleanup concentration of 240 μ g/kg has been met. Details of the confirmation sampling procedures are included in Appendix C.

REMEDIAL ACTION WORK PLAN

The following sections describe the RAW tasks required to achieve the objectives outlined above. Supporting details and specifications are included in Appendices C through E. The scope of work described in the RAW assumes that the structural integrity of the building and subsurface utilities will not be compromised by the proposed remediation activities. To assess the potential for excavation activities to jeopardize the structural integrity of the building or utilities, PES will attempt to obtain as built construction drawings from the current owners of Eastmont Town Center prior to the initiation of the remedial actions. A structural engineer will be retained, as appropriate, to review the as-built drawings and PES' RAW to evaluate whether the RAW specifications need to be revised due to building structural integrity or worker health and safety concerns. Construction specification revisions may include shoring, temporary structural supports, phased slot trenching, or other measures, as deemed necessary by the structural engineer. These revisions, if required, will be done prior to the issuance of Requests for Quotations (RFQs) for the project.

Preliminary Activities

The existing site-specific Health and Safety Plan (HASP) will be modified prior to conducting the remediation to comply with Occupational Safety and Health Administration, 29 CFR 1910.120 and California Code of Regulations Title 8 CCR G150 5192. Additionally, any remediation subcontractors selected to perform remedial work onsite will be required to

prepare a HASP for their own staff and work activities. PES personnel and subcontractors will be required to have 40-hour Hazardous Waste Operations (HAZWOPER) training and current 8-hour HAZWOPER refresher training.

Prior to conducting the remediation, all necessary permits needed to complete the project will be obtained by the remediation contractor. A private underground utility locating service will be retained by the remediation contractor to clear the proposed excavations of subsurface utilities. In addition, Underground Service Alert will be contacted to arrange utility locates to be performed by public and private utility companies.

Site Preparation

Prior to conducting remedial activities, utilities that may be impacted by the excavation activities will be disconnected and/or relocated, as needed. At present, these utilities include an electrical panel (Plate 3) located on the rear wall of Sparkle Cleaners, and the Jus' Smart Mister (Plate 3). If other utilities that require disconnection and relocation are identified during the review of the as-built drawings, arrangements will be made to disconnect and relocate them. These utilities may include, but are not limited to, underground water, gas, electricity, steam, and sanitary sewer lines.

At this time, the excavation is planned so that the currently operating DCU will not require relocation or disconnection. Should relocation of dry cleaning-related equipment be required as a result of expansion of the soil excavation, these activities will be conducted by a dry-cleaning equipment specialist.

Prior to the initiation of remedial work, temporary screens will be installed around the margins of the excavation area to reduce the possibility for fugitive dust transport during excavation operations. During remediation activities, precautions will be taken to ensure equipment entering and exiting the cleaners will minimally disrupt operations at the Site.

The concrete slab above the proposed excavation area will be saw cut to expose the underlying soil for subsequent excavation. The concrete will be removed and stored temporarily under cover in the parking lot pending characterization and disposal and/or recycling. Assuming an average concrete floor thickness of 6 inches, approximately 2 cubic yards (CY) of concrete is expected to be generated. For disposal and/or recycling purposes, the concrete will be sampled and analyzed for VOCs by U.S. EPA Method 8260B.

Excavation of VOC Affected Soil

Soil affected with concentrations of PCE in excess of 240 μ g/kg will be excavated from an area having plan dimensions of approximately 165 square feet. The approximate area of excavation

is shown on Plate 3. Based on the soil matrix concentrations detected in boring locations B-11, B-24, and B-25 (Plate 3), the soil excavation area is expected to be limited to the interior of the Sparkle Cleaners suite. No excavation is currently planned beyond the rear wall of Sparkle Cleaners or extending into the hallway.

The estimated depth of excavation is approximately 5.5 feet bgs. The depth of the excavation may be increased locally to facilitate removal of soil with concentrations of PCE in excess of the target soil cleanup goal. However, the initial depth of excavation and the sequence of excavation will be controlled by the depth and orientation of the footing for the building structural support column located along the back wall of Sparkle Cleaners and the depth and location of an underground sanitary sewer line running through the excavation area (Plate 3). These two items will be evaluated by a structural engineer. If the structural engineer determines that the soils adjacent to the column and the sanitary sewer line can be safely excavated to 5.5 feet bgs, then the excavation work will proceed in that manner. If, however, the structural engineer determines that excavation can not continue to 5.5 feet bgs without additional engineering controls to protect the structural integrity of the building, then the excavation approach will be modified as needed and engineering controls will be installed as specified by the structural engineer.

Assuming the prior removal of approximately 6 inches of concrete floor, an estimated 50 inplace CY of soil will be generated during the excavation activities unless soil matrix confirmation samples indicate that additional excavation is required.

The excavated soil will be placed into lined, locking, roll-off bins and temporarily stored in the parking lot pending offsite disposal and/or recycling. Samples of the excavated soil will be analyzed for VOCs by U.S. EPA Method 8260B for disposal and/or recycling (i.e., waste characterization) purposes. Additional analyses may be required by the selected disposal facility. A discussion of waste characterization sampling procedures is presented in Appendix C.

Post-Removal Verification Soil Sampling

After the horizontal limits of the excavation shown on Plate 3 have been reached and soils within the excavation limits have been removed to a depth of 5.5 feet bgs, verification soil matrix samples will be collected from the excavation bottom for VOC analysis to confirm that the cleanup goal has been met. Bottom samples will be collected in a systematic sampling grid composed of square cells measuring approximately 6 feet on a side. Approximately five soil samples will be collected from the excavation bottom. Discrete sidewall soil matrix samples will be collected from the excavation as follows (refer to Plate 3 for sidewall numbers); two samples from Sidewall 1, two samples from Sidewall 2, three samples from Sidewall 3, one sample from Sidewall 4 and two samples from Sidewall 5. The sidewall samples will be

located at approximately equidistant intervals. If expansion of the initial excavation is required, additional sidewall samples will be collected at the rate of one sample for every 5 linear feet of additional sidewall.

Soil samples submitted for laboratory chemical analysis from the soil borings will be collected and analyzed by a mobile laboratory to provide close to real-time data. In the event that samples are instead analyzed by a fixed laboratory, the samples will be prepared in accordance with U.S. EPA Method 5035 using EnCore[®] samplers. Samples will be collected directly from the bottom and sidewalls of the excavation. For each sampling point, a sample will be prepared for submittal to the analytical laboratory by pushing the appropriate sampler directly into a freshly exposed surface of the bottom and/or sidewall of the excavation. Sample handling, labeling, documentation, and chain of custody procedures will be performed as described in the Verification Sampling and Analysis Plan, attached as Appendix C. If the confirmation sample analysis indicates the target cleanup level has been attained, no further excavation will be conducted and the excavation will be backfilled as described below. If the confirmation sample analysis indicates the target cleanup level has not been attained, further excavation will be conducted, provided that the structural integrity of the building can be maintained during further excavation, as determined by the structural engineer.

Decontamination Procedures

All reusable equipment contacting excavation materials will be cleaned using a stiff-bristled broom or wire brush, and if necessary, a hot water wash or a mild phosphate-free detergent solution and double rinsed with deionized water, prior to leaving the remediation area. Reusable verification sampling equipment will be cleaned with a mild phosphate-free detergent solution and double rinsed with deionized water prior to beginning sampling and between each sample location. Decontamination fluids will be stored in Department of Transportation (DOT)-approved drums pending characterization and disposal.

Backfilling Procedures

The excavation area will be backfilled using imported select fill material specified by the structural engineer. In general, all fill will be non-corrosive and free of organic material, will contain no rocks greater than 3 inches in the largest dimension, and will have a low expansion potential. The base of the excavations will be prepared by compacting the soil to at least 90 percent relative compaction. The overlying backfill material will be placed in not more than 8-inch lifts, moisture conditioned to near-optimum moisture, and compacted to at least 95 percent relative dry density. Field density testing will be conducted by the remedial contractor in accordance with ANSI/ASTM 1557. If the field density tests indicate the tested soil does not meet specified requirements, the soil will be re-compacted and retested until the minimum requirements are met.

Concrete Replacement

Following backfilling of the excavations, the concrete floor slab will be replaced to match the existing slab. The concrete will be replaced at the same thickness and to the same finish grade as the existing slab. Concrete will be a 5-sack mix with a 28-day strength of 3,500 pounds per square inch that complies with ASTM C94. The replaced slab will be tied into the existing slab by drilling into the existing concrete and placing (with epoxy) Number 4 or 5 steel dowels into the existing slab. The concrete contractor will obtain all necessary permits and schedule inspections as required to comply with permit requirements. Concrete installation and replacement criteria are presented in Appendix D.

Post Excavation Restoration Activities

Following the replacement of the concrete slab, all facility equipment that was temporarily relocated will be repositioned and bolted to the underlying concrete slab in its approximate original location. All conveyance piping and utilities that were disconnected and capped will be uncapped and reconnected to the appropriate equipment. Any dry cleaning-related pressure piping will be pressure-tested by a dry-cleaning equipment contractor to ensure tightness.

Construction tasks required to return the suite to pre-excavation condition will be completed by a licensed contractor. Prior to performing construction activities, the contractor will obtain any required permits. Construction inspections will be scheduled as required by the local building department.

Concrete and Soil Disposal

The concrete and soil will be disposed and/or recycled pending the results of waste characterization chemical analyses. A discussion of waste characterization sampling procedures is presented in Appendix C. The concrete and soil will be disposed or recycled in accordance with applicable local, state, and federal regulations.

Post-Remediation Groundwater Monitoring Program

A program of quarterly groundwater monitoring including the installation of new monitoring wells will be implemented at the Site. Historical and recent groundwater data indicated the sporadic detections of VOCs. These data indicate that groundwater has been affected by drycleaning solvents, but not at significant concentrations. The remedy for groundwater is source removal of the affected soil, as described in the preceding sections of this report. The purpose of the groundwater monitoring will be to: (1) document the initial concentrations of VOCs in wells at the site; (2) monitor groundwater flow direction(s), gradient, and seasonal

fluctuations; (3) evaluate the groundwater chemical response to the removal of the source contamination, (4) and verify that groundwater quality down gradient of Sparkle Cleaners are not declining.

Following completion of soil remediation activities, installation of four groundwater monitoring wells is proposed for the Site. The tentative locations of these wells are shown on Plate 4. The wells will be constructed of 2-inch diameter PVC and installed to approximately 50 feet bgs (approximately 10 feet into the first encountered aquifer). A California-licensed drilling contractor will be employed to install the wells under PES supervision. Hollow-stem auger drilling equipment will be used to drill and install the monitoring wells in accordance with Alameda County Public Works Department guidelines and State of California standards. After completion, the wells will be developed by surging and purging. A detailed description of groundwater monitoring procedures and methodologies to be utilized during the quarterly monitoring program is presented in Appendix E.

Each quarter, prior to collecting groundwater samples, water-level measurements will be measured in each monitoring well to the nearest 0.01 foot. The water-level measurements will be converted to elevations referenced to mean sea level and evaluated to assess the direction of groundwater flow.

Groundwater samples will be collected from each monitoring well. Water samples will be analyzed by a California state-certified laboratory for VOCs by U.S. EPA Method 8260B.

The groundwater monitoring program is proposed for one year (four consecutive quarters) following completion of soil remediation activities. Upon completion of the first year of groundwater monitoring, the sampling frequency and continued need for groundwater monitoring will be evaluated.

REMEDIATION AND GROUNDWATER MONITORING REPORTING

Remediation Documentation

The results of the remedial activities will be presented in a post-remediation report. The purpose of the report is to describe remedial activities and to document compliance with this plan. The report will provide the following information:

- A summary of remedial activities conducted during the remediation, and description and bases for deviations, if any, from this RAW;
- Limits of excavation and quantity of contaminated soil excavated;

- Results of the excavation confirmation sampling and laboratory analyses;
- Results of the backfilling operations including soil compaction testing results;
- Documentation of soil and concrete disposal or recycling; and
- Recommendations, as appropriate.

The remedial observations report will be presented to RWQCB staff for review and approval of the remediation project.

Quarterly Groundwater Monitoring Reporting

Following completion of groundwater monitoring and receipt of the laboratory analytical results for each quarter, a written quarterly groundwater monitoring letter report will be prepared. The report will include a discussion of the:

- Scope of work performed;
- Field methodologies and procedures utilized;
- Results of groundwater sampling; and
- Recommendations, as appropriate.

The quarterly groundwater monitoring reports will be submitted to the RWQCB.

If you have any questions or require additional information regarding this RAW, please call either of the undersigned at (415) 899-1600.

Very truly yours,

PES ENVIRONMENTAL, INC.

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William W. Mast, P.G. Associate Engineer

Robert S. Creps, P.E. Principal Engineer



- cc: John Wolfenden San Francisco Bay Regional Water Quality Control Board Todd Gooding - ScanlanKemperBard Companies
- Attachments: Table 1 Summary of Laboratory Analytical Results Soil Vapor Samples
 - Table 2 Summary of Laboratory Analytical Results Soil Matrix Samples
 - Table 3 Summary of Laboratory Analytical Results Grab Groundwater Samples
 - Plate 1 Site Location Map
 - Plate 2 Site Vicinity Map
 - Plate 3 Site Plan, Soil Sample Locations and Excavation Map
 - Plate 4 Groundwater Sample Locations and Proposed Groundwater Wells
 - Appendix A Historical Environmental Documentation
 - Appendix B Analytical Laboratory Reports and Chain-of-Custody Forms
 - Appendix C Verification Sampling and Analysis Plan
 - Appendix D Concrete Installation Specifications
 - Appendix E Groundwater Monitoring Procedures and Methodologies

REFERENCES

Alameda County Health Care Services Agency (ACHCS), 1995. Remedial Action Completion Certification, J.C. Penney Store, 1 Eastmont Mall, Oakland, CA. February 10.

___, 1998. Remedial Action Completion Certification, 1 Eastmont Mall, Oakland, CA (1-500 gallon waste oil tank removed in October 23, 1995). April 16.

- Broadbent & Associates, 2006. Second Quarter 2006 Ground-Water Monitoring Report, Former BP Station #11117, 7210 Bancroft Avenue, Oakland, Alameda County, California. ACEH Case No. RO356. July 28.
- California Regional Water Quality Control Board San Francisco Bay Region, 2005. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. February 2005.
- EBI Consulting, 2004. Phase II Limited Subsurface Investigation Report, Eastmont Town Center, 7200 Bancroft Avenue, Oakland, California. December 22.

TABLES

Table 1 Summary of Laboratory Analytical Results- Soil Vapor Samples Sparkle Cleaners Eastmont Town Center Oakland, California

Sample Location	Sample Identification	Sample Date	PCE (µg/L)	TCE (µg/L)	с-1,2-DCE (µg/L)
B-1	B-1-G	10/9/2006	ND(0.1)	ND(0.1)	ND(0.2)
B-2	B-2-G	10/9/2006	0.62	ND(0.1)	ND(0.2)
B-3	B-3-G	10/9/2006	0.15	ND(0.1)	ND(0.2)
B-4	B-4-G	10/9/2006	0.26	ND(0.1)	ND(0.2)
B-5	B-5-G	10/9/2006	0.42	ND(0.1)	ND(0.2)
B-6	B-6-G	10/9/2006	0.22	0.16	ND(0.2)
B-7	B-7-G	10/9/2006	6.4	0.15	ND(0.2)
B-8	B-8-G	10/9/2006	20	3.9	0.42
B-9	B-9-G	10/9/2006	36	0.30	ND(0.2)
B-10	B-10-G	10/9/2006	16	11	0.26
RWQCB Environm	ental Screening Le	evel (ESL) ¹	1.4	4.1	20

Notes:

All samples collected at 5 feet bgs

PCE - Tetrachloroethene

TCE - Trichloroethene

c-1,2-DCE - cis-1,2-Dichloroethene

µg/I - Micrograms per liter of air

ND() - Not detected at or above the indicated laboratory reporting limit.

 California Regional Water Quality Control Board, San Francisco Bay Region, Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, February 2005. Table E-2, Shallow Soil Gas Screening Levels For Evaluation of Potential Vapor Intrusion Concerns.

- Exceeds ESL

Table 2Summary of Laboratory Analytical Results-Soil Matrix SamplesSparkle CleanersEastmont Town CenterOakland, California

Sample Location	Sample Identification	Sample Date	Sample Depth (feet bgs)	PCE (µg/kg)	TCE (μg/kg)
B-1	B-1-4.5'	10/9/2006	4.5	ND(4.0)	ND(4.0)
	B-1-19.5'	10/10/2006	19.5	ND(3.9)	ND(3.9)
B-2	B-2-4.5'	10/9/2006	4.5	ND(4.3)	ND(4.3)
	B-2-19.5'	10/10/2006	19.5	ND(3.9)	ND(3.9)
B-3	B-3-2.25'	10/9/2006	2.25	ND(4.0)	ND(4.0)
	B-3-19.5'	10/9/2006	19.5	ND(4.2)	ND(4.2)
B-4	B-4-4.5'	10/9/2006	4.5	ND(4.0)	ND(4.0)
	B-4-19.5'	10/10/2006	19.5	ND(3.9)	ND(3.9)
B-5	B-5-4.5'	10/9/2006	4.5	ND(4.1)	ND(4.1)
B-6	B-6-4.5'	10/9/2006	4.5	ND(4.1)	ND(4.1)
B-7	B-7-4.5'	10/9/2006	4.5	ND(4.0)	ND(4.0)
B-8	B-8-4.5'	10/9/2006	4.5	1,400	ND(830)
B-9	B-9-4.5'	10/9/2006	4.5	3,000	ND(830)
B-10	B-10-4.5'	10/9/2006	4.5	2,500	ND(790)
B-11	B-11-1.5-2.0	11/13/2006	2	53	ND(2.0)
	B-12-5.5-6.0	11/13/2006	6	49	ND(2.0)
	B-11-9.5-10.0	11/13/2006	10	8.9	ND(2.0)
	B-11-17.5-18.0	11/13/2006	18	ND(2.0)	ND(2.0)
B12	B-12-1.5-2.0	11/13/2006	2	ND(2.0)	ND(2.0)
	B-12-5.5-6.0	11/13/2006	6	ND(2.0)	ND(2.0)
	B-12-9.5-10.0	11/13/2006	10	5.5	ND(2.0)
B13	B-13-1.5-2.0	11/13/2006	2	ND(2.0)	ND(2.0)
	B-13-5.5-6.0	11/13/2006	6	ND(2.0)	ND(2.0)
	B-13-9.5-10.0	11/13/2006	10	3.9	ND(2.0)
	B-13-17.5-18.0	11/13/2006	18	ND(2.0)	ND(2.0)
B-14	B-14-1.5-2.0	11/13/2006	2	4.3	ND(2.0)
	B-14-5.5-6.0	11/14/2006	6	25	ND(2.0)
	B-14-9.5-10.0	11/14/2006	10	ND(2.0)	ND(2.0)
	B-14-17.5-18.0	11/14/2006	18	ND(2.0)	ND(2.0)
B-15	B-15-3.5-4.0	11/14/2006	4	ND(2.0)	ND(2.0)
	B-15-9.5-10.0	11/14/2006	10	ND(2.0)	ND(2.0)
B-18	B-18-1.5-2.0	11/14/2006	2	110	6.8
	B-18-5.5-6.0	11/14/2006	6	65	ND(2.0)
	B-18-9.5-10.0	11/14/2006	10	13	ND(2.0)
	B-18-17.5-18.0	11/14/2006	18	2.0	ND(2.0)
B-20	B-20-5.5-6.0	11/14/2006	6	30	ND(2.0)
	B-20-9.5-10.0	11/14/2006	10	ND(2.0)	ND(2.0)

Table 2 Summary of Laboratory Analytical Results-Soil Matrix Samples Sparkle Cleaners Eastmont Town Center Oakland, California

Sample Location	Sample Identification	Sample Date	Sample Depth (feet bgs)	PCE (µg/kg)	TCE (µg/kg)
	B-20-11.5-12.0	11/14/2006	12	ND(2.0)	ND(2.0)
B-23	B-23-2.0	11/15/2006	2	59	ND(4.2)
	B-23-6.0	11/15/2006	6	ND(5.0)	ND(5.0)
	B-23-10	11/15/2006	10	8.3	ND(4.7)
	B-23-18	11/15/2006	18	ND(4.2)	ND(4.2)
B-24	B-24-2	11/15/2006	2	77	ND(4.4)
	B-24-6	11/15/2006	6	72	ND(4.1)
	B-24-10	11/15/2006	10	8.2	ND(4.2)
	B-24-18	11/15/2006	18	6.1	ND(3.9)
B-25	B-25-2	11/15/2006	2	140	ND(4.5)
	B-25-6	11/15/2006	6	57	ND(4.5)
	B-25-10	11/15/2006	10	ND(4.3)	ND(4.3)
	B-25-18	11/15/2006	18	36	ND(4.2)
RWQCB Environm	ental Screening Le	vel (ESL) ¹		240	460

Notes:

PCE - Tetrachloroethene

TCE - Trichloroethene

bgs - Below ground surface

µg/kg - Micrograms per kilogram

ND() - Not detected at or above the indicated laboratory reporting limit.

 California Regional Water Quality Control Board, San Francisco Bay Region, Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, February 2005. Table A-2, Shallow Soil Screening Levels (<3m bgs), Commercial / Industrial Land Use.

- Exceeds ESL

Table 3 Summary of Analytical Results - Grab Groundwater Samples Sparkle Cleaners Eastmont Town Center Oakland, California

Sample Location	Sample Identification	Depth to First Water (feet bgs)	Static Depth to Water (feet bgs)	Sample Date	PCE (µg/L)	TCE (µg/L)
B-1	NFWE					
B-2	NFWE					
B-3	B-3-W	20	17	10/9/2006	ND(2.0)	ND(2.0)
B-4	NFWE					
B-16	B-16-W	40	26	11/14/2006	ND(2.0)	ND(2.0)
B-17	NFWE					
B-19	B-19-W	42	40	11/14/2006	ND(2.0)	ND(2.0)
B-21	B-21-W	42	23	11/14/2006	40	2.1
B-22	B-22-W	40	36	11/15/2006	19	2.4
		1				_
Maximum Contaminant Level (MCL) ¹				5	5	

Notes:

PCE - Tetrachloroethene

TCE - Trichloroethene

µg/l - Micrograms per liter

NFWE - No free water encountered

ND() - Not detected at or above the indicated laboratory reporting limit

1 - (a) Title 22 California Code of Regulations (CCR) §64431-§64444; and

(b) U.S. Environmental Protection Agency, Region 9. June 2003

PLATES









WWM 881.060.01.003 881-06001003_1206-03 JOB NUMBER DRAWING NUMBER

REVIEWED BY

	Explanation
۲	Soil Boring Location

- Approximate Location of Former ____ Dry Cleaning Unit
- --- Proposed Excavation Area

5 Future Excavation Sidewall (Refer to Text)

B-3 💿



B-4 ⊚

Site Plan, Soil Sample and Excavation Map PLATE Sparkle Cleaners 3 Eastmont Town Center Oakland, California





 881.060.01.003
 881-06001003_1206-03
 WWM

 JOB NUMBER
 DRAWING NUMBER
 REVIEWED BY

Explanation

---- Approximate Property Boundary

- Grab Groundwater Sample
- Dry Boring to 40-ft. below grade (no soil sample)
- October 9-10 Dry Boring (with soil sample)
- Proposed Groundwater Monitoring Well



Groundwater Sample Locations and Proposed Groundwater Monitoring Wells Sparkle Cleaners Eastmont Town Center Oakland, California

PLATE



PES Environmental, Inc.

APPENDIX A

HISTORICAL ENVIRONMENTAL DOCUMENTATION

ALAMEDA COUNTY



DAVID J. KEARS, Agency Director

AGENCY

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

February 10, 1995

STID # 26

REMEDIAL ACTION COMPLETION CERTIFICATION

Kathleen Scheutzow Bridgestoen/firestone Inc. 1200 Firestone Pkwy, Akron, Oh 44317

Bob Gerber, Real Est J.C. Penney p.o. Box 4015 Buena Park, Ca - 90624

Ref: J.C. Penney Store, 1 Eastmont Mall, Oakland, CA

Dear Mr. Scheutzow and Mr. Gerber:

This letter confirms the completion of site investigation and remedial action for the five underground storage tanks at the above mentioned location.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721 (e) of the California Code of Regulations.

Please contact Madhulla Logan at (510) 271-4320 if you have any questions regarding this matter.

Very truly yours,

Rafat A. Shahid Assistant Agency Director

cc: Edgar B. Howell, Chief, Hazardous Materials Division Kevin Graves, RWQCB Mike Harper, SWRCB (with attachment) files

CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

I.AGENCY INFORMATIONDate: 11/1/94Agency name:Alameda County-HazMatAddress: 1131 Harbor Bay PkwyCity/State/Zip:Alameda, CA - 94502Phone: (510) 271-4320Responsible staff person:Thomas peacockTitle:Supervising HMS

II. CASE INFORMATION

Site facility name: J.C. Penney Store, No. 836 Site facility address: 1 Eastmont Mall, Oakland, CA RB LUSTIS Case No: N/A Local Case No./LOP Case No.:26 URF filing date: 12/20/89 SWEEPS No: N/A

<u>Responsible Parties:</u> Bob Gerber, Real Est J.C. Penney	<u>Addresses:</u> P.O. Box 4015 Buena Park, CA - 90624	<u>Phone Numbers:</u>
Kathleen Scheutzow	1200 Firestone Pkwy	

Akron, Oh-44317

Kathleen Scheutzow Firestone Inc

Jim Given #1 Eastmont Mall, Argonaut Financial Services Oakland, CA - 94605

Tank No:	<u>Size in</u> _gal.:	<u>Contents:</u>	<u>Closed in</u> or remov	n-place ved?:	<u>Date:</u>	
1 2 3 4 5	* 550 10000 10000 10000 550	waste oil gasoline/diesel gasoline/diesel gasoline/diesel waste oil	removed removed removed removed removed tank only	(dated Marc	1987 (no 1985 (no 1985 (no 1985 (no Dec 1991 h 30, 1993	date) date) date) date) L)

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release:Overfilling-TPH as gasoline, BTEX

Site characterization complete? YES

Date approved by oversight agency: December 1992

Monitoring wells installed?	YES	Number:3 (MW-4, DW-1, DW-2). I have not considereed wells MW-2 and MW-3, since they were not part of J.C. Penney site.
Proper screened interval?	YES	MW-4 - 8 to 25 feet (gw at 17 ft) DM-1 - 13 to 28 ft DM-2 - 10 to 25 ft

Page 2 of 5

Leaking Underground Fuel Storage Tank Program

Highest GW depth below ground surface: 15 Lowest depth: 37 ft Flow direction: Fluctuating, has changed from south to south east to now towards west(final)

Most sensitive current use: Not Drinking (others not determined) Are drinking water wells affected? No Aquifer name: Is surface water affected? NO Nearest affected SW name:N/A Off-site beneficial use impacts (addresses/locations): Not Known Report(s) on file? YES Where is report(s) filed? Alameda County 1131 Harbor Bay Parkway Alameda, CA - 94502

Treatment and Disposal of Affected Material:

÷. ,

MaterialAmountAction (TreatmentDate(include units)of Disposal w/destination)

NO EXCAVATION PERFORMED ON SITE Soil 29.37 tons Liquid Waste Mgmt, McKittrick CA 2/14/91

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		
	Befor	<u>e After</u>	Before	Alter	
TPH (Gas)	2000		2.7	ND	
TPH (Diesel)	NA		0.028	NA	
Bonzene	1.4	-	0.021	ND	
Toluene	4.3	-	0.050	ND	
Yvlene	23	-	0.29	ND	
Ethylbenzene	150	-	ND	0.0008	
Oil & Grease	ND	-	ND	NA	
Stoddard Solvent	ND	-	-	-	
1.2 dichloroethene			8		
PCE			210		

Comments (Depth of Remediation, etc.):

The above mentioned soil sample results were collected from boring MW-4 at 15 feet depth. The "before" groundwater results are also from monitoring well MW-4. 1,2 DCE and PCE were found in MW-2.

Page 3 of 4

Leaking Underground Fuel Storage Tank Program

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined

Does corrective action protect public health for current land use? YES Site management requirements: NA

Should corrective action be reviewed if land use changes? No

Monitoring wells Decommisioned: No, pending site closure

Number Decommisioned: Number Retained: 3 (MW-4, DM-2, and DM-1)

List enforcement actions taken:N/A

List enforcement actions rescinded:N/A

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Thomas Peack Signature: What

Reviewed by Name: Madhulla Logan Signature: Machulla

Name: Eva Chu Signature: Juru

VI. RWQCB NOTIFICATI

Date Submitted to RB RWOCB Staff Name: Kevin Prives

VII. ADDITIONAL COMENTS

Title: Supervisor, LOP Spec Date: 1/27/95

Title: Hazardous Materials Spec Date: 1/26/95

Title: Hazardous Materials Spec Date: 1/27/95

RB Response:

Title: San. Engineering Asso. Date:

In December 1989, a phase II Environmental audit was performed for the Eastmont Mall. One boring B-1 and 3 monitoring wells MW-2, MW-3, and MW-4 was installed on-site. Monitoring wells MW-2, and MW-3 were drilled near the dry cleaners store, and the BP service station, respectively. Monitoring well MW-4 was installed near the Firestone site which was leased by J.C. Penney Stores. MW-4 was installed downgradient to the former waste oil tank. The soil and groundwater samples collected from MW-4, near the Firestone site indicated significant amounts of TPH expressed as gasoline or diesel and BTEX. The TPHg&d concentrations in soil was 2000 ppm, and the BTEX concentrations in soil were 1.4 ppm, 4.3 ppm, 23 ppm, and 150 ppm respectively. The groundwater samples had 2.2 ppm TPH, .028 ppm Benzene, 0.021 ppm Toluene, 0.050 ppm Xylene, and 0.29 ppm Ethylbenzene. No constituents were detected in any of the other soil and groundwater samples, except for 8 ppb 1,2 DCE and 210 ppb PCE was detected in MW-2 mear

Page 4 of 5

the dry cleaner store. There are two other projects, one of them is the BP oil site that are being handled separately from this project.

Based on previous records, three 10000 gallon underground storage tanks were excavated and removed from the Eastmont Mall by Firestone in 1985. These tanks used to supply gasoline to the pump island formerly located at the south end of the facility. According to reports, J.C. Penney has no records of tank excavation at the site and no information was found in any of the local agencies about this tank removal. Also, the contractor who completed the removal operation, "Dor-Am Builders, Inc" is no longer in business and does not have a forwarding phone message. The original waste oil tank, that was formerly located at the northeast corner of the site was removed by Firestone and replaced in 1987. One soil sample was collected at the bottom of the pit and the laboratory analysis of the sample did not indicate the presence of hydrocarbons. A new waste oil tank was installed in the same location and was later removed in December 1990. The sample collected from the bottom of the pit did not contain any hydrocarbons but samples collected from the stockpiled soil detected 40 ppm TPH-d and 820 ppm TOG. Based on these results, the excavated soils were removed and the excavation was filled with cleaned soil.

On September 25, 1990, monitoring well MW-4 (the well concerned with the tanks in J.C. Penney) was re-sampled for BTEX only and all constituents were non-detectable.

In July 1991, 6 soil borings B1 to B4, DM1, and DM2, were drilled on site out of which 2 borings DM-1 and DM-2 were converted into monitoring wells. Monitoring well DM-1 was located north and upgradient of the former underground storage tanks, while boring DM-2 was located 90 feet south and downgradient to the UST's. Only one soil sample collected from boring B-1 at 15 feet bgs contained TPHg at 7.7 ppm, tolune at 0.070 ppm, total xylenes at 0.030 ppm. None of the ground water samples collected from the 3 monitoring wells showed any detectable levels of TPH or BTEX. Since this groundwater monitoring event was conducted 16 months apart from the previous sampling conducted in 1989, the reports attribute retardation, dispersion, natural biodegradation, etc., as primary reasons for the nondetectable levels of BTEX in monitoring well MW-4 in the current sampling Two more rounds of groundwater monitoring was conducted in Feburary event. 1992 and June 1992. Benzene and ethylbenzene was present at 0.0019 and 0.0025 ppm respectively in MW-4 during the February 1992 sampling event and ethylbenzene was present at 0.0008 ppm during the June 1992 sampling event. No other constituents were detected.

The reports also mention a groundwater discontinuity across the site . Out of the 6 borings installed in July 1991, boring B-4 was drilled to a depth of 50 feet without encountering groundwater while in monitoring well MW-4 which about 30 feet away from B-4, groundwater was encountered at 17 feet. There appears to be a groundwater discontinuity between monitoring well MW-4 and Boring B-4. The report suggests that the near surface groundwater is perched in a localized discontinuous unconfined aquifer above the regional confined aquifer which in encountered at greater depths.

Page 5 of 5

Reasons for site closure:

- 1. The presence of a localized perched aquifer due to groundwater discontinuity.
- 2. Soil samples from boring B-1 drilled downgradient to MW-4 did not contain significant concentrations of TPHg or BTEX.
- 3. Also borings drilled downgradient to B-1 and MW-4 did not detect any hydrocarbons in the soil samples. Based on this data it appears that the residual hydrocarbon contamination is localized in the vicinity of former UST.
- 4. The last 2 rounds of groundwater sampling did not detect significant concentrations of hydrocarbons.

ALAMEDA COUNTY HEALTH CARE SERVICES



AGENCY DAVID J. KEARS, Agency Director

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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 114 - 1 Eastmont Mall, Oakland, CA (1-500 gallon waste oil tank removed in October 23, 1995)

April 16, 1998

Mr. Jack Sumski 1 Eastmont Mall Oakland, CA 94605

Dear Mr. Sumski:

This letter confirms the completion of site investigation and remedial action for the underground storage tank formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection Chuck Headlee, RWQCB Dave Deaner, SWRCB Leroy Griffin, OFD files-ec (eastmont-4)

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ALAMEDA COUNTY HEALTH CARE SERVICES



DAVID J. KEARS, Agency Director

AGENCY

StID 114

April 16, 1998

Mr. Jack Sumski 1 Eastmont Mall Oakland, CA 94605 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Re: Fuel Leak Site Case Closure for Eastmont Mall at 1 Eastmont Mall, Oakland, CA 94605

Dear Mr. Sumski:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- o up to 160 ppm TPH as diesel, 610 ppm TPH as motor oil, and 1,500 ppm Total Oil and Grease remain in soil beneath the site; and,
- o a site safety plan should be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of the former waste oil tank.

If you have any questions, please contact me at (510) 567-6762.

eva chu Hazardous Materials Specialist

enlosure:

- 1. Case Closure Letter
- 2. Case Closure Summary
- c: Frank Kliewer City of Oakland-Planning 1330 Broadway, 2nd Floor Oakland, CA 94612
 - files (eastmont-5)

97 AUG 21 PH 2:52 CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

Ι. AGENCY INFORMATION Date: July 8, 1997

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700 Responsible staff person: M. Logan Title: Hazardous Materials Spec.

CASE INFORMATION II.

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1

Site facility name: Eastmont Mall Site facility address: 1 Eastmont Mall, Oakland, CA 94605 RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 114 URF filing date: SWEEPS No: N/A

Phone Numbers: Responsible Parties: Addresses:

David Norwitt 1 Eastmont Mall, Oakland, CA 94605

<u>Tank</u> <u>No:</u>	<u>Size in</u> gal.:	Contents:	<u>Closed in-place</u> <u>or removed?:</u>	<u>Date:</u>

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Waste Oil

Cause and type of release: Unknown Site characterization complete? YES Date approved by oversight agency: 7/3/97 Monitoring Wells installed? Yes Number: 25 Proper screened interval? Yes, 35' to 50'bgs in MW-9 Highest GW depth below ground surface: 26.01' Lowest depth: 33.97' in MW-9 Flow direction: WNW Most sensitive current use: Commercial Are drinking water wells affected? No Aguifer name: **Unknown** Is surface water affected? No Nearest affected SW name: NA Off-site beneficial use impacts (addresses/locations): None

10/23/95

Removed

Report(s) on file? YES Where is report(s) filed? Alameda County 1131 Harbor Bay Pkwy Alameda, CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> (include units)	<u>Action (Treatment</u> or Disposal w/destination)	Date
Tank	1 UST	Disposed by H & H, San Francisco	10/23/95
Soil	31.75 cy	Incinerated at Remco, Richmond	12/19/95

Maximum Do	ocumented Conta	minant C	oncentrations	Befo	re and	After	Cleanup
Contamina	ant	Soil	(ppm)	Water	(ppb)		
		<u>Before</u> 1	After ¹	Before ²	After ³		
TPH (Gas)		ND	ND	78	ND		
TPH (Diese	el)	160	160	200	ND		
TPH (Moto	r Oil)	610	610	4,300	4,300		
Benzene		ND	ND	13	ND		
Toluene		ND	ND	ND	ND		
Ethylbenze	ene	ND	ND	1.5	ND		
Xylenes		ND	ND	ND	ND		
Oil & Grea	ase	1,500	1,500	ND	NA		
Other	HVOC	ND	ND	237 ⁴	ND		
	Benzo(a)pyrene	2			ND		
	Naphthalene				ND		

NOTE :	1	soil samples collected from waste oil pit during UST removal (10/95) and
		after limited overexcavation (12/95)
	2	results from grab water from soil borings or initial two quarters of
		groundwater sampling
	3	results from final quarters of groundwater sampling
	4	8ppb 1,2 DCE, 19ppb TCE, and 210ppb PCE

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Does corrective action protect public health for current land use? YES Site management requirements: A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination. YES Should corrective action be reviewed if land use changes? Monitoring wells Decommissioned: No, pending site closure Number Decommissioned: 0 Number Retained: 35 List enforcement actions taken: None List enforcement actions rescinded: NA

V. LOCAL AGENCY REPRESENTATIVE DATA

Eva Chu Title: Haz Mat Specialist Name: 8/11/97 Date: Signature: Reviewed by Haz Mat Specialist Madhulla Logan Title: Name: 8/4/97 hulla Date: Signature: Thomas Peacock Name: Title: Supervisor Date: Signature: RWQCB NOTIFICATION VI. 8/12/97 Date Submitted to RB: **RB** Response: Title: AWRCE RWQCB Staff Name: Kevin Graves Date: 8-18-97 Signature: ADDITIONAL COMMENTS, DATA, ETC. VII.

In 1916 the site was occupied by an automobile assembly plant (Chevrolet Fisher Body Plant) where auto body parts were sanded, painted, and assembled. At this time five USTs were in use (12-K gasoline, 12K motor oil, 13-K fuel oil, 10K kerosene, and a 13K oil tank). The plant was demolished in 1965. Construction of the Eastmont Mall began in 1969. The mall consists of several commercial retailers, including clothing stores, car repair shops, a dry cleaner, fast food restaurants, and a supermarket. A gasoline station (BP Oil) is located at the south corner of the site. (See Figs 1 and 2)

Subsurface contamination has been identified at four areas of the site: 1) JC Penny area (also known as Firestone on site plan), 2) BP service Station, 3) Sparkle Cleaner, and 4) Eastmont Auto Center (in vicinity of Thrifty). <u>Contamination at JC Penny and at BP service station is under a</u> <u>separate investigation, therefore, this closure summary only covers</u> <u>contamination in the vicinity of Sparkle Cleaner and Eastmont Auto Center.</u>

In December 1989 Hunter Environmental Services, Inc. advanced four soil borings, of which three were completed as groundwater monitoring wells (MW-2 through MW-4). The monitoring wells are located at the JC Penny site (well MW-4), the BP service station (well MW-3), and by Sparkle Cleaners (well MW-2). Well MW-2 was drilled to 35'bgs. Groundwater was encountered at ~29'bgs. Soil samples from 10' and 20' bgs were analyzed for TPH and BTEX. None was identified. The groundwater was analyzed for TPH and VOCs. Up to 8ppb 1-2 DCE, 19ppb TCE, 210ppb PCE and 200ppb TPH were identified. BTEX was not found above the detection limits. (See Fig 2, Tables 1 through 4)

i i i

In September 1993 five soil borings (B-5 through B-9) were drilled around the mall buildings and converted into monitoring wells MW-5 through MW-9, respectively. Well MW-6 is downgradient of the dry cleaners, and well MW-9 is near the location of the waste oil UST at Eastmont Auto Center. Soil samples were only collected from the capillary fringe (at 30' to 40'bgs). Soil and groundwater samples were analyzed for TPHd, TPHg, BTEX, and HVOCs. Contaminants were not detected above the detection limit. (See Fig 3, Tables 5 and 6, and Well Logs)

Wells MW-5 through MW-9 were sampled for seven quarters (Sep 1993 to September 1996) without detecting hydrocarbon contamination (except for low TPHg and benzene concentrations in December 1993, and 1.4ppb TCE in October 1995). Groundwater flows to the west-northwest. It appears the UST operated by the former auto assemble plant and dry cleaner did not adversely impact groundwater quality beneath the site. (See Tables 7 and 8)

In October 1995 two soil borings (AW-1 and AW-2) were drilled in the vicinity of Sparkle Cleaner, to verify that soil was not impacted by solvent use at the facility. Six selected soil samples (from 6' and 10.5'bgs and from the capillary fringe) were analyzed for HVOCs. None was detected. (See Fig 4, Table 9)

Also in October 1995 the 500 gallon waste oil UST was removed from the Eastmont Auto Center. A soil sample S1 was collected from the center of the pit bottom at 8'bgs. Elevated TPHd and TOG were identified. HVOCs and SVOCs were below detection limits. One to two feet of soil were removed from three of the four sidewalls. And the bottom of the pit was overexcavated to 10'bgs. A confirmatory soil sample (S2) was collected from the pit bottom. Up to 1,300ppm non-polar O&G and 610ppm TPH-mo were identified. (See Figs 5 and 6, Table 10)

In April 1996 three soil borings (B1, B2 and B3) were advanced just outside of the former waste oil UST to 40'bgs. Soil samples were collected at 15' and 25' to 35'bgs. Soil and grab water samples were analyzed for TPH-mo and TOG. No hydrocarbons were detected in the soil samples. Only water from boring B1 contained TPH-mo (at 4,300ppb). The laboratory reported that the contaminant appeared to be a lubricating oil, lighter than motor oil. (See Fig 7, Table 11, and Boring Logs)

The low levels of TPH in groundwater identified from boring B1 appears limited in extent because well MW-9, located ~200' downgradient of the former waste oil UST, has not identified any TPHg, TPHd, BTEX, benzo(a)pyrene or naphthalene in groundwater. Continued groundwater sampling is not warranted. In summary, case closure is recommended because:

- the leak and ongoing sources have been removed; 0
- 0
- 0
- the site has been adequately characterized; the dissolved plume is not migrating; no water wells, surface water, or other sensitive receptors are о likely to be impacted; and,
- the site presents no significant risk to human health or the ٥ environment.

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TABLE 1. RESULTS OF TPH, BTEX, AND STODDARD ANALYSES ON SOIL SAMPLES TAKEN DECEMBER 5 AND 6, 1989 AT EASTMONT MALL, OAKLAND; CALIFORNIA

SAMPLE ID	DATE SAMPLED	TPH (mqq)	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	STODDARD (PPm)
MW-1010' MW-1030'	12/5/89	ND<1 ND<1	ND<3 ND<3	ND<3 ND<3	ND<3 ND<3	ND<3 ND<3	-
MW-2010' MW-2020'		ND<1 ND<1	ND<3 ND<3	ND<3 ND<3	ND<3 ND<3	ND<3 ND<3	ND<10 ND<10
MW-3010' MW-3020'	12/6/89	ND<1 ND<1	ND<3 ND<3	8>Dא 2>Dא	ND<3 ND<3	ND<3 ND<3	-
MW-4010' MW-4015'		ND<1 2000	ND<3 1400	ND<3 4300	ND<3 23,000	ND<3 150,000	-

NOTES:

- Parts per million or milligrams per kilogram ppmppb - Parts per billion or micrograms per kilogram ND<1 - Not detected at indicated detection limit

> Hunter Environmental Services, Inc. 597 Center Avenue, Suite 350 Martinez, CA 94553

AT EASTMONT MALL, OAKLAND, CALIFORNIA						
 SAMPLE ID	DATE SAMPLED	OIL & GREASE (ppm)				
MW-3010' MW-3020'	12/6/89	ND<20 ND<20				
MW-4010' MW-4015'		ND<20 ND<20				

TABLE 2. RESULTS OF OIL AND GREASE (O&G) ANALYSES ON SOIL SAMPLES TAKEN DECEMBER 6, 1989

Notes: ppm - Parts per million or milligrams per kilogram (mg/kg) ND<20 - Not detected at indicated detection limit

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TABLE	3.	RESULTS OF T	PH, BTEX,	AND	STODDAR	D ANALYSES
	ON	WATER SAMPLE	ES TAKEN D	ECEME	BER 11,	1989
	A	r eastmont ma	ALL, OAKLA	мр. α	ALIFORN	IIA

			CHODDA			
SAMPLE DATE ID SAMPLED	TPH (ppm)	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	STODDARD (PPm)
MW-2 12/11/89	0.2	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<1.
MW-3	2.7	530	16	150	59	-
MW-4	2.2	28	21	50	290	. ~

Notes: ND<0.3 - Not detected at indicated detection limit ppm - Parts per million or milligrams per kilogram ppb - Parts per billion or micrograms per kilogram

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Hunter Environmental Services, Ir 597 Center Avenue, Suite 350 Martinez, CA 94553 TABLE 4. RESULTS OF TOTAL VOLATILE ORGANIC ANALYSES FOR WATER SAMPLE FROM MW-2 COLLECTED DECEMBER 11, 1989

SAMPLE: MW-2

Compound	ug/l	Compound	ug/l
Chloromethane Bromoethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon disulfide Trichlorofluoromethane 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Vinyl Acetate Bromodichloromethane	ND<10 ND<10 ND<10 ND<10 ND<10 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3	Cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene Trans-1,3-Dichloropropene 2-Chloroethyl vinyl ether Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes 1,3-Dichlorobenzene 1,2&1,4-Dichlorobenzenes	ND<3 19 ND<3 ND<3 ND<2 ND<3 ND<3 ND<10 210 ND<10 210 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3 ND<3
L' Z-DICHT CECELCE			

Notes: ug/l - Micrograms per liter or parts per billion (ppb) ND<10 - Non-detectable at indicated detection limit

3 2 2

Hunter Environmental Services, Inc 597 Center Avenue, Suite 350 Martinez, CA 94553



Table 1. 9 Summary of Soil Analytical Results							
Boring Sample II	ened maneg	Benzen	e <u>Roliene</u>	Bhaliba	nzene Total Xylenes		
Number Depth's pr	ib ppm	ppb	ppb	ling	olda		
B-5-35' 35' N.	D. N.D.	N.D.	N.D.	N.D.	N.D.		
B-6-35' 35' N.	D. N.D.	N.D.	N.D.	N.D.	N.D.		
B-7-30' 30' N.	D. N.D.	N.D.	N.D.	N.D.	N.D.		
B-8-30' 30' N.	D. N.D.	N.D.	N.D.	N.D.	N.D.		
B-9-40' 40' N.	D. N.D.	N.D.	N.D.	N.D.	N.D.		
Compound	B-5-35	B-6-35'	B-7-30'	B-8-30 '	B-9-40'		
Name	ppb .	ppb	ppb	ppb.	ppb		
Chloromethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Vinyl Chloride	N.D.	N.D.	N.D.	N.D.	N.D.		
Bromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Chloroethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Trichlorofluoromethand	. N.Đ.	N.D.	N.D.	N.D.	N.D.		
1, 1-Dichloroethene	N.D.	N.D.	N.D.	N.D.	N.D.		
Methylene Chloride	N.D.	N.D.	N.D.	N.D.	N.D.		
1, 2-Dichloroethene (Tr	ans) N.D.	N.D.	N.D.	N.D.	N.D.		
1, 2-Dichloroethene (Ci	is) N.D.	N.D.	N.D.	N.D.	N.D.		
1, 1-Dichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Chloroform	N.D.	N.D.	N.D.	N.D.	N.D.		
1,1,1- Trichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Carbon Tetrachloride	N.D.	N.D.	N.D.	N.D.	N.D.		
1, 2-Dichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Trichloroethene	N.D.	N.D.	N.D.	N.D.	N.D.		
1, 2-Dichloropropane	N.D.	N.D.	N.D.	N.D.	N.D.		
Bromodichloromethane	N.D.	N.D.	N.D.	N.D.	N.D.		
2-chloroethylvinylether	N.D.	N.D.	N.D.	N.D.	N.D.		
Trans-1, 3-Dichloropro	pene N.D.	N.D.	N.D.	N.D.	N.D.		
Cis-1, 3-Dichloroproper	ne N.D.	N.D.	N.D.	N.D.	N.D.		
1,1,2-Trichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Tetrachloroethene	N.D.	N.D.	N.D.	N.D.	N.D.		
Dibromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.		
Chlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.		
Bromoform	N.D.	N.D.	N.D.	N.D.	N.D.		
1,1,2,2-tetrachloroethan	ie N.D.	N.D.	N.D.	N.D.	N.D.		
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.		
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.		
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.		
Freon 113	N.D.	N.D.	N.D.	N.D.	N.D.		
				N.D.= no	n-detect		
TPH-d= total petroleum	hydrocarbons	as diesel		ppb= part	ts per billion		
TPH-g= total petroleum	hydrocarbons	as gasoline	•	ppm=part	ts per million		
B-T-E-X= benzene, tolt	uene, ethyl ben	zene, and to	otal xylenes	All soil sampling done on 9/13-14/93.			

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1 Part of the second seco	A CHINA CAUS	any of that	Many Manual	an incourts	
Wontor 1121Ed	UPHcg.	Benzen	a doluence anb	3 1 <u>911</u> 21182	nzene lotal Xylenes
MW-5 ND	ND	ND	N D	ND	N D
MW-6 ND	ND.	ND	N.D.	ND	N.D.
MW 7 ND	N.D.	N.D.	N.D.	ND	N.D.
MW 9 ND	ND.	ND.	N.D.	ND.	N.D.
MW 0 ND	N.D.	N.D.	N.D.	N.D.	N.D.
MW-9 (N.D.	N.D.	IN.D.	N.D.	IN.D.	N.D.
Compound	MW-5	MW-6	MW-7	MW-8	MW-9
Name	dad	ppb	opb	ppb	ppb
Chloromethane	N.D.	N.D.	N.D.	N.D.	N.D.
Vinyl Chloride	N.D.	N.D.	N.D.	N.D.	N.D.
Bromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.
Chloroethane	N.D.	N.D.	N.D.	N.D.	N.D.
Trichlorofluoromethane	N.D.	N.D.	N.D.	N.D.	N.D.
1. 1-Dichloroethene	N.D.	N.D.	N.D.	N.D.	N.D.
Methylene Chloride	ND	N.D.	N.D.	N.D.	ND
1. 2-Dichloroethene (Trans)	N.D.	N.D.	N.D.	N.D.	N.D.
1. 2-Dichloroethene (Cis)	N.D.	N.D.	N.D.	N.D.	N.D.
1. 1-Dichloroethane	N.D.	ND	N.D.	N.D.	N.D.
Chloroform	ND	ND	ND	N.D.	N.D.
1.1.1- Trichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.
Carbon Tetrachloride	ND.	N D	N.D.	N.D.	N.D.
1. 2-Dichloroethane	ND	ND	N.D.	N.D.	N.D.
Trichloroethene	ND.	ND	ND	N.D.	N D.
1. 2-Dichloropropane	ND	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	ND	ND	ND	N.D.	N.D.
2-chloroethylvinylether	N.D.	N.D.	Ň.D.	N.D.	N.D.
Trans-1, 3-Dichloropropene	ND	ND	ND	N.D.	N.D.
Cis-1 3-Dichloropropene	N D	ND	N.D.	N.D.	N.D.
1 1 2-Trichloroethane	ND	ND	N.D.	N.D.	N.D.
Tetrachloroethene	ND	N.D	N.D.	N.D.	N.D.
Dibromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	N.D	N.D	N.Đ.	N.D.	N.D.
Bromoform	ND	ND	ND	N.D.	N.D.
1.1.2.2-tetrachloroethane	N D	N D	ND	N.D.	N.D.
1.3-Dichlorobenzene	N.D	N.D	ND	N.D.	N.D.
1.4-Dichlorobenzene	N.D	N.D	N.D.	N.D.	N.D.
1.2-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.
Freon 113	N.D.	N.D.	N.D.	N.D.	N.D.
				N.D.= no	on-detect
TPH-d= total petroleum hvdr	ocarbons	as diesel		ppb= par	rts per billion
TPH-g= total petroleum hvdr	ocarbons	as gasoline		ppm=pa	rts per million
B-T-E-X= benzene, toluene,	ethyl ben	zene, and tot	al xylenes	All wate	r sampling done on 9/28/93.

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Table 16 Summary of Water Analytical Results















PID (ppm) **GRAPHIC LOG** DESCRIPTION 40 40 Sandy gravel, some clay (GC) 2° sch 40 slotted PVC section with .020° slot screen 0 LS#3 sand 42 42 DEPTH BELOW GROUND SURFACE (FEET) 44 44 Sand, clay, rocky gravels (GC) 0 46 46 48 48 All sand, gravel (GP) End Cap 50 50 Boring terminated, 50' 2" 8" 33 0 52 52 54 54 blows Final Page Boring Log and Well Completion Details MONITOR EXPLANATION MW-9 Contacts WELL ▼ Water level during drilling Solid where certain Water level in completed well Dotted where approximate Location of recovered drill sample 9 — — — Dashed where uncertain One Eastmont Mall Oakland, California '/////// Hachured where gradational Location of sample sealed for chemical analysis Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary est K Sieve sample ARTESIAN ENVIRONMENTAL CONSULTANTS 3175 KERNER BOULEVARD, SUITE E. SAN RAFAEL CALIFORNIA 94901 (415) 257-4801 NR No recovery Grab sample 110-01-01

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TABLE **7**

CUMULATIVE GROUNDWATER ELEVATION MEASUREMENTS

Eastmont Mall Oakland, California

October 1996

		The second se		
+ 42.07`	9-28-93	35.25°	6.82'	West
	12-29-93	36.10°	5.97'	0.007 ft/ft West
	10-19-95	30.10°	11.97'	0.005 ft/ft West
	3-6-96	29.40°	12.67'	0.004 ft/ft Northwest
	6-4-96	26.55°	15.52'	0.004 ft/ft Northwest
	9-30-96	30.10°	[1.97'	0.002 ft/ft South
+ 43.35`	9-28-93	36.85*	6.50°	West
	12-29-93	37.15*	6.20°	0.007 ft/ft West
	10-19-95	31.26*	12.09°	0.005 ft/ft West
	3-6-96	30.17*	13.18°	0.004 ft/ft Northwest
	6-4-96	28.00*	15.38°	0.004 ft/ft Northwest
	9-30-96	27.12*	16.23°	0.002 ft/ft South
+ 44.37	9-28-93	33.42*	10.95*	West
	12-29-93	34.25*	10.12*	0.007 ft/ft West
	10-19-95	28.78*	15.59*	0.005 ft/ft West
	3-6-96	28.97*	15.40*	0.004 ft/ft Northwest
	6-4-96	26.84*	17.53*	0.004 ft/ft Northwest
	9-30-96	27.96*	16.41*	0.002 ft/ft South
+ 44.90'	9-28-93	32.10°	12.80°	West
	12-29-93	32.75°	12.15°	0.007 ft/ft West
	10-19-95	28.95°	15.95°	0.005 ft/ft West
	3-6-96	28.80°	16.10°	0.004 ft/ft Northwest
	6-4-96	26.92°	17.98°	0.004 ft/ft Northwest
	9-30-96	28.95°	15.95°	0.002 ft/ft South
+ 44.18*	9-28-93	33.00°	11.18'	West
	12-29-93	33.97°	10.21'	0.007 ft/ft West
	10-19-95	29.18°	15.00'	0.005 ft/ft West
	3-6-96	28.09°	16.09'	0.004 ft/ft Northwest
	6-4-96	26.01°	18.17'	0.004 ft/ft Northwest
	9-30-96	29.02°	15.16'	0.002 ft/ft South
	+ 43.35` + 44.37` + 44.90` + 44.18`	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

TABLE #8

CUMULATIVE GROUNDWATER ANALYTICAL RESULTS

Eastmont Mall Oakland, California

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October 1996

Well Number	Sampling Date	'ТРН-д	² Benzene	² Toluene	²Ethyl- Benzene	² Xylene	³ Naphthalene Benzo(a)Pyrene	⁴ Volatile Organic Compounds
MW-5	12-29-93 10-19-95 3-6-96 6-4-96 9-30-96	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ns ND ns ns ns	ND ND ns ns
MW-6	12-29-93 10-19-95 3-6-96 6-4-96 9-30-96	73 ND ND ND ND	I3 ND ND ND ND	ND ND ND ND ND	1.5 ND ND ND ND	ND ND ND ND ND	ns ND ns ns ns	ND TCE - 1.4 ND ND ND
MW-7	12-29-93 10-19-95 3-6-96 6-4-96 9-30-96	78 ND ND ND ND	I5 ND ND ND ND	ND ND ND ND ND	1.7 ND ND ND ND	ND ND ND ND	ns ND ns ns ns	ND ND ns ns
MW-8	12-29-93 10-19-95 3-6-96 6-4-96 9-30-96	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ns ND ns ns ns	ND ND ns ns
MW-9	12-29-93 10-19-95 3-6-96 6-4-96 9-30-96	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	- ns ND ns ns ns	ND ND ns ns ns

'TPH-g, TPH-d, TPH-mo are equivalent to Total Petroleum Hydrocarbons as gasoline, diesel and motor oil, respectively and analyzed by EPA method 8015(m).

Benzene, toluene, ethylbenzene, and xylene (BTEX) are volatile organic compounds found in fuels and analyzed by EPA method 8020. 1

Benzo(a)pyrene and Naphalene compounds are analyzed by EPA method 8010.

Volatile organic compounds are analyzed by EPA method 8010.



Table 9 California Laboratory Services

SURROGATE

Analysis Report: Halogenated Volatile Organics, EPA Method 8010 Purge and Trap, EPA Method 5030

Client: AllWest Environmental One Sutter Street Ste 600 San Francisco, CA 94104

Project: Eastmont Sub

Date Sampled:	10/30/95
Date Received:	10/31/95
Date Extracted:	11/01/95
Date Analyzed:	11/01/95
Date Reported:	11/02/95
Client ID No.:	B-1-6.0'

Project No.:	95278.23
Contact:	Keith Craig
Phone:	(415)391-2510
Lab Contact:	John Arndt
Job No.:	800651
COC Log No.:	13269
Lab ID No.:	N0651-1A
Batch No.:	17016
Matrix:	SOIL

Analyte	CAS No.	Sເ (າ	ırr Conc. ıg/kg)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	1(00	97
	Sample: B-1-6.0'			
Analyte	CAS No.	Results (ug/kg)	Rep. Limit (ug/kg)	Dilution (factor)
Bromodichloromethane	75-27-4	ND	5.0	1.0
Bromoform	75-25-2	ND	5.0	1.0
Bromomethane	74-83-9	ND	5.0	1.0
Carbon tetrachloride	56-23-5	ND	5.0	1.0
Chlorobenzene	108-90-7	ND	5.0	1.0
Chloroethane	75~00-3	ND	5.0	1.0
2-Chloroethyl vinyl ether	110-75-8	ND	5.0	1.0
Chloroform	67-66-3	ND	5.0	1.0
Chloromethane	74-87-3	ND	5.0	1.0
Dibromochloromethane	124-48-1	ND	5.0	1.0
1,2-Dichlorobenzene	95-50-1	ND	5.0	1.0
1,3-Dichlorobenzene	541-73-1	ND	5.0	1.0
1,4-Dichlorobenzene	106-46-7	UN ND	5.0	1.0
Dichlorodifluoromethane	75-71-8	ND	5.0	1.0
1,1-Dichloroethane	75-34-3	ND	5.0	1.0
1,2-Dichloroethane	107-06-2	ND	5.0	1.0
1,1-Dichloroethene	75-35-4	UN MD	5.0	1.0
1,2-Dichloroethene, total	540-59-0	ND	5.0	1.0
1,2-Dichloropropane	78-87-5	ND	5.0	1.0
cis-1,3-Dichloropropene	10061-01-5		5.0	1.0
trans-1,3-Dichloropropene	10061-02-0		5.0	1.0
Methylene chloride	75-09-2	ND	5.0	1.0
1,1,2,2-Tetrachloroethane	/9~34~5	ND	5.0	1.0
Tetrachloroethene			5.0	1.0
1,1,1-Trichloroethane	11-22-0	UVD D	5.0	1 0
1,1,2-Trichloroethane	79-00-5		5.V 6 0	1.0
Trichloroethene	79-01-6	UM UM	5.0 E 0	1 0
Trichlorotluoromethane			5.0	1 0
1,1,2-Trichloro-1,2,2-trilluoroetha Vinyl chloride	75-01-4	ND	5.0	1.0

ND = Not detected at or above indicated Reporting Limit

CA DOWS ELAP Accreditation/Registration Number 1231

Client: AllWest Environmental One Sutter Street Ste 600 San Francisco, CA 94104	Proje C	ct No.: S ontact: H Phone:	95278.23 Keith Craig (415)391-2510	
Project: Eastmont Sub Date Sampled: 10/30/95	Lab C J COC L	ontact: d ob No.: 0 og No.:	John Arndt 300651 13269	
Date Received: 10/31/95 Date Extracted: 11/01/95 Date Analyzed: 11/01/95 Date Reported: 11/02/95 Client ID No.: B-1-10.5	Lab Bat	ID No.: 1 ch No.: 2 Matrix: 5	N0651-2A 17016 SOIL	
SI	JRROGATE			
Analyte	CAS No.	S	Surr Conc. (ug/kg)	Surro Recov (perc
o-Chlorotoluene	95-49-8		100	97
Samp.	Ie: B-1-10.5	Results	Rep Limit	Dilut
Analyte	CAS No.	(ug/kg)	(ug/kg)	(fact
Bromodichloromethane Bromoform	75-27-4 75-25-2	ND ND	5.0 5.0	1.0 1.0
Bromomethane	74-83-9	ND	5.0	1.0
Chlorobenzene	108-90-7	ND	5.0	1.0 1.0
Chloroethane	75-00-3	ND	5.0	1.0
Chloroform	67-66-3	ND	5.0	1.0
Chloromethane	74-87-3	ND	5.0	1.0
Dibromochloromethane	124-48-1 95-50-1	ND ND	5.0	1.0 1.0
1,3-Dichlorobenzene	541-73-1	ND	5.0	1.0
1,4-Dichlorobenzene Dichlorodifluoromethane	106-46-7 75-71-8	ND ND	5.0	1.0
1,1-Dichloroethane	75-34-3	ND	5.0	1.0
1,2-Dichloroethane	107-06-2	ND ND	5.0	1.0
1,2-Dichloroethene, total	540-59-0	ND	5.0	1.0
1,2-Dichloropropane	78-87-5	ND ND	5.0 -	1.0
trans-1,3-Dichloropropene	10061-02-6	ND	5.0	1.0
Methylene chloride	75-09-2	ND	5.0	1.0
Tetrachloroethene	127-18-4	ND	5.0	1.0
1,1,1-Trichloroethane	71-55-6	ND ND	5.0	1.0
Trichloroethene	79-01-6	ND	5.0	1.0
Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Vinyl chloride	75-69-4 76-13-1 75-01-4	ND ND ND	5.0 5.0 5.0	1.0 1.0 1.0
ND - Not detacted at an above indicated	Reporting Li	imit		

CA DOWS FLAP Accreditation/Registration Number 1233

California Laboratory Services

Analysis Report: Halogenated Volatile Organics, EPA Method 8010 Purge and Trap, EPA Method 5030

Client: AllWes	t Environmental	Project No.:	95278.23
One Su	tter Street Ste 600	Contact:	Keith Craig
San Fr	ancisco, CA 94104	Phone:	(415)391-2510
Project: Eastmo Date Sampled: Date Received: Date Extracted: Date Analyzed: Date Reported: Client ID No.:	nt Sub 10/30/95 11/01/95 11/01/95 11/02/95 B-1-46.0	Lab Contact: Job No.; COC Log No.; Lab ID No.; Batch No.; Matrix;	John Arndt 800651 13269 N0651-8A 17016 SOIL

	SURROGATE			
Analyte	CAS No.	ຽນ (ບ	urr Conc. ag/kg)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	10	00	101
	Sample: B-1-46.0			
		Results	Rep. Limit (ug/kg)	Dilution (factor)
Analyte	CAS NO.	(ug/xg/	(~9,9,	
Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloromethane Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene Dichlorodifluoromethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethene 1,2-Dichloroethene 1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Methylene chloride 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroe	75 - 27 - 4 $75 - 25 - 2$ $74 - 83 - 9$ $56 - 23 - 5$ $108 - 90 - 7$ $75 - 00 - 3$ $110 - 75 - 8$ $67 - 66 - 3$ $74 - 87 - 3$ $124 - 48 - 1$ $95 - 50 - 1$ $541 - 73 - 1$ $106 - 46 - 7$ $75 - 71 - 8$ $75 - 34 - 3$ $107 - 06 - 2$ $75 - 35 - 4$ $540 - 59 - 0$ $78 - 87 - 5$ $10061 - 01 - 5$ $10061 - 02 - 6$ $75 - 09 - 2$ $79 - 34 - 5$ $127 - 18 - 4$ $71 - 55 - 6$ $79 - 00 - 5$ $79 - 01 - 6$ $75 - 69 - 4$ thane $76 - 13 - 1$	ND ND ND ND ND ND ND ND ND ND ND ND ND N	5.000000000000000000000000000000000000	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

ND = Not detected at or above indicated Reporting Limit

CA DOIS ELAP Accreditation/Registration Number 1233

California Laboratory Services

Analysis Report: Halogenated Volatile Organics, EPA Method 8010 Purge and Trap, EPA Method 5030

Client: AllWest Environmental One Sutter Street Ste 600 San Francisco, CA 94104

Project: Eastmont Sub

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Date Sampled: 10/30/95 Date Received: 10/31/95 Date Extracted: 11/01/95 Date Analyzed: 11/01/95 Date Reported: 11/02/95 Client ID No.: B-2-6.0'

Project No.:	95278.23
Contact:	Keith Craig
Phone:	(415)391-2510
Lab Contact:	John Arndt
Job No.:	800651
COC Log No.:	13269
Lab ID No.:	N0651-9A
Batch No.:	17016
Matrix:	SOIL

SURROGATE	

.

Analyte	CAS No.	S1 (1	urr Conc. ug/kg)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	10	00	104
	ample: B-2-6.0'			
Analyte	CAS No.	Results (ug/kg)	Rep. Limit (ug/kg)	Dilution (factor)
Bromodichloromethane	75-27-4	ND	5.0	1.0
Bromoform	75-25-2	ND	5.0	1.0
Bromomethane	74-83-9	ND	5.0	1.0
Carbon tetrachloride	56-23-5	ND	5.0	1.0
Chlorobenzene	108-90-7	ND	5.0	1.0
Chloroethane	75-00-3	ND	5.0	1.0
2-Chloroethyl vinyl ether	110-75-8	ND	5.0	1.0
Chloroform	67-66-3	ND	5-0	1.0
Chloromethane	74-87-3	ND	5.0	1.0
Dibromochloromethane	124-48-1	ND	5.0	10
1,2-Dichlorobenzene	95-50-1	ND	5.0	1.0
1,3-Dichlorobenzene	541-73-1	ND	5.0	1.0
1,4-Dichlorobenzene	106-46-7	ND	5.0	1.0
Dichlorodifluoromethane	75-71-8	ND	5.0	1.0
1, 1-Dichloroethane	75-34-3	ND	5.0	1.0
1,2-Dichloroethane	107-06-2	ND	5.0	1.0
1,1-Dichloroethene	75-35-4	ND	5.0	1.0
1,2-Dichloroethene, total	540-59-0	ND	5.0	1.0
1,2-Dichloropropane	78-87-5	ND	5.0 -	1.0
Cls-1,3-Dichloropropene	10061-01-5	ND	5.0	1.0
crans-1,3-Dichloropropene	10061-02-6	ND	5.0	1.0
Methylene chloride	75-09-2	ND	5.0	1.0
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.0	1.0
Tetrachioroethene	127-18-4	ND	5,0	1.0
1, 1, 1-Trichloroethane	71-55-6	ND	5.0	1.0
1,1,2-Trichloroethane	79-00-5	ND	5,0	1.0
Trichloroethene	79-01-6	ND	5.0	1.0
Trichlorofluoromethane	75-69-4	ND	5.0	1.0
1,1,2-Trichloro-1,2,2-trifluoroethan	e 76-13-1	ND	5,0	1.0
vinyi chloride	75-01-4	ND	5.0	1.0

ND = Not detected at or above indicated Reporting Limit

CA DOWS SLAP Accreditation/Registration Number 1233

California Laboratory Services

Analysis Report: Halogenated Volatile Organics, EPA Method 8010 Purge and Trap, EPA Method 5030

Client: AllWest Environmental One Sutter Street Ste 600 San Francisco, CA 94104

Project: Eastmont Sub

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Date Sampled: 10/30/95 Date Received: 10/31/95 Date Extracted: 11/01/95 Date Analyzed: 11/01/95 Date Reported: 11/02/95 Client ID No.: B-2-10.5

Project No.:	95278.23
Contact:	Keith Craig
Phone:	(415)391-2510
Lab Contact:	John Arndt
Job No.:	800651
COC Log No.:	13269
Lab ID No.:	N0651-10A
Batch No.:	17016
Matrix:	SOIL

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SURROGATE

Analyte	CAS No.	Su (ບ	err Conc. Ig/kg)	Surrogate Recovery (percent)	
o-Chlorotoluene	95-49-8	10	102		
	Sample: B-2-10.5				
		Results	Rep. Limit	Dilution	
Analyte	CAS NO.	(ug/kg)	(ug/kg)	(factor)	
Bromodichloromethane	75-27-4	ND	5.0	1.0	
Bromoform	75-25-2	ND	5.0	1.0	
Bromomethane	74-83-9	ND	5.0	1.0	
Carbon tetrachloride	56-23-5	ND	5.0	10	
Chlorobenzene	108-90-7	ND	5.0	1.0	
Chloroethane	75-00-3	ND	5.0	1.0	
2-Chloroethyl vinyl ether	110-75-8	ND	5.0	1.0	
Chloroform	67-66-3	ND	5.0	1.0	
Chloromethane	74-87-3	ND	5.0	1.0	
Dibromochioromethane		ND	5.0	1.0	
1,2-Dichloropenzene	22~20-T	ND	5.0	1.0	
1,3-Dichlorobenzene	D41-73-1 106 46 7	ND	5.0	1.0	
L,4-DICHIOFODEHZene Digblomediflueromethane		ND	5.0	1.0	
1 l Dighloroothano	75-71-0	NTD	5.0	1.0	
1.2-Dichloroethane	107-06-2	ND	5.0	1.0	
1 1-Dichloroothene	75-35-4		5.0	1.0	
1.2-Dichloroethene total	540-59-0	ND	5.0	1 0	
1 2-Dichloropropage	78-87-5	ND	5.0 4	1.0	
cis-1 3-Dichloropropene	10061-01-5	ND	5.0	1 0	
trans-1.3-Dichloropropene	10061-02-6	ND	5.0	1 0	
Methylene chloride	75-09-2	ND	5 0	1 0	
1.1.2.2-Tetrachloroethane	79-34-5	ND	5.0	10	
Tetrachloroethene	127-18-4	ND	5.0	1.0	
1,1,1-Trichloroethane	71-55-6	ND	5.0	1.0	
1,1,2-Trichloroethane	79-00-5	ND	5.0	1.0	
Trichloroethene	79-01-6	ND	5.0	1.0	
Trichlorofluoromethane	75-69-4	ND	5.0	1.0	
1,1,2-Trichloro-1,2,2-trifluoroetha	ne 76-13-1	ND	5.0	1.0	
Vinyl chloride	75-01-4	ND	5.0	1.0	

ND = Not detected at or above indicated Reporting Limit

CA DOHS ELAP Accreditation/Registration Number 1233

cont. Table 9

California Laboratory Services

Analysis Report: Halogenated Volatile Organics, EPA Method 8010 Purge and Trap, EPA Method 5030

Client: AllWest Environmental One Sutter Street Ste 600 San Francisco, CA 94104

Project: Eastmont Sub

Date Sampled: 10/30/95 Date Received: 10/31/95 Date Extracted: 11/01/95 Date Analyzed: 11/01/95 Date Reported: 11/02/95 Client ID No.: B-2-31.0

Project No.:	95278.23
Contact:	Keith Craig
Phone:	(415)391-2510
Lab Contact:	John Arndt
Job No.:	800651
COC Log No.:	13269
Lab ID No.:	N0651–14A
Batch No.:	17016
Matrix:	SOIL

	SURROGATE				
Analyte	CAS No.	S (urr Conc. ug/kg)	Surrogate Recovery (percent)	
o-Chlorotoluene	95-49-8	100		101	
	Sample: B-2-31.0				
		Peculte	Ren Limit	Dilution	
Analyte	CAS No.	(ug/kg)	(ug/kg)	(factor)	
Bromodichloromethane	75-27-4 75-25-2	ND ND	5.0 5.0	1.0	
Bromomethane	74-83-9	ND	5.0	1.0	
Carbon tetrachloride	56-23-5		5.0	1.0	
Chlorobenzene	75-00-3	ND	5.0	1.0	
Chloroethane	110-75-8	ND	5.0	1.0	
Chloroform	67-66-3	ND	5.0	1.0	
Chloromethane	74-87-3	ND	5.0	1.0	
Dibromochloromethane	124-48-1	ND	5.0	1.0	
1.2-Dichlorobenzene	95-50-1	ND	5.0	1.0	
1.3-Dichlorobenzene	541-73-1	ND	5.0	1.0	
1,4-Dichlorobenzene	106-46-7	ND	5.0	1.0	
Dichlorodifluoromethane	75-71-8	ЦИ	5.0	1.0	
1,1-Dichloroethane	75-34-3	ND	5.0	1.0	
1,2-Dichloroethane	107-06-2	ND	5.0	1 0	
1,1-Dichloroethene	75-35-4	ND	5.0	1 0	
1,2-Dichloroethene, total	70-07-5		5.0	1.0	
1,2-Dichloropropane	10061-01-5	ND	5.0-	1.0	
cis-1,3-Dichloropropene	10061 - 02 - 6	ND	5.0	1.0	
trans-1,3-Dichloropropene	75-09-2	ND	5.0	1.0	
Methylene chioride	79-34-5	ND	5.0	1.0	
T, T, Z, Z-TECTACHIOTOCCHARC Tetrachloroethene	127-18-4	ND	5.0	1.0	
1 1 1_Trichloroethane	71-55-6	ND	5.0	1.0	
1 1 2-Trichloroethane	79-00-5	ND	5.0	1.0	
Trichloroethene	79-01-6	ND	5.0	1.0	
Trichlorofluoromethane	75-69-4	ND	5.0	1.0	
1,1,2-Trichloro-1,2,2-trifluoroeth	ane 76-13-1	ND	5.0	1.0	
Vinvl chloride	75-01-4	ND	5.0	1.0	

ND = Not detected at or above indicated Reporting Limit

CA DORS ELAP Accreditation/Registration Number 1233







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Table 10. Summary of Soil Analytical Results

Project Site: Waste Oil UST Removal and Soil Remediation One Eastmont Mall Oakland, California Artesian Environmental Job # 1695 3100 Kerner Blvd., Suite C San Rafael, CA 94901 (415) 257-4801

Sample Number		Date Sampled:	O&G T ppm	O&GN-P ppm	TPH-d ppm	TPH-g-	Benzene ppb	Toluene ppb	Ethyl Benzene ppb	Xylenes ppb
S-1	Tank pit sample	10/23/95	410	330	160	ND	ND	ND	ND	ND
SS-1	Soil stockpile	10/23/95	11,110	8500	23,000	220	ND	360	1,700	9,500
S-2	Tank pit/overex. sample	12/19/95	1,500	1,300	ND*4	NA	NA	NA	NA	NA
Compound Name			Cd ppm	Cr ppm	Ph ppm	Ni ppm	Zn- ppm	Creosote ppm	8010/8270 ppb	Other
S-t	Tank pit sample	10/23/95	ND	48	2.7	71	32	N.D.	N.D.	*2
SS-1	Soil stockpile	10/23/95	ND	38	12	39	30	N.D.	*1	*3
S-2	Tank pit/overex. sample	12/19/95	NA	NA	NA	NA	NA	NA	NA	NA
NOTES:										
* 1= 2.2 ppb cis-1,2-Dichloroethene, 2.3 ppb tetrachloroethene										
$1^{-2} = pr = 0.3$, Suffice = 35, C	Lyanide= ND Cussida - ND: Statusiat	R. 16 107314 - 1 4								
$13 \pm pn = 7.9$, Sumue = 02 pp ND \$\$= ND for diamal 610.	m, Cyanide= ND; Flashpoint	/ignitability=>14	O degrees P							
nnb- parts per hillion	ppui for TPH-motor on by M	ethod 1418015								
ppo= parts per onnon										
ppin= parts per nintion										
NAT DOL ANALYZEU; NUT DELOW REPORTING LEVEL (NON-DELECT)										
$\nabla \alpha \cup = \text{ on and glease, } x = \text{total, } x + 1 = \text{non-polar}$										
TPH-0= total petroleum hydrocardons as diesel										
1 PH-g= total petroleum hydrocarbons as gasoline										
B-T-E-X= benzene, toluene, ethyl benzene, and total xylenes										


TABLE 11.ANALYTICAL LABORATORY RESULTSTHE EASTMONT MALL7100 BANCROFT AVENUEOAKLAND, CALIFORNIA

SOIL	教送 了的1000		
Sample	Sample	TPH-MO	Oil & Grease
Number	Date	mg/Kg	mg/Kg
B1 15'	4/10/96	<50	<50
B1 25'	4/10/96	<50	<50
B2 15'	4/10/96	<50	<50
B2 30'	4/10/96	<50	<50
B3 15'	4/10/96	<50	<50
B3 35'	4/10/96	<50	<50
GROUNDWATER	的。我们的这种化学		
Sample	Sample	TPH-MO	Oil & Grease
Number	Date	ug/L	mg/L
B1 AQ	4/10/96	4300	<1
B2 AQ	4/10/96	<500	<1
B3 AQ	4/10/96	<500	<1

Notes:

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<50 = Analyte concentration below indicated laboratory reporting limit -TPH-MO = Total Petroleum Hydrocarbons as Motor Oil mg/Kg = Milligrams per Kilogram, equivalent to parts per million ug/L = Milligrams per Liter, equivalent to parts per billion mg/L = Milligrams per Liter, equivalent to parts per million See laboratory report for analytical methods

1								10h and 1 of		
1		MA		og of Bori	ng:	B-1		Sheet 1 OF		
		and	P	roject Nar	ne:	Eastmor	Eastmont Sub			
1917				rojectNur	nber:	95278.2	3			
			31 11. Inc. D	rilling Dat	e:	10/30/9	5 ••			
TP				oils Explo	ration Se	rvices	Sampler: 2" Modified California			
	rilling	Contrac n	ιοι. S [.] C	ME - 55			Hammer: 140 lb. slide hammer			
T	Auger.	9.	6'	'Auger			Logged By: Keith Craig			
	Blow	OVM Reading	Sample Interval	Depth in Feet	Well Profile	USCS Code	Soil Description			
	Ų	 		-			2" asphalt with 4" of baserock			
				1 - - 2 - -			dark brown sandy clay (cl); soft to firm, moist;			
				3 -			changes to moderate brown clay at 3.5';			
				4 -		CL				
-	5 6	ND	Π	5 -						
	12			6 -						
11				-	\$		increase in sand content at 7.5';			
3 8	;			-						
							moderate brown clayey gravelly sand (sc) with sand	y gravelly clay		
10	6 10	ND		11 -		SC	interbed; moist to wet, toose, fine to coarse grained.	, , , ,		
	F- 12			12 -						
1				15 -						
	5	ND		16 -						
	1. 1	5		17 -			moderate brown silty clay (cl):			
	j			18 -		CL	stiff, wet, mottled orange;			
1	T'			10 -						
				20 -						
I	8	ND		21 -						
-	3				1			Drawn By:		
	Notes							MJ Cunninghar Reviewed Bv		
-	1							I.Ching		
1				A			an on the state of the second of the second of the state of the	20 - O		

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	PUN .		og of Bori	ng:	B-1		Sheet 2 of 3
Ⅲ, ≷	E ANNS	P	roject Nar	ne:	Eastmor	(.	
	146	et P	roject Nur	nber:	95278.2	3	
IWest Er	Stremnoriva	SI D	rilling Dat	e:	10/30/9	5 • •	
Prilling Prill Ri Auger:	g:	ctor: So Cl 6"	oils Explo ME - 55 Auger	ration Se	rvices	Sampler: 2" Modified California Hammer: 140 lb. slide hammer Logged By: Keith Craig	
Blow	OVM Reading	Sample Interval	Depth in Feet	Well Profile	USCS Code	Soil Description	
	ND		21 - 22 - -		CL	moderate brown silty clay (cl); stiff, wet, mottled orange;	
0 12 12	ND		23 - 24 - 25 - 26 - 27 - 28 - 28 - 29 -		CL	clay becomes firm from 28.0' to 45.0';	
9 9 9	ND		$ \begin{array}{c} 23 \\ 30 \\ - \\ 31 \\ - \\ 32 \\ - \\ 33 \\ - \\ 33 \\ - \\ 33 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$			÷	
5 8 8	ND		34 - 35 - 36 - 37 - 38 - 38 - 39 - 40 -		CL	no changes;	
Notes:			41 -				Drawn By: MJ Cunningh: Reviewed By: L Ching

	MA		og of Borir	ng:	B-1		Sheet 3
<u> </u>	Inns	P	roject Nan	ne:	Eastmo	ntSub	
A 11	11/2	P	rojectNun	nber:	95278.2	23	
All	Me	SI C)rilling Dat	e:	10/30/9	5	
				tion Se	nvicos	Sampler: 2" Modified California	
Prilling	Contrac	tor: S C	ME - 55	allonse	IVICES	Hammer: 140 lb. slide hammer	
Auger:	y.	6'	"Auger			Logged By: Keith Craig	
Blow	OVM Reading	Sample Interval	Depth in Feet	Well Profile	USCS Code	Soil Description	
			- 41 - 42 - 43 -	-	CL	moderate brown silty clay (cl); stiff, wet;	
0 9 12	ND		44 - 45 - 46 -		SW	moderate brown gravelly sand (sw); saturated, toose, well graded, fine to coarse grained	;
			47 - - 48 - - 49 -			groundwater first encountered at 45.3',	
			50 - - 51 - - 52 -				
			53 - - 54 -				
Ţ.			55 -				
			56 -				
			57 -				
			58 -				
			59 -				
			60 -				
ÍNotes E	;		67 ~				Drawn E MJ Cunr Reviewe L Ching

							Sheet 1 of 2		
	In	L	og of Borir	ng:	B-2				
IN	ANT	P	roject Nan	ne:	Eastmont Sub				
	1. La	- P	rojectNun	nber:	95278.2	3			
	Week and the second sec	DI D	rilling Dat	Э:	10/30/95	5 ••			
avvest Cit	Sampler: 2" Modified California								
Drilling Drill Ric	Contract	C	ME - 55			Hammer: 140 lb. slide hammer			
Auger:		6'	'Auger			Logged By: Keith Craig			
Blow	OVM Reading	Sample Interval	Depth in Feet	Well Profile	USCS Code	Soil Description			
			-			2" asphalt with 4" of baserock			
			1 -			dark brown sandy clay (cl); wet_firm:			
			2 -		CL				
			3 -			changes to moderate brown clay at 3.5';			
TT.			4 -						
7	ND		5 -						
. 8			7 -						
			8 -						
			9 -				-		
			10 -						
7	ND		11 -		sw	moderate brown gravelly sand (sw);			
			12 -				<u></u>		
			13 -						
			14 -						
8		П	15 -						
9			16 -						
			17 -		CL	moderate brown silty clay (cl); moist to wet, stiff, mottled orange;			
			18 -						
-			19						
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	10 10	ND		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		SW	moderate brown silty sand (sw); saturated, loose, fine grained; borehole terminated at 31.5'; groundwater first encountered at 30.0';	
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National Environmental Management and Engineering Services

PHASE II LIMITED SUBSURFACE INVESTIGATION REPORT



EASTMONT TOWN CENTER 7200 BANCROFT AVENUE OAKLAND, CALIFORNIA

EBI Project #24-8175

December 22, 2004

Prepared for:

COUNTRYWIDE COMMERCIAL REAL ESTATE FINANCE 4500 Park Granada MS CH-143 CALABASAS, CA 91302

EBI Consulting Four A Street Burlington, MA 01803 Phone: 781.273.2500 Toll Free: 800.786.2346 Fax: 781.273.3311

EBI CONSULTING FOUR A STREET BURLINGTON, MA 01803 800-786-2346 Project #24-8175

PHASE II LIMITED SUBSURFACE INVESTIGATION REPORT

Eastmont Town Center 7200 Bancroft Avenue Oakland, California 94605

December 22, 2004

Prepared for: Countrywide Commercial Real Estate Finance 4500 Park Granada MS CH-143 Calabasas, CA 91302

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December 22, 2004

Mr. Sepp Dobler Countrywide Commercial Real Estate Finance 4500 Park Granada MS CH-143 Calabasas, CA 91302

Subject: Phase II Limited Subsurface Investigation, Eastmont Town Center 7200 Bancroft Avenue, Oakland, California EBI Project #24-8175

Dear Mr. Dobler:

In accordance with our *Proposal for Subsurface Investigation* dated December 3, 2004, EBI Consulting (EBI) is pleased to submit this *Phase II Limited Subsurface Investigation Report (Report)* for the above-referenced property (herein referred to as the Subject Property).

The purpose of this *Report* is to assist *Countrywide Commercial Real Estate Finance* in its underwriting of a proposed mortgage loan on the Subject Property described herein. *Countrywide Commercial Real Estate Finance* and its affiliates (collectively, "CRF"), its successors and assigns, rating agencies and certain investors involved in the Securitization (as defined below) or other disposition, may use and rely upon this *Report* in connection with a planned securitization involving the loan secured by the Property or a whole loan sale or other disposition of the related loan (collectively, the "Securitization"). CRF, at its option, may elect to include selected information contained in the *Report* in the Offering Memorandum or other disclosure materials relating to the Securitization and the Consultant agrees to cooperate in answering questions by any of the above parties in connection with the Securitization. There are no intended or unintended third party beneficiaries to this *Report*, except as expressly stated herein.

The conclusions of this *Report* are based on soil analytical data prepared by Test America Analytical Testing Corporation, soil vapor analytical data prepared by HydroGeoSpectrum (HGS), soil-screening results obtained utilizing a MiniRae Photoionization Detector (PID), and field observations recorded by EBI personnel.

It has been a pleasure to prepare this *Report*. Please contact the undersigned if you have questions about the contents of this *Report* or require further information.

Sincerely,

Put miking

Mr. Richard McKinney RG 6183 Author/Senior Program Director

William 9. Sillians_

Mr. William Gibbons Reviewer/Manager Site Investigation/Remediation

EXECUTIVE SUMMARY

On December 9 and 10, 2004, EBI Consulting (EBI) performed a Phase II Limited Subsurface Investigation at the Subject Property, which included the advancement of four soil borings at the Sparkle Kleen dry cleaner tenant space located at 7000 Bancroft Avenue, and four borings at the site of the former Eastmont Auto hydraulic lifts and oil/water separator at 7250 Bancroft Avenue (1 Eastmont Mall).

Four of the soil samples collected during the advancement of the soil borings at the dry cleaner facility were analyzed for volatile organic compounds (VOCs) by EPA Method 8260. In addition, four soil vapor samples were collected and analyzed for VOCs by GCMS in accordance with California Regional Water Quality Control Board (RWQCB) QA/QC requirements. Five of the soil samples collected during the advancement of the soil borings at the former Eastmont Auto facility were analyzed for total petroleum hydrocarbons diesel range organics and gasoline range organics (TPH/DRO-GRO) and polychlorinated biphenyls (PCBs) by US EPA Methods 8015 and 8082.

Field screening of soil samples obtained from the soil borings was completed using a photoionization detector (PID). Groundwater was not encountered within any of the borings at the Subject Property to the depths investigated. The maximum depth of investigation was approximately 46 feet below ground surface (bgs).

Dry Cleaner

The results of the Limited Subsurface Investigation revealed low concentrations of dry cleaning solvent tetrachloroethene (PCE) and trichloroethylene (TCE) in shallow subsurface soil collected from soil borings advanced adjacent to the dry cleaning unit. These concentrations are less than the regulatory screening concentrations, SF-RWQCB ESLs for PCE and TCE. Trace concentrations of PCE were reported in soil vapor collected from the two interior soil borings. The concentration of PCE in soil vapor decreased in concentration with depth into the subsurface.

Based on these results, EBI is of the opinion that evidence of a significant release at the Subject Property dry cleaner was not identified; therefore, no further intrusive investigations are recommended at this time.

However, as indicated in the Phase I ESA Report (EBI Project #24-2778A), EBI recommends repairing the floor cracks and the installation of secondary containment beneath the dry cleaning unit and waste storage drums. Secondary containment will reduce the potential for an accidental release of dry cleaning solvent to migrate into the subsurface and adversely impact the Subject Property.

Former Eastmont Auto

Results of the analysis of the soil samples collected to address potential impacts from the hydraulic lifts and oil/water separator associated with the former Eastmont Auto revealed no detectable concentrations of TPH-DRO, TPH-GRO or PCBs. Based on these results, EBI is of the opinion that no evidence of a significant release at the Subject Property former Eastmont Auto facility was identified; therefore, no further intrusive investigations are recommended at this time.

1.0 INTRODUCTION

1.1 Purpose

The purpose of the Phase II Limited Subsurface Investigation was to confirm the absence or presence of solvent contamination as a result of dry cleaning operations conducted at the Subject Property from 1995 to the present and potential petroleum hydrocarbon contamination of the subsurface at the location of former hydraulic lift and oil/water separator operations. This *Report* presents an evaluation of the subsurface soil conditions and results of the analysis of soil and soil vapor samples obtained in the vicinity of and within the dry cleaning tenant space and analysis of soil samples obtained in the vicinity of the inactive hydraulic lifts and oil/water separator. Groundwater was not encountered at the maximum 46 feet depth of investigation.

According to EBI's Phase I ESA (EBI Project #24-2778A), Sparkle Cleaners has operated dry cleaning equipment continuously for the last 15 years. The date of the last reported subsurface assessment related to the dry cleaner was 1997. No significant subsurface contamination was reported in proximity to the dry cleaner and based upon the results of the subsurface assessment; the regulatory authority determined no further action was required. However, dry cleaning operations, utilizing tetrachloroethene (PCE) as a dry cleaning solvent, have continued at this location from 1997 to the present. Therefore, EBI could not comment on the condition of the subsurface beneath and in the immediate vicinity of the existing dry cleaner tenant space since 1997. In addition, EBI observed cracks in the concrete flooring adjacent to the dry cleaning unit, some floor staining, and secondary containment beneath the dry cleaner and waste storage containers was absent. Minor spills of PCE have the propensity to result in impact to the subsurface beneath dry cleaner tenant spaces and/or immediately behind the tenant spaces.

Eastmont Auto formerly operated at the southern portion of the existing retail mall building located adjacent and east of the 76 Station retail gasoline station. Eastmont Auto reportedly operated at the mall from the late 1960s to the 1990s. Case closure was granted for the removal of a former waste oil UST at this location. However, EBI did not identify previous subsurface investigation(s) that addressed the potential for a release of hydraulic fluid from the inactive hydraulic lifts located inside the building or potential release of petroleum contaminants from the inactive oil/water separator associated with this former auto service facility. Based on the age of the lifts, there is a potential for the hydraulic oil to have contained polychlorinated biphenyls (PCBs). The potential exists for a release of petroleum hydrocarbons to the subsurface from the historic hydraulic lift and oil/water separator system operations.

1.2 Subject Property Description and Location

The Subject Property is located in Oakland, Alameda County, California and is enclosed by Bancroft Avenue, Foothill Boulevard, Church Street and 73rd Avenue. *Figures 1, 2, and 3* attached to this *Report* depict the Subject Property on a street map, topographic map, and *Site Plan* that shows an approximate layout of the Subject Property and adjacent properties.

The Subject Property is part of the Eastmont Town Center and was reportedly constructed in 1968 to 1972 and consists of a one- and two-story retail mall building with an attached medical arts building (former JC Penney) and a one-story police station building (former Mervyn's department store). The site is approximately 27.53 acres and the net rentable area of the buildings included as part of the Subject Property is approximately 581,517 square feet (Figure 3).

Geology

Oakland and the San Francisco Bay Region lie within the California Coast Range, a complex of mountains and valleys that lie parallel and adjacent to the Pacific Ocean. These ranges are characterized by rock units that have been subjected to extensive fracturing related to movements along the San Andreas and other nearby fault zones. The bedrock is a complex, disrupted assemblage of sedimentary, igneous, and metamorphic rock, generally associated with the Franciscan Formation. The Subject Property area is underlain by Quaternary age deposits of unconsolidated stream alluvium and slope wash, ranging in thickness from ten feet to several hundred feet. The alluvium grades into marine clays and sands toward the San Francisco Bay located approximately 3.5 miles west of the Subject Property.

The Soil Conservation Survey report for Alameda County describes the soils at the Subject Property as Urban Land; thereby rendering statistical soil descriptions infeasible. Previous subsurface investigations at the Subject Property reported clays with some interbedded sands and gravels to 45 feet below surface grade (bsg).

Hydrology/Hydrogeology

No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the Property. The nearest water body is the Arroyo Viejo located approximately 1,300 feet south of the Subject Property.

According to the previous groundwater investigations at the Subject Property, discussed in Section 2.0 of this *Report*, first depth to groundwater under the southern portion of the Subject Property was variable, ranging from 13 to 33 feet bgs with variable flow direction reported from 1992 to 2003 from southwest to northeast. However, the predominant direction of groundwater flow appears to be northerly, ranging from northeast through northwest. Note that groundwater was not encountered in soil borings advanced during this assessment to a maximum depth of 46 feet bgs.

2.0 SUMMARY OF PREVIOUS ENVIRONMENTAL SITE ASSESSMENTS

Refer to the EBI Phase I ESA report for the Subject Property, EBI Project #24-2778, for a complete discussion of previous environmental assessments of the Subject Property. Previous reports relevant to this Phase II assessment are discussed below.

Remedial Action Completion Certification, 1 Eastmont Mall, Oakland, California dated April 16, 1998 by Alameda County Health Care Services. Granted closure for one 500-gallon waste oil tank removed October 23, 1995. This document included a Case Closure Summary that provided the following information:

- In 1916, the site was occupied by the Chevrolet Fisher Body Plant and five USTs were in use that included one 12,000-gallon gasoline, one 12,000-gallon waste oil, one 13,000-gallon fuel oil, one 10,000-gallon kerosene, and one 13,000-gallon oil UST. The plant was demolished in 1965 and the mall was constructed in 1969.
- Subsurface contamination was identified in four areas of the site to include the former JCPenney/ Firestone building; Sparkle Cleaners; BP/Current 76 Station; and Eastmont Auto Center. The 1998 Closure Letter only granted closure for the Sparkle Cleaners and Eastmont Auto Center as the former JCPenney/Firestone building and 76 Station are treated as two separate site cases.
- The results presented in a 1997 report prepared by Envirocon were reiterated and the case closure report summarized that groundwater from wells MW-5 through MW-9 was sampled seven times on a quarterly basis and no hydrocarbon contamination was detected except for very low levels of TPHg, benzene, and TCE in one event. The groundwater flow was stated to be west-northwest. It appeared "that the UST[s] operated by the former auto assembly plant and dry cleaner did not adversely impact the groundwater..."
- Soil contamination was not found beneath the Sparkle Cleaners space in an October 1995 investigation.
- The 500-gallon waste-oil UST was removed from the Eastmont Auto Center in October 1995 and analysis of a soil sample collected from the center of the excavation pit identified elevated TPH as diesel (TPHd) and total oil and gasoline (TOG). Halogenated and semi volatile organic compounds were not detected. An additional one to two feet of soil was excavated from the UST pit and post-excavation sampling and analysis detected up to 1,300 ppm non-polar oil and gas and 610 ppm motor oil remaining in the soil.
- In April 1996, three soil borings were completed near the former waste-oil UST to 40 feet bsg. Soil samples were collected and no hydrocarbons were detected in the soil samples. TPH as motor oil was detected in one out of three groundwater samples at a concentration of 4,300 ppb and the laboratory indicated this contaminant resembled lubricating oil and not motor oil. This contamination appeared to be limited as none was detected in downgradient well MW-9 (approximately 200 feet away) and the County concluded further sampling was not warranted.

3.0 SCOPE OF INVESTIGATION

3.1 Rationale for Work Scope

EBI conducted subsurface investigation activities in the vicinity of the dry cleaner facility to assess subsurface conditions related to the use of dry cleaning solvent (PCE) and from in-ground hydraulic lifts and an oil/water separator associated with the former Eastmont Auto that operated from the 1960s to the 1990s (Figure 3).

3.2 *Exploration Procedures*

3.2.1 Soil Boring Locations

Subsurface utilities were located on the exterior portions of the Subject Property by the respective utility companies or by their utility clearance contractors. The utility locations were identified and clearly marked within an approximate 50-feet radius of planned subsurface activities.

Dry Cleaner

Two soil borings (SV1 and SV2) were completed within the interior of the tenant space in proximity to the dry cleaning equipment and waste storage area, the most likely source of a potential release of dry cleaning solvent to the environment. In addition, one soil boring (SV3) was advanced in the hallway, exterior rear entrance, adjacent to the tenant space and one soil boring (SV4) was advanced in front of this tenant space. *Figure 4A*, *Soil Boring Location Map* shows the general layout of the Subject Property, the locations of the soil borings, tenant facility dry cleaning equipment, and waste storage areas.

A mobile Geoprobe[®] unit was used to advance the exterior soil borings. The interior soil borings were advanced utilizing a limited access Geoprobe[®] unit. Drilling services were provided by HydroGeoSpectrum (HGS). Advancement of the soil borings was limited by equipment refusal in dense soils at depths ranging from 12 feet (SV3) to 25 feet bgs (SV4). Groundwater was not encountered during advancement of any of the soil borings.

Former Eastmont Auto

A total of four exterior soil borings (SV5-SV8) were advanced at the Subject Property in the vicinity of the former Eastmont Auto (*Figure 3*). *Figure 4B, Soil Boring Location Map* shows the locations of the soil borings and the former Eastmont Auto facility. A mobile Geoprobe[®] unit was used to advance the exterior soil borings. Drilling services were provided by HGS.

The exterior soil borings were advanced to depths ranging from 20 feet to 46 feet bgs. The interior of the auto service bays and hydraulic lifts were inaccessible to drilling equipment due to the presence of miscellaneous equipment storage that occupied most of the interior space. Three soil borings were advanced in close proximity to the entrance to the service bays and hydraulic lifts, and oil/water separator (Figure 4B). One soil boring, SV7 Figure 4B, was advanced in an accessible location downgradient of the former automotive service facility in an attempt to collect a "grab" groundwater sample. However, groundwater was not encountered during the advancement of boring SV7 to a maximum depth of 46 feet bgs. Groundwater was not encountered during advancement of any of the soil borings.

3.2.2 Soil Screening and Sampling Methods

Subsurface soil samples were collected for lithologic descriptions and potential laboratory analysis. Soil boring logs with field screening readings are included in Appendix B. Soil samples were collected in polyacetate liners using Geoprobe[®] patented stop-pin tools, by hydraulic installation. Soil samples were collected from discreet depth intervals, typically three feet or five feet below ground surface (bgs) and at five to tenfoot intervals to the termination depth of the soil borings.

The sampling equipment was decontaminated with a water and alconox solution prior to each sampling event. Each of the soil samples was placed into sealed polyethylene bags for approximately 10 minutes and headspace measurements of the soil samples were made in the field for VOCs using the PID instrument. The PID readings should not be interpreted as exact measurements but as useful indications of relative VOC levels in the vapor headspace of soil samples. No detectable VOCs were identified in any of the soil samples screened with the PID.

3.2.3 Soil Vapor Sampling Methods

On December 9, 2004, EBI monitored the installation of soil vapor probes by HGS in three of the four soil borings advanced at the dry cleaners. Two vapor probes were installed in soil boring SV1 at 7 and 17 feet bgs, respectively, and one vapor probe was installed in soil borings SV2 (5 feet bgs) and SV3 (11 feet bgs). Field vapor sample collection from all soil vapor probes was conducted by HGS on December 10, 2004, approximately 24-hours following installation of the vapor probes.

All soil vapor probes were installed by the same methodology following recovery of the soil samples from each boring. A polyethylene tubing (1/4 inch) equipped with an anchor was inserted into the open annulus of the borehole. A small amount of coarse sand was placed into the borehole annulus so as to form a permeable sand pack at depth. The hole was then grouted to the next shallow depth with bentonite slurry formed *in situ* from granular bentonite. A second length of color-coded polyethylene tubing was then inserted to depth, the process was repeated, and the hole then grouted to the surface.

The polyethylene tubing for each soil vapor probe extended to the surface and was connected to a glass-sampling bulb fitted with Teflon stopcocks and a viton rubber sampling port. This bulb was then connected in turn to a vacuum gauge, flowmeter, and portable sampling pump. Initially both stopcocks were closed, and the absence of flow and the presence of a slight vacuum noted. This demonstrated that the sampling train on the far end of the bulb was leak-tight. The first stopcock (pump end) was opened; the absence of flow demonstrates that the sampling bulb itself was leak-tight. The ground end of the bulb was then opened, and a flow of 150 ml/min was maintained for seven to ten purge volumes. During the sampling an open container containing a pentane-soaked kinwipe was exposed to the sampling train. Any trace of pentane detected in the sample would indicate the intrusion of ambient air into the sampling train, invalidating the results of that sample. No such leaks were detected with any of the samples. The stopcocks were then closed (pump end first), and the sample retained in the container. The bulb containing the vapor sample was then spiked with certain chemicals to be analyzed for sample quality assurance and quality control (QA/QC). The sample containers were then delivered to the mobile laboratory for VOC analysis by GCMS.

3.2.4 Laboratory Analytical Methods

The soil samples collected from the dry cleaner were preserved by EPA method 5035. Soil samples were retrieved in polyacetate core liners, subsampled with laboratory supplied coring devices and placed in 40ml VOA vials with preservative, and also placed in laboratory-provided glass jars. The soil samples collected from the Eastmont Auto site were retained in polyacetate core liners or placed in laboratory-provided four-ounce glass jars. Each sample was labeled/logged onto a chain-of-custody form, and placed in a cooler with ice for preservation in accordance with current Federal EPA SW-846 (3rd ed.). After collection, the samples were submitted for analyses to Test America of Nashville, Tennessee, a state certified laboratory. The samples collected to address potential impacts from the dry cleaner were analyzed for VOCs via EPA Method 8260. Soil vapor samples were collected and analyzed by HGS. The analysis of the vapor samples for VOCs was performed with gas chromatography and mass spectrometer (GCMS). The samples collected to address potential impacts from the hydraulic lifts and oil/water separator associated with the former Eastmont Auto were analyzed for total petroleum hydrocarbons-diesel range organics and gasoline range organics (TPH/DRO-GRO) and polychlorinated biphenyls (PCBs) via EPA Methods 8015 and 8082.

4.0 FINDINGS

4.1 Field Observations

In general, soils encountered during boring activities consisted of stiff, Silty CLAY (CH) and moderately stiff SAND (SM) with silt, clay, and some gravel. Groundwater was not encountered to the boring termination depths, which ranged from 12 feet to 46 feet bgs. No staining or discernable odors were detected in any of the soil samples. General soil classifications and field observations are presented on the Soil Boring Logs attached as Appendix B.

4.2 Soil Sample Analysis

Dry Cleaner

Results of the analysis of the soil samples in the area of the dry cleaner for VOCs via EPA Method 8260 revealed the following:

Sample No.	Sample Depth (ft)	РСЕ	TCE	VOC
SV1-5	5	237	ND	ND
SV2-5	5	49.6	18.3	ND
SV3-12	12	ND	ND	ND
SV4-25	25	ND	ND	16.6 (methylene chloride)

SUMMARY OF DRY CLEANER SOIL ANALYTICAL RESULTS (All Results in µg/kg - ppb)

Notes:

ND: Not Detected -- The compound was analyzed for, but was not found to be present at or above the Laboratory Method Detection Limit

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compounds

Methylene chloride is a common laboratory introduced artifact

Results of the analysis of the soil samples collected to address potential impacts from the on-site dry cleaner revealed tetrachloroethene or PCE at concentrations ranging from 49.6 (SV2-5) to 237 (SV1-5) parts per billion (ppb) and trichloroethene or TCE 18.3 ppb (SV2-5). These concentrations are below the Environmental Screening Levels (ESLs) of 250 ppb (PCE) and 730 ppb (TCE) for shallow soils and Commercial/Industrial Land Use. The ESLs (revised 9/4/03) were prepared by the San Francisco Bay Area Regional Water Quality Control Board (RWQCB). In addition, as indicated in the soil vapor results below, the low concentrations of PCE in soil vapor decreased with depth into the subsurface (SV1-17). A copy of the complete analytical report is included in Appendix C.

Former Eastmont Auto

Results of the analysis of the soil samples in the area of the former Eastmont Auto for TPH/DRO-GRO and for PCBs via EPA Methods 8015 and 8082 revealed the following:

SUMMARY OF EASTMONT SOIL ANALYTICAL RESULTS (All Results in µg/kg - ppb)

Sample No.	Sample Depth (ft)	TPH-DRO	TPH-GRO	PCBs
SV5-10	10	ND	ND	ND
SV6-10	10	ND	ND	ND
SV6-26	26	ND	ND	ND
SV7-20	20	ND	ND	ND
SV8-10	10	ND	ND	ND

Notes:

ND: Not Detected -- The compound was analyzed for, but was not found to be present at or above the Laboratory Method Detection Limit

TPH-DRO = Total petroleum hydrocarbons – diesel range organics

TPH-GRO = Total petroleum hydrocarbons – gasoline range organics

PCBs = Polychlorinated biphenyls

Results of the analysis of the soil samples collected to address potential impacts from the hydraulic lifts and oil/water separator associated with the former Eastmont Auto revealed no detectable concentrations of TPH-DRO, TPH-GRO or PCBs. A copy of the complete analytical report is included in Appendix C.

4.3 Soil Vapor Sample Analysis

Results of the analysis of the soil vapor samples collected from the dry cleaner facility for VOCs by GCMS revealed the following:

	$(1 \text{ In Results in } \mu_{\text{B}} D)$									
Sample No.	Sample Depth (ft)	РСЕ	VOC							
SV1-7	7	19	<0.5							
SV1-17	17	3.2	<0.5							
SV2-5	5	1.5	<0.5							
SV3-11	11	<0.5	<0.5							

SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS (All Results in µg/L)

Notes:

 $<5 \mu g/L$, laboratory detection limit, indicates not detected at or above the lab detection limit

PCE = tetrachloroethene

VOC = volatile organic compounds

Results of the analysis of the soil vapor samples collected during the investigation revealed low concentrations of PCE in three of the four vapor samples analyzed for VOCs. The remaining vapor sample was non-detect for VOCs, including PCE. The concentrations of PCE ranged from 1.5 to 19 μ g/L. The highest reported concentrations of PCE in soil vapor, 19 μ g/L was reported from interior soil boring SV1 located in the area of the dry cleaning machine. The complete soil vapor analytical report is presented in Appendix D.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Dry Cleaner

The results of the Limited Subsurface Investigation revealed low concentrations of dry cleaning solvent PCE (49.6 to 237 ppb) and TCE (18.3 ppb) in shallow subsurface soil collected from soil borings advanced adjacent to the dry cleaning unit. These concentrations are less than the regulatory screening concentrations, SF-RWQCB ESLs for PCE (250 ppb) and TCE (730 ppb). No VOCs were detected in soil samples collected from the remaining two soil borings advanced at the dry cleaner facility. Trace concentrations of PCE were reported in soil vapor collected from interior borings SV1 (19 μ g/L at 7 feet and 3.2 μ g/L at 17 feet) and SV2 (1.5 μ g/L at 5 feet). The concentration of PCE in soil vapor decreased in concentration with depth into the subsurface at boring location SV1. No VOCs were detected in soil vapor collected from 11 feet bgs in soil boring SV3. There are currently no remedial standards to soil vapor concentrations in California. However, the concentrations of PCE reported in soil vapor are low and significantly less the average concentrations observed at dry cleaning establishments with known releases. Groundwater was not encountered during this assessment and groundwater apparently occurs at some depth in excess of 45 feet bgs, based on the maximum depth of investigation.

Based on these results, EBI is of the opinion that evidence of a significant release at the Subject Property dry cleaner was not identified; therefore, no further intrusive investigations are recommended at this time.

However, as indicated in the Phase I ESA Report (EBI Project #24-2778A), EBI recommends repairing the floor cracks and the installation of secondary containment beneath the dry cleaning unit and waste storage drums. Secondary containment will reduce the potential for an accidental release of dry cleaning solvent to migrate into the subsurface and adversely impact the Subject Property.

Former Eastmont Auto

Results of the analysis of the soil samples collected to address potential impacts from the hydraulic lifts and oil/water separator associated with the former Eastmont Auto revealed no detectable concentrations of TPH-DRO, TPH-GRO or PCBs. Based on these results, EBI is of the opinion that no evidence of a significant release at the Subject Property former Eastmont Auto facility was identified; therefore, no further intrusive investigations are recommended at this time.

6.0 LIMITATIONS

The purpose of this *Report* is to assist *Countrywide Commercial Real Estate Finance* in its underwriting of a proposed mortgage loan on the Subject Property described herein. *Countrywide Commercial Real Estate Finance* and its affiliates (collectively, "CRF"), its successors and assigns, rating agencies and certain investors involved in the Securitization (as defined below) or other disposition, may use and rely upon this *Report* in connection with a planned securitization involving the loan secured by the Property or a whole loan sale or other disposition of the related loan (collectively, the "Securitization"). CRF, at its option, may elect to include selected information contained in the *Report* in the Offering Memorandum or other disclosure materials relating to the Securitization and the Consultant agrees to cooperate in answering questions by any of the above parties in connection with the Securitization. There are no intended or unintended third party beneficiaries to this *Report*, except as expressly stated herein.

This Phase II Limited Subsurface Investigation was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information obtained by visual inspection of the Subject Property; field notes and data recorded by EBI personnel; soil screening results using a PID; soil analytical data; and information provided by the client and by others. EBI renders no opinion as to the presence of oil and/or hazardous material for which no analyses were conducted and/or at uninspected and/or inaccessible portions of the Subject Property. The observations in this Report are valid on the date of the investigation. Therefore, the *Report* should not be relied on to represent conditions at a later date. Any additional information that becomes available concerning the Subject Property should be provided to EBI, so that our conclusions may be revised and modified, if necessary. This *Report* has been prepared in accordance with the terms and conditions provided in our Standard Conditions For Engagement described in Attachment A, which is an integral part of this *Report*. No other warranty, expressed or implied, is made.

ATTACHMENT A LIMITATIONS

- 1. The observations described in this *Report* were made under the conditions stated herein. The conclusions presented are based solely upon the services described, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this *Report* was carried out in accordance with terms and conditions in our *Authorization Letter* and *Agreement for Environmental Services* regarding the Site, which are incorporated herein by references.
- 2. In preparing this *Report*, EBI has relied on certain information provided by state and other referenced parties, and on information contained in the files of federal, state and/or local agencies available to EBI at the time of the assessment. Although there may have been some degree of overlap in the information provided by these various sources, EBI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of these *Environmental Services*.
- 3. Observations were made of the Site and of structures on the Site as indicated within the *Report*. Where access to portions of the Site or to structures on the Site was unavailable or limited, EBI renders no opinion as to the presence of oil or hazardous materials (OHM) in that portion of the Site or structure. In addition, EBI renders no opinion as to the presence of OHM or the presence of indirect evidence relating to OHM where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces. No representations concerning insulating material is expressed or implied.
- 4. EBI did not perform testing or analyses to determine the presence or concentration of asbestos, radon, or lead at the Site unless specifically stated otherwise in the *Report*. Similarly, no investigation of dust or air quality was conducted unless specifically stated otherwise in the *Report*.
- 5. The purpose of this *Report* is to assess the physical characteristics of the Site with respect to the presence of OHM in the environment. No specific attempt was made to determine the compliance of present or past owners or operators of the Site with federal, state, or local laws or regulations (environmental or otherwise).
- 6. Except as noted in the *Report*, no quantitative laboratory testing was performed as part of the assessment. Where such analyses have been conducted by an outside laboratory, EBI has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
- 7. Any qualitative or quantitative information regarding the Site, which was not available to EBI at the time of this assessment may result in a modification of the representations made herein.
- 8. It is acknowledged that EBI judgments shall not be based on scientific or technical test or procedures beyond the scope of the Services or beyond the time and budgetary constraints imposed by Client. It is acknowledged further that EBI conclusions shall not rest on pure science but on such considerations as economic feasibility and available alternatives. Client also acknowledges that, because geologic and soil formations are inherently random, variable, and indeterminate in nature, the Services and opinions provided under this Agreement with respect to such Services, are not guaranteed to be a representation of actual conditions on the Site, which are also subject to change with time as a result of natural or man-made processes, including water permeation. In performing the Services, EBI shall use that degree of care and skill ordinarily exercised by environmental consultants or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely at the time the Services are rendered and not according to standards utilized at a later date. The Services shall be rendered without any other warranty, expressed or implied, including, without limitation, the warranty of merchant ability and the warranty of fitness for a particular purpose.
- 9. Client and EBI agree that to the fullest extent permitted by law, EBI shall not be liable to Client for any special, indirect or consequential damages whatsoever, whether caused by EBI's negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause of causes whatsoever.

APPENDIX A

FIGURES











APPENDIX B

SOIL BORING LOGS

SOIL BORING LOG - FIELD READINGS EBI Project # 24-8175 Project NAME: <u>Eastmont Town Center</u> BORING METHOD: Geoprobe DATE: December 9-10, 2004								
Sample #	Depth (Ft)	Moisture (H-M-L)	PID Reading	Soil Description				
SV1-5	4-6	L	0	Silty CLAY (CL-ML), stiff, brown, no odor				
SV1-17	16-17	L	0	Silty CLAY (CL-ML), stiff, brown, no odor, equipment refusal in dense soil				
		Bottom of Boring at 1	7', equipment refus	al, no groundwater				
SV2-5	4-6	L	0	Silty CLAY (CL-ML), stiff, gray and dark gray, no odor				
SV2-19	18-19	L	0	Silty CLAY (CL-ML), stiff/very stiff, brown, no odor, equipment refusal in dense soil				
		Bottom of Boring at 1	9', equipment refus	al, no groundwater				
SV3-5	4-6	L	0	Silty CLAY (CL-ML), stiff, gray and dark gray, no odor				
SV3-12	11-12	М	0	Silty SAND (SM), with clay and some gravel, brown, moderate stiff, no odor, equipment refusal in dense soil				
	Bottom of Boring at 12', equipment refusal, no groundwater							
SV4-5	4-6	L	0	Silty CLAY (CL-ML), stiff, gray and dark gray, no odor				
SV4-10	9-11	L	0	Silty CLAY (CL-ML), stiff, gray and dark gray, no odor				
SV4-25	23-25	L	0	Silty SAND (SM), with clay and some gravel, brown, moderate stiff, no odor, equipment refusal in dense soil				
		Bottom of Boring at 2	5', equipment refus	al, no groundwater				
SV5-10	9-11	L	0	Silty SAND (SM), with clay and some gravel, med/dk brown, moderate stiff, no odor				
SV5-25	24-26	L	0	Silty SAND (SM), fine and medium sand with clay and some medium gravel, med/dk brown, moderate stiff, no odor				
SV5-35	33-35	NA	NA	No soil sample, attempted to collect groundwater with hydropunch, dry				
		Bottom of B	oring at 35', no gro	undwater				
SV6-10	9-11	L	0	Silty SAND (SM), with clay and some gravel, med/dk brown, moderate stiff, no odor				
SV6-26	24-26	L	0	Silty SAND (SM), fine and medium sand with clay				

SOIL BORING LOG - FIELD READINGS EBI Project # 24-8175 Project NAME: <u>Eastmont Town Center</u> BORING METHOD: <u>Geoprobe</u> DATE: <u>December 9-10, 2004</u>									
Sample # Depth (Ft) Moisture (H-M-L) PID Reading Soil Description									
				and some medium gravel, med/dk brown, moderate stiff, no odor					
	Bottom of Boring at 26', equipment refusal, no groundwater								
SV7-10	9-11	L	0	Silty SAND (SM), with clay and some gravel, med/dk brown, moderate stiff, no odor					
SV7-20	19-21	L	L 0 Silty SAND (SM), with clay and some gravel, med/dk brown, stiff, no odor						
SV7-46	44-46	NA	NA	No soil sample, attempted to collect groundwater with hydropunch, dry					
		Bottom of Boring at 4	6', equipment refus	al, no groundwater					
SV8-5	4-6	L	0	Silty CLAY (CL-ML), very stiff, brown, no odor					
SV8-10	9-11	L	0	Silty CLAY (CL-ML), very stiff, brown, no odor					
SV8-20	19-20	L	0	Silty SAND (SM), with clay and some gravel, med/dk brown, stiff, no odor					
		Bottom of B	oring at 20', no gro	undwater					

APPENDIX C

SOIL ANALYTICAL LABORATORY REPORT



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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

Project: Project Name: EASTMONT TOWNE CENTER Sampler: RICH McKINNEY Lab Number: 04-A194046 Sample ID: SV1-5 Sample Type: Soil Site ID:

Date Collected: 12/ 9/04 Time Collected: 13:00 Date Received: 12/13/04 Time Received: 8:00

			Report	Dil					
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS									
**Acetone	ND	mg/kg	0.0601	1	12/15/04	12:43	J. Adams	8260B	8118
**Benzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Bromobenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Bromochloromethane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Bromoform	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Bromomethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**2-Butanone	ND	mg/kg	0.0601	1	12/15/04	12:43	J. Adams	8260B	8118
**n-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**sec-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**tert-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Carbon disulfide	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Carbon tetrachloride	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Chlorobenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Chloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Chloroform	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Chloromethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**2-Chlorotoluene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**4-Chlorotoluene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2-Dibromo-3-chloropropane	ND	mg/kg	0.00601	1	12/15/04	12:43	J. Adams	8260B	8118
**Dibromochloromethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2-Dibromoethane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Dibromomethane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,3-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,4-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Dichlorodifluoromethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1-Dichloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2-Dichloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**cis-1,2-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**trans-1,2-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2-Dichloropropane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118



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ANALYTICAL REPORT

Laboratory Number: 04-A194046 Sample ID: SV1-5

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Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
**1,3-Dichloropropane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**2,2-Dichloropropane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1-Dichloropropene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**cis-1,3-Dichloropropene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**trans-1,3-Dichloropropene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Ethylbenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Hexachlorobutadiene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**2-Hexanone	ND	mg/kg	0.0120	1	12/15/04	12:43	J. Adams	8260B	8118
**Isopropylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**4-Isopropyltoluene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**4-Methyl-2-pentanone	ND	mg/kg	0.0120	1	12/15/04	12:43	J. Adams	8260B	8118
**Methylene chloride	ND	mg/kg	0.0060	1	12/15/04	12:43	J. Adams	8260B	8118
**Naphthalene	ND	mg/kg	0.00601	1	12/15/04	12:43	J. Adams	8260B	8118
**n-Propylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Styrene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1,1,2-Tetrachloroethane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Tetrachloroethene	0.237	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Toluene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2,3-Trichlorobenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2,4-Trichlorobenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1,1-Trichloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,1,2-Trichloroethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Trichloroethene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2,3-Trichloropropane	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**1,2,4-Trimethylbenzene	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**1,3,5-Trimethylbenzene	ND	mg/kg	0.00240	1	12/15/04	12:43	J. Adams	8260B	8118
**Vinyl chloride	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Xylenes (Total)	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Bromodichloromethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
**Trichlorofluoromethane	ND	mg/kg	0.0024	1	12/15/04	12:43	J. Adams	8260B	8118
GENERAL CHEMISTRY PARAMETE	RS								
% Dry Weight	83.2	\$			12/13/04	10:14	B.Plett	CLP	5481
Surrogate		% F	ecovery	Tar	get Range				
100 Surr 1 2-DOAdd			111						



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ANALYTICAL REPORT

Laboratory Number: 04-A194046 Sample ID: SV1-5

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Surrogate	% Recovery	Target Range
VOA Surr, 4-BFB	114.	60 138.
VOA Surr, DBFM	102.	75 137.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte

All reported results for metals or Organic analyses have been corrected for dry weight.


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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

Project: Project Name: EASTMONT TOWNE CENTER Sampler: RICH McKINNEY Lab Number: 04-A194047 Sample ID: SV2-5 Sample Type: Soil Site ID:

Date Collected: 12/ 9/04 Time Collected: 15:00 Date Received: 12/13/04 Time Received: 8:00

Apolyto	Pogult	Unita	Report	Dil	Dato	Timo	Apolyat	Mothod	Patab
VOLATILE ORGANICS	MD		0 0600	1	10/15/04	12.14	T Jelewa	0.260.0	0110
^ Acetone	ND	mg/kg	0.0600	1	12/15/04	13:14	J. Adams	8260B	8118
**Benzene	ND	llig / kg	0.0024	1	12/15/04	13.14	J. Adams	8260B	0110
* Bromodenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Bromocnioromethane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Bromoform	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Bromomethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**2-Butanone	ND	mg/kg	0.0600	1	12/15/04	13:14	J. Adams	8260B	8118
**n-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**sec-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**tert-Butylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Carbon disulfide	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Carbon tetrachloride	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Chlorobenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Chloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Chloroform	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Chloromethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**2-Chlorotoluene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**4-Chlorotoluene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2-Dibromo-3-chloropropane	ND	mg/kg	0.00600	1	12/15/04	13:14	J. Adams	8260B	8118
**Dibromochloromethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2-Dibromoethane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Dibromomethane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,3-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,4-Dichlorobenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Dichlorodifluoromethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1-Dichloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2-Dichloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**cis-1,2-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**trans-1,2-Dichloroethene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2-Dichloropropane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118



ANALYTICAL REPORT

Laboratory Number: 04-A194047 Sample ID: SV2-5

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
**1,3-Dichloropropane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**2,2-Dichloropropane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1-Dichloropropene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**cis-1,3-Dichloropropene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**trans-1,3-Dichloropropene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Ethylbenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Hexachlorobutadiene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**2-Hexanone	ND	mg/kg	0.0120	1	12/15/04	13:14	J. Adams	8260B	8118
**Isopropylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**4-Isopropyltoluene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**4-Methyl-2-pentanone	ND	mg/kg	0.0120	1	12/15/04	13:14	J. Adams	8260B	8118
**Methylene chloride	ND	mg/kg	0.0060	1	12/15/04	13:14	J. Adams	8260B	8118
**Naphthalene	ND	mg/kg	0.00600	1	12/15/04	13:14	J. Adams	8260B	8118
**n-Propylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Styrene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1,1,2-Tetrachloroethane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Tetrachloroethene	0.0496	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Toluene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2,3-Trichlorobenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2,4-Trichlorobenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1,1-Trichloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,1,2-Trichloroethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Trichloroethene	0.0183	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2,3-Trichloropropane	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**1,2,4-Trimethylbenzene	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**1,3,5-Trimethylbenzene	ND	mg/kg	0.00240	1	12/15/04	13:14	J. Adams	8260B	8118
**Vinyl chloride	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Xylenes (Total)	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Bromodichloromethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
**Trichlorofluoromethane	ND	mg/kg	0.0024	1	12/15/04	13:14	J. Adams	8260B	8118
GENERAL CHEMISTRY PARAMETE	RS								
% Dry Weight	83.4	\$			12/13/04	10:14	B.Plett	CLP	5481
Surrogate		* F	ecovery	Tar	get Range				
Surrogate		% F	lecovery	Tar	get Range 72 - 134				



ANALYTICAL REPORT

Laboratory Number: 04-A194047 Sample ID: SV2-5

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Surrogate	% Recovery	Target Range
VOA Surr, 4-BFB	109.	60 138.
VOA Surr, DBFM	101.	75 137.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

Project: Project Name: EASTMONT TOWNE CENTER Sampler: RICH McKINNEY Lab Number: 04-A194048 Sample ID: SV3-12 Sample Type: Soil Site ID:

Date Collected: 12/ 9/04 Time Collected: 19:00 Date Received: 12/13/04 Time Received: 8:00

			Report	Dil					
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS									
**Acetone	ND	mg/kg	0.0571	1	12/15/04	13:45	J. Adams	8260B	8118
**Benzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Bromobenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Bromochloromethane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Bromoform	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Bromomethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**2-Butanone	ND	mg/kg	0.0571	1	12/15/04	13:45	J. Adams	8260B	8118
**n-Butylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**sec-Butylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**tert-Butylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Carbon disulfide	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Carbon tetrachloride	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Chlorobenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Chloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Chloroform	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Chloromethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**2-Chlorotoluene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**4-Chlorotoluene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2-Dibromo-3-chloropropane	ND	mg/kg	0.00571	1	12/15/04	13:45	J. Adams	8260B	8118
**Dibromochloromethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2-Dibromoethane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Dibromomethane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,3-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,4-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Dichlorodifluoromethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1-Dichloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2-Dichloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**cis-1,2-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**trans-1,2-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2-Dichloropropane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118



ANALYTICAL REPORT

Laboratory Number: 04-A194048 Sample ID: SV3-12

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			Report	Dil					
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
**1,3-Dichloropropane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**2,2-Dichloropropane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1-Dichloropropene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**cis-1,3-Dichloropropene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**trans-1,3-Dichloropropene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Ethylbenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Hexachlorobutadiene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**2-Hexanone	ND	mg/kg	0.0114	1	12/15/04	13:45	J. Adams	8260B	8118
**Isopropylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**4-Isopropyltoluene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**4-Methyl-2-pentanone	ND	mg/kg	0.0114	1	12/15/04	13:45	J. Adams	8260B	8118
**Methylene chloride	ND	mg/kg	0.0057	1	12/15/04	13:45	J. Adams	8260B	8118
**Naphthalene	ND	mg/kg	0.00571	1	12/15/04	13:45	J. Adams	8260B	8118
**n-Propylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Styrene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1,1,2-Tetrachloroethane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Tetrachloroethene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Toluene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2,3-Trichlorobenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2,4-Trichlorobenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1,1-Trichloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,1,2-Trichloroethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Trichloroethene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2,3-Trichloropropane	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**1,2,4-Trimethylbenzene	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**1,3,5-Trimethylbenzene	ND	mg/kg	0.00229	1	12/15/04	13:45	J. Adams	8260B	8118
**Vinyl chloride	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Xylenes (Total)	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Bromodichloromethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
**Trichlorofluoromethane	ND	mg/kg	0.0023	1	12/15/04	13:45	J. Adams	8260B	8118
GENERAL CHEMISTRY PARAMETE	RS								
% Dry Weight	87.5	જ			12/13/04	10:14	B.Plett	CLP	5481
Surrogate		% R	ecovery	Tar	get Range				
VOA Surr 1 2-DOAd4			114		72 - 134				

103.

76. - 122.

VOA Surr Toluene-d8



ANALYTICAL REPORT

Laboratory Number: 04-A194048 Sample ID: SV3-12

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Surrogate	% Recovery	Target Range
VOA Surr, 4-BFB	100.	60 138.
VOA Surr, DBFM	103.	75 137.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

Project: Project Name: EASTMONT TOWNE CENTER Sampler: RICH McKINNEY Lab Number: 04-A194049 Sample ID: SV4-25 Sample Type: Soil Site ID:

Date Collected: 12/10/04 Time Collected: 9:00 Date Received: 12/13/04 Time Received: 8:00

			Report	Dil					
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS									
**Acetone	ND	mg/kg	0.0579	1	12/15/04	14:16	J. Adams	8260B	8118
**Benzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Bromobenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Bromochloromethane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Bromoform	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Bromomethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**2-Butanone	ND	mg/kg	0.0579	1	12/15/04	14:16	J. Adams	8260B	8118
**n-Butylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**sec-Butylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**tert-Butylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Carbon disulfide	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Carbon tetrachloride	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Chlorobenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Chloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Chloroform	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Chloromethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**2-Chlorotoluene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**4-Chlorotoluene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2-Dibromo-3-chloropropane	ND	mg/kg	0.00579	1	12/15/04	14:16	J. Adams	8260B	8118
**Dibromochloromethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2-Dibromoethane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Dibromomethane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,3-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,4-Dichlorobenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Dichlorodifluoromethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1-Dichloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2-Dichloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**cis-1,2-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**trans-1,2-Dichloroethene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2-Dichloropropane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118



ANALYTICAL REPORT

Laboratory Number: 04-A194049 Sample ID: SV4-25

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			Report	Dil					
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
**1,3-Dichloropropane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**2,2-Dichloropropane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1-Dichloropropene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**cis-1,3-Dichloropropene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**trans-1,3-Dichloropropene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Ethylbenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Hexachlorobutadiene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**2-Hexanone	ND	mg/kg	0.0116	1	12/15/04	14:16	J. Adams	8260B	8118
**Isopropylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**4-Isopropyltoluene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**4-Methyl-2-pentanone	ND	mg/kg	0.0116	1	12/15/04	14:16	J. Adams	8260B	8118
**Methylene chloride	0.0155	mg/kg	0.0058	1	12/15/04	14:16	J. Adams	8260B	8118
**Naphthalene	ND	mg/kg	0.00579	1	12/15/04	14:16	J. Adams	8260B	8118
**n-Propylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Styrene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1,1,2-Tetrachloroethane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Tetrachloroethene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Toluene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2,3-Trichlorobenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2,4-Trichlorobenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1,1-Trichloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,1,2-Trichloroethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Trichloroethene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2,3-Trichloropropane	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**1,2,4-Trimethylbenzene	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**1,3,5-Trimethylbenzene	ND	mg/kg	0.00232	1	12/15/04	14:16	J. Adams	8260B	8118
**Vinyl chloride	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Xylenes (Total)	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Bromodichloromethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
**Trichlorofluoromethane	ND	mg/kg	0.0023	1	12/15/04	14:16	J. Adams	8260B	8118
GENERAL CHEMISTRY PARAMETE	RS								
% Dry Weight	86.3	8			12/13/04	10:14	B.Plett	CLP	5481
Surrogate		% R 	ecovery	Tar	get Range				
			110						
VOA Surr, 1,2-DCAd4			112.		72 134.				

104.

76. - 122.

VOA Surr Toluene-d8



ANALYTICAL REPORT

Laboratory Number: 04-A194049 Sample ID: SV4-25

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Surrogate	% Recovery	Target Range
VOA Surr, 4-BFB	104.	60 138.
VOA Surr, DBFM	102.	75 137.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte

All reported results for metals or Organic analyses have been corrected for dry weight. Sample could have been contaminated with Methylene Chloride from the Prep Lab.



ANALYTICAL REPORT

EBI CONSULTANTS 10966	Lab Number: 04-A194050 Sample ID: SV5-10
FOUR A STREET	Sample Type: Soil
BURLINGTON, MA 01803	Site ID:
	Date Collected: 12/10/04
Project:	Time Collected: 11:00
Project Name: EASTMONT TOWNE CENTER	Date Received: 12/13/04
Sampler: RICH McKINNEY	Time Received: 8:00

Analyte		Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAME	rers									
**TPH (Gasoline Ra	ange)	ND	mg/kg	5.60	1	12/14/04	13:08	J. Redmond	8015B	7052
**TPH (Diesel Rang	ge)	ND	mg/kg	11.2	1	12/14/04	17:22	M.Jarrett	8015B	7284
PESTICIDE/PCB':	s/HERBICIDES	5								
**Aroclor 1016		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1221		ND	mg/kg	0.0373	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1232		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1242		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1248		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1254		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
**Aroclor 1260		ND	mg/kg	0.0186	1	12/16/04	10:35	J. Markham	8082	7626
GENERAL CHEMIS	TRY PARAMETE	RS								
% Dry Weight		89.3	8			12/13/04	10:14	B.Plett	CLP	5481
Sample Extraction	Data									
	Wt/Vol									
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method				
EPH/DRO	24.9	m 1.0 ml	12/14/04		J. Davis	3550				

PCB'S 29.9 gm 10.0 ml 12/14/04 K. 10mer 3550	PCB's	29.9 gm	10.0 ml	12/14/04	К.	Turner	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	88.	63 127.
EPH surr-o-Terphenyl	111.	54 136.
pcb surr-TCMX	104.	59 125.



ANALYTICAL REPORT

Laboratory Number: 04-A194050 Sample ID: SV5-10

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Surrogate	% Recovery	Target Range
8082 Surr DCB,s	86.	18 111.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- B = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- # = Recovery outside Laboratory historical or method prescribed limits.
- ** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966		Lab Number: 04-A194051 Sample ID: SV6-10
FOUR A STREET		Sample Type: Soil
BURLINGTON, MA 01803		Site ID:
		Date Collected: 12/10/04
Project:		Time Collected: 14:00
Project Name: EASTMONT	TOWNE CENTER	Date Received: 12/13/04
Sampler: RICH McKINNEY		Time Received: 8:00

Analyte	Result	Units 	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
**TPH (Gasoline Range)	ND	mg/kg	5.73	1	12/14/04	13:38	J. Redmond	8015B	7052
**TPH (Diesel Range)	ND	mg/kg	11.5	1	12/14/04	17:42	M.Jarrett	8015B	7284
PESTICIDE/PCB's/HERBICIDI	ES								
**Aroclor 1016	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1221	ND	mg/kg	0.0381	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1232	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1242	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1248	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1254	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
**Aroclor 1260	ND	mg/kg	0.0190	1	12/16/04	10:58	J. Markham	8082	7626
GENERAL CHEMISTRY PARAME	TERS								
% Dry Weight	87.3	8			12/13/04	10:21	B.Plett	CLP	5628
Sample Extraction Data									
Wt/Vol									
Parameter Extracted	d Extract Vo	l Date	Time	Analyst	Method	L			

EPH/DRO	24.7 gm	1.0 ml	12/14/04	J.	Davis	3550
PCB's	30.2 gm	10.0 ml	12/14/04	к.	Turner	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	90.	63 127.
EPH surr-o-Terphenyl	111.	54 136.
pcb surr-TCMX	108.	59 125.



ANALYTICAL REPORT

Laboratory Number: 04-A194051 Sample ID: SV6-10

Page 2

Surrogate	% Recovery	Target Range
8082 Surr DCB,s	88.	18 111.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- B = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- # = Recovery outside Laboratory historical or method prescribed limits.
- ** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966	Lab Number: 04-A194052 Sample ID: SV6-26
FOUR A STREET	Sample Type: Soil
BURLINGTON, MA 01803	Site ID:
	Date Collected: 12/10/04
Project:	Time Collected: 14:00
Project Name: EASTMONT TOWNE CE	INTER Date Received: 12/13/04
Sampler: RICH McKINNEY	Time Received: 8:00

Analyte		Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETH	ERS									
**TPH (Gasoline Rar	nge)	ND	mg/kg	5.80	1	12/14/04	14:08	J. Redmond	8015B	7052
**TPH (Diesel Range	=)	ND	mg/kg	11.6	1	12/14/04	18:02	M.Jarrett	8015B	7284
*PESTICIDE/PCB's/	/HERBICIDES	*								
**Aroclor 1016		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1221		ND	mg/kg	0.0386	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1232		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1242		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1248		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1254		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
**Aroclor 1260		ND	mg/kg	0.0193	1	12/16/04	11:21	J. Markham	8082	7626
GENERAL CHEMISTE	RY PARAMETE	RS								
% Dry Weight		86.2	00			12/13/04	10:21	B.Plett	CLP	5628
Sample Extraction I	Data									
	Wt/Vol									
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method				
EPH/DRO	24.8 g	m 1.0 ml	12/14/04		J. Davis	3550				

EPH/DRO	24.8 gm	1.0 ml	12/14/04	J.	Davis	3550
PCB's	29.6 gm	10.0 ml	12/14/04	к.	Turner	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	90.	63 127.
EPH surr-o-Terphenyl	110.	54 136.
pcb surr-TCMX	106.	59 125.



ANALYTICAL REPORT

Laboratory Number: 04-A194052 Sample ID: SV6-26

Page 2

Surrogate	% Recovery	Target Range
8082 Surr DCB,s	88.	18 111.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966		Lab Number: 04-A194053 Sample ID: SV7-20
FOUR A STREET		Sample Type: Soil
BURLINGTON, MA 01803		Site ID:
		Date Collected: 12/10/04
Project:		Time Collected: 15:00
Project Name: EASTMONT TOWN	E CENTER	Date Received: 12/13/04
Sampler: RICH MCKINNEY		Time Received: 8:00

Analyte	Result	Units 	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
**TPH (Gasoline Range)	ND	mg/kg	5.71	1	12/14/04	14:38	J. Redmond	8015B	7052
**TPH (Diesel Range)	ND	mg/kg	11.4	1	12/14/04	18:22	M.Jarrett	8015B	7284
PESTICIDE/PCB's/HERBICIDE	S								
**Aroclor 1016	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1221	ND	mg/kg	0.0381	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1232	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1242	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1248	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1254	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
**Aroclor 1260	ND	mg/kg	0.0190	1	12/16/04	11:44	J. Markham	8082	7626
GENERAL CHEMISTRY PARAMET	ERS								
% Dry Weight	87.5	\$			12/13/04	10:21	B.Plett	CLP	5628
Sample Extraction Data									
Wt/Vol									
Parameter Extracted	Extract Vo	l Date	Time	Analyst	Method	l			

EPH/DRO	24.6 gm	1.0 ml	12/14/04	J.	Davis	3550
PCB's	30.0 gm	10.0 ml	12/14/04	к.	Turner	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	90.	63 127.
EPH surr-o-Terphenyl	102.	54 136.
pcb surr-TCMX	106.	59 125.



ANALYTICAL REPORT

Laboratory Number: 04-A194053 Sample ID: SV7-20

Page 2

Surrogate	% Recovery	Target Range
8082 Surr DCB,s	88.	18 111.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- B = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- # = Recovery outside Laboratory historical or method prescribed limits.
- ** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 109	966	Lab Number: 04-A194054 Sample ID: SV8-10
FOUR A STREET		Sample Type: Soil
BURLINGTON, MA 0180	3	Site ID:
		Date Collected: 12/10/04
Project:		Time Collected: 15:00
Project Name: EASTMC	NT TOWNE CENTER	Date Received: 12/13/04
Sampler: RICH McKINN	IEY	Time Received: 8:00

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
**TPH (Gasoline Range)	ND	mg/kg	5.93	1	12/14/04	15:08	J. Redmond	8015B	7052
**TPH (Diesel Range)	ND	mg/kg	11.9	1	12/14/04	18:42	M.Jarrett	8015B	7284
PESTICIDE/PCB's/HERBIC	IDES								
**Aroclor 1016	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1221	ND	mg/kg	0.0395	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1232	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1242	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1248	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1254	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
**Aroclor 1260	ND	mg/kg	0.0197	1	12/16/04	12:08	J. Markham	8082	7626
GENERAL CHEMISTRY PARA	METERS								
% Dry Weight	84.3	\$			12/13/04	10:21	B.Plett	CLP	5628
Sample Extraction Data									
Wt/Vo	1								
Parameter Extrac	ted Extract Vo	l Date	Time	Analyst	Method	l			

EPH/DRO	24.7 gm	1.0 ml	12/14/04	J.	Davis	3550
PCB's	29.6 gm	10.0 ml	12/14/04	к.	Turner	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	86.	63 127.
EPH surr-o-Terphenyl	107.	54 136.
pcb surr-TCMX	110.	59 125.



ANALYTICAL REPORT

Laboratory Number: 04-A194054 Sample ID: SV8-10

Page 2

Surrogate	% Recovery	Target Range
8082 Surr DCB,s	90.	18 111.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- B = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- # = Recovery outside Laboratory historical or method prescribed limits.
- ** = NELAC E87358 Certified Analyte



ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

Project: Project Name: EASTMONT TOWNE CENTER Sampler: RICH McKINNEY Lab Number: 04-A194055 Sample ID: Trip Blank Sample Type: Water Site ID:

Date Collected: 12/10/04 Time Collected: 15:00 Date Received: 12/13/04 Time Received: 8:00

			Report	Dil	Analysis	Analysis	5		
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS									
**Acetone	ND	mg/l	0.0500	1	12/15/04	8:34	C. Spry	8260B	7850
**Benzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Bromobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Bromochloromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Bromoform	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Bromomethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**2-Butanone	ND	mg/l	0.0250	1	12/15/04	8:34	C. Spry	8260B	7850
**n-Butylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**sec-Butylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**tert-Butylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Carbon disulfide	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Carbon tetrachloride	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Chlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Chloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Chloroform	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Chloromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**2-Chlorotoluene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**4-Chlorotoluene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2-Dibromo-3-chloropropane	ND	mg/l	0.00100	1	12/15/04	8:34	C. Spry	8260B	7850
**Dibromochloromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2-Dibromoethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Dibromomethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2-Dichlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,3-Dichlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,4-Dichlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Dichlorodifluoromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1-Dichloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2-Dichloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1-Dichloroethene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**cis-1,2-Dichloroethene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**trans-1,2-Dichloroethene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2-Dichloropropane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,3-Dichloropropane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**2,2-Dichloropropane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850



ANALYTICAL REPORT

Laboratory Number: 04-A194055 Sample ID: Trip Blank

Page 2

			Report	Dil	Analysis	Analysi	3		
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
**1,1-Dichloropropene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**cis-1,3-Dichloropropene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**trans-1,3-Dichloropropene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Ethylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Hexachlorobutadiene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**2-Hexanone	ND	mg/l	0.0100	1	12/15/04	8:34	C. Spry	8260B	7850
**Isopropylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**p-Isopropyltoluene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**4-Methyl-2-pentanone	ND	mg/l	0.0100	1	12/15/04	8:34	C. Spry	8260B	7850
**Methylene chloride	ND	mg/l	0.00250	1	12/15/04	8:34	C. Spry	8260B	7850
**Naphthalene	ND	mg/l	0.00250	1	12/15/04	8:34	C. Spry	8260B	7850
**n-Propylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Styrene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1,1,2-Tetrachloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1,2,2-Tetrachloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Tetrachloroethene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Toluene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2,3-Trichlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2,4-Trichlorobenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1,1-Trichloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,1,2-Trichloroethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Trichloroethene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2,3-Trichloropropane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,2,4-Trimethylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**1,3,5-Trimethylbenzene	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Vinyl chloride	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Xylenes (Total)	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Bromodichloromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850
**Trichlorofluoromethane	ND	mg/l	0.00050	1	12/15/04	8:34	C. Spry	8260B	7850

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	97.	73 127.
VOA Surr Toluene-d8	96.	79 113.
VOA Surr, 4-BFB	98.	79 125.
VOA Surr, DBFM	96.	75 134.



ANALYTICAL REPORT

Laboratory Number: 04-A194055 Sample ID: Trip Blank

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LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- # = Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 1 Laboratory Receipt Date: 12/13/04

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
TPH (Gasoline Range)	mg/kg	< 5.00	7.65	10.0	76	52 150.	7052	04-A194052
TPH (Diesel Range)	mg/kg	< 10.0	35.6	40.0	89	28 143.	7284	blank
VOA PARAMETERS								
Benzene	mg/l	< 0.00050	0.0572	0.0500	114	62 - 14	3 7850	193014
Benzene	mg/kg	< 0.0008	0.0515	0.0500	103	53 - 13	6 8118	blank
Chlorobenzene	mg/l	< 0.00050	0.0560	0.0500	112	63 - 14	2 7850	193014
Chlorobenzene	mg/kg	< 0.0001	0.0537	0.0500	107	46 - 13	7 8118	blank
1,1-Dichloroethene	mg/l	< 0.00050	0.0536	0.0500	107	62 - 15	2 7850	193014
1,1-Dichloroethene	mg/kg	< 0.0006	0.0583	0.0500	117	60 - 13	8 8118	blank
Toluene	mg/l	< 0.00050	0.0572	0.0500	114	63 - 14	1 7850	193014
Toluene	mg/kg	< 0.0005	0.0551	0.0500	110	43 - 13	9 8118	blank
Trichloroethene	mg/l	< 0.00050	0.0579	0.0500	116	62 - 16	0 7850	193014
Trichloroethene	mg/kg	< 0.0007	0.0541	0.0500	108	49 - 14	8 8118	blank
Tetrachloroethene	mg/kg	< 0.0008	0.0523	0.0500	105	44 - 14	2 8118	blank
VOA Surr 1,2-DCA-d4	% Rec				88	73 - 12	7 7850	
VOA Surr Toluene-d8	% Rec				99	79 - 11	3 7850	
VOA Surr, 4-BFB	% Rec				85	79 - 12	5 7850	
VOA Surr, DBFM	% Rec				92	75 - 13	4 7850	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
TPH (Gasoline Range)	mg/kg	7.65	6.21	20.78	39.	7052
TPH (Diesel Range)	mg/kg	35.6	36.2	1.67	51.	7284



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 2 Laboratory Receipt Date: 12/13/04

VOA PARAMETERS						
Benzene	mg/l	0.0572	0.0567	0.88	27.	7850
Chlorobenzene	mg/l	0.0560	0.0562	0.36	28.	7850
1,1-Dichloroethene	mg/l	0.0536	0.0546	1.85	28.	7850
Toluene	mg/l	0.0572	0.0564	1.41	34.	7850
Trichloroethene	mg/l	0.0579	0.0583	0.69	31.	7850
Tetrachloroethene	mg/l	0.0548	0.0548	0.00	27.	7850
VOA Surr 1,2-DCA-d4	% Rec		89.			7850
VOA Surr Toluene-d8	% Rec		99.			7850
VOA Surr, 4-BFB	% Rec		87.			7850
VOA Surr, DBFM	% Rec		93.			7850

Analyte	units	Known Val.	Analyzed Val	<pre>% Recovery</pre>	Target Range	Q.C. Batch
UST PARAMETERS						
TPH (Gasoline Range)	mg/kg	10.0	9.01	90	74 - 127	7052
TPH (Diesel Range)	mg/kg	40.0	35.8	90	54 - 126	7284
VOA PARAMETERS						
Acetone	mg/l	0.250	0.314	126	61 - 142	7850
Acetone	mg/kg	0.250	0.286	114	44 - 153	8118
Benzene	mg/l	0.0500	0.0482	96	78 - 123	7850
Benzene	mg/kg	0.0500	0.0516	103	76 - 124	8118
Bromobenzene	mg/l	0.0500	0.0479	96	72 - 125	7850
Bromobenzene	mg/kg	0.0500	0.0547	109	64 - 128	8118
Bromochloromethane	mg/l	0.0500	0.0498	100	70 - 138	7850
Bromochloromethane	mg/kg	0.0500	0.0532	106	70 - 142	8118
Bromoform	mg/l	0.0500	0.0445	89	58 - 131	7850
Bromoform	mg/kg	0.0500	0.0462	92	56 - 138	8118
Bromomethane	mg/l	0.0500	0.0572	114	53 - 169	7850
Bromomethane	mg/kg	0.0500	0.0514	103	38 - 155	8118
2-Butanone	mg/l	0.250	0.273	109	66 - 136	7850
2-Butanone	mg/kg	0.250	0.244	98	59 - 146	8118
n-Butylbenzene	mg/l	0.0500	0.0503	101	65 - 138	7850
n-Butylbenzene	mg/kg	0.0500	0.0524	105	49 - 147	8118
sec-Butylbenzene	mg/l	0.0500	0.0512	102	71 - 134	7850
sec-Butylbenzene	mg/kg	0.0500	0.0575	115	60 - 136	8118
tert-Butylbenzene	mg/l	0.0500	0.0509	102	75 - 132	7850
tert-Butylbenzene	mg/kg	0.0500	0.0578	116	65 - 133	8118



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 3 Laboratory Receipt Date: 12/13/04

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Carbon disulfide	mg/l	0.0500	0.0469	94	75 - 133	7850
Carbon disulfide	mg/kg	0.0500	0.0614	123	68 - 132	8118
Carbon tetrachloride	mg/l	0.0500	0.0467	93	75 - 139	7850
Carbon tetrachloride	mg/kg	0.0500	0.0585	117	68 - 136	8118
Chlorobenzene	mg/l	0.0500	0.0480	96	80 - 123	7850
Chlorobenzene	mg/kg	0.0500	0.0537	107	77 - 123	8118
Chloroethane	mg/l	0.0500	0.0531	106	56 - 152	7850
Chloroethane	mg/kg	0.0500	0.0554	111	51 - 147	8118
Chloroform	mg/l	0.0500	0.0480	96	74 - 127	7850
Chloroform	mg/kg	0.0500	0.0579	116	76 - 126	8118
Chloromethane	mg/l	0.0500	0.0471	94	36 - 155	7850
Chloromethane	mg/kg	0.0500	0.0486	97	42 - 137	8118
2-Chlorotoluene	mg/l	0.0500	0.0477	95	72 - 132	7850
2-Chlorotoluene	mg/kg	0.0500	0.0526	105	61 - 133	8118
4-Chlorotoluene	mg/l	0.0500	0.0503	101	76 - 130	7850
4-Chlorotoluene	mg/kg	0.0500	0.0525	105	55 - 138	8118
1,2-Dibromo-3-chloropropane	mg/l	0.0500	0.0482	96	62 - 132	7850
1,2-Dibromo-3-chloropropane	mg/kg	0.0500	0.0450	90	49 - 143	8118
Dibromochloromethane	mg/l	0.0500	0.0466	93	72 - 129	7850
Dibromochloromethane	mg/kg	0.0500	0.0571	114	70 - 130	8118
1,2-Dibromoethane	mg/l	0.0500	0.0525	105	72 - 135	7850
1,2-Dibromoethane	mg/kg	0.0500	0.0532	106	59 - 146	8118
Dibromomethane	mg/l	0.0500	0.0489	98	75 - 130	7850
Dibromomethane	mg/kg	0.0500	0.0518	104	69 - 135	8118
1,2-Dichlorobenzene	mg/l	0.0500	0.0494	99	80 - 129	7850
1,2-Dichlorobenzene	mg/kg	0.0500	0.0524	105	76 - 128	8118
1,3-Dichlorobenzene	mg/l	0.0500	0.0496	99	81 - 124	7850
1,3-Dichlorobenzene	mg/kg	0.0500	0.0507	101	69 - 129	8118
1,4-Dichlorobenzene	mg/l	0.0500	0.0467	93	79 - 124	7850
1,4-Dichlorobenzene	mg/kg	0.0500	0.0494	99	68 - 130	8118
Dichlorodifluoromethane	mg/l	0.0500	0.0494	99	34 - 163	7850
Dichlorodifluoromethane	mg/kg	0.0500	0.0541	108	29 - 151	8118
1,1-Dichloroethane	mg/l	0.0500	0.0469	94	76 - 129	7850
1,1-Dichloroethane	mg/kg	0.0500	0.0575	115	75 - 128	8118
1,2-Dichloroethane	mg/l	0.0500	0.0479	96	73 - 130	7850
1,2-Dichloroethane	mg/kg	0.0500	0.0542	108	71 - 129	8118
1,1-Dichloroethene	mg/l	0.0500	0.0471	94	76 - 134	7850
1,1-Dichloroethene	mg/kg	0.0500	0.0601	120	73 - 135	8118



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 4 Laboratory Receipt Date: 12/13/04

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
cis-1,2-Dichloroethene	mg/l	0.0500	0.0480	96	69 - 134	7850
cis-1,2-Dichloroethene	mg/kg	0.0500	0.0571	114	74 - 130	8118
trans-1,2-Dichloroethene	mg/l	0.0500	0.0480	96	70 - 136	7850
trans-1,2-Dichloroethene	mg/kg	0.0500	0.0593	119	72 - 131	8118
1,2-Dichloropropane	mg/l	0.0500	0.0495	99	81 - 126	7850
1,2-Dichloropropane	mg/kg	0.0500	0.0550	110	77 - 127	8118
1,3-Dichloropropane	mg/l	0.0500	0.0488	98	75 - 127	7850
1,3-Dichloropropane	mg/kg	0.0500	0.0537	107	75 - 126	8118
2,2-Dichloropropane	mg/l	0.0500	0.0510	102	42 - 146	7850
2,2-Dichloropropane	mg/kg	0.0500	0.0564	113	59 - 137	8118
1,1-Dichloropropene	mg/l	0.0500	0.0493	99	80 - 127	7850
1,1-Dichloropropene	mg/kg	0.0500	0.0559	112	75 - 132	8118
cis-1,3-Dichloropropene	mg/l	0.0500	0.0530	106	62 - 135	7850
cis-1,3-Dichloropropene	mg/kg	0.0500	0.0560	112	69 - 129	8118
trans-1,3-Dichloropropene	mg/l	0.0500	0.0453	91	59 - 131	7850
trans-1,3-Dichloropropene	mg/kg	0.0500	0.0559	112	67 - 128	8118
Ethylbenzene	mg/l	0.0500	0.0498	100	80 - 124	7850
Ethylbenzene	mg/kg	0.0500	0.0568	114	70 - 128	8118
Hexachlorobutadiene	mg/l	0.0500	0.0496	99	66 - 136	7850
Hexachlorobutadiene	mg/kg	0.0500	0.0457	91	58 - 147	8118
2-Hexanone	mg/l	0.250	0.250	100	66 - 139	7850
2-Hexanone	mg/kg	0.250	0.252	101	55 - 138	8118
Isopropylbenzene	mg/l	0.0500	0.0517	103	81 - 129	7850
Isopropylbenzene	mg/kg	0.0500	0.0583	117	73 - 129	8118
p-Isopropyltoluene	mg/l	0.0500	0.0505	101	73 - 132	7850
4-Isopropyltoluene	mg/kg	0.0500	0.0515	103	63 - 135	8118
4-Methyl-2-pentanone	mg/l	0.250	0.268	107	69 - 138	7850
4-Methyl-2-pentanone	mg/kg	0.250	0.247	99	58 - 140	8118
Methylene chloride	mg/l	0.0500	0.0489	98	73 - 139	7850
Methylene chloride	mg/kg	0.0500	0.0614	123	68 - 136	8118
Naphthalene	mg/l	0.0500	0.0516	103	62 - 144	7850
Naphthalene	mg/kg	0.0500	0.0407	81	59 - 152	8118
n-Propylbenzene	mg/l	0.0500	0.0511	102	72 - 134	7850
n-Propylbenzene	mg/kg	0.0500	0.0562	112	54 - 141	8118
Styrene	mg/l	0.0500	0.0521	104	82 - 129	7850
Styrene	mg/kg	0.0500	0.0525	105	71 - 129	8118
1,1,1,2-Tetrachloroethane	mg/l	0.0500	0.0468	94	71 - 129	7850
1,1,1,2-Tetrachloroethane	- mg/kg	0.0500	0.0530	106	79 - 126	8118



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 5 Laboratory Receipt Date: 12/13/04

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
1,1,2,2-Tetrachloroethane	mg/l	0.0500	0.0472	94	66 - 136	7850
1,1,2,2-Tetrachloroethane	mg/kg	0.0500	0.0506	101	62 - 128	8118
Tetrachloroethene	mg/l	0.0500	0.0489	98	80 - 128	7850
Tetrachloroethene	mg/kg	0.0500	0.0516	103	73 - 134	8118
Toluene	mg/l	0.0500	0.0483	97	77 - 124	7850
Toluene	mg/kg	0.0500	0.0544	109	72 - 125	8118
1,2,3-Trichlorobenzene	mg/l	0.0500	0.0496	99	70 - 134	7850
1,2,3-Trichlorobenzene	mg/kg	0.0500	0.0436	87	63 - 156	8118
1,2,4-Trichlorobenzene	mg/l	0.0500	0.0501	100	67 - 137	7850
1,2,4-Trichlorobenzene	mg/kg	0.0500	0.0411	82	54 - 154	8118
1,1,1-Trichloroethane	mg/l	0.0500	0.0506	101	76 - 131	7850
1,1,1-Trichloroethane	mg/kg	0.0500	0.0581	116	73 - 131	8118
1,1,2-Trichloroethane	mg/l	0.0500	0.0483	97	79 - 123	7850
1,1,2-Trichloroethane	mg/kg	0.0500	0.0511	102	73 - 125	8118
Trichloroethene	mg/l	0.0500	0.0492	98	78 - 140	7850
Trichloroethene	mg/kg	0.0500	0.0590	118	75 - 135	8118
1,2,3-Trichloropropane	mg/l	0.0500	0.0456	91	57 - 134	7850
1,2,3-Trichloropropane	mg/kg	0.0500	0.0477	95	53 - 135	8118
1,2,4-Trimethylbenzene	mg/l	0.0500	0.0505	101	75 - 129	7850
1,2,4-Trimethylbenzene	mg/kg	0.0500	0.0530	106	60 - 135	8118
1,3,5-Trimethylbenzene	mg/l	0.0500	0.0510	102	79 - 127	7850
1,3,5-Trimethylbenzene	mg/kg	0.0500	0.0540	108	62 - 135	8118
Vinyl chloride	mg/l	0.0500	0.0473	95	53 - 148	7850
Vinyl chloride	mg/kg	0.0500	0.0561	112	53 - 140	8118
Xylenes (Total)	mg/l	0.150	0.154	103	81 - 124	7850
Xylenes (Total)	mg/kg	0.150	0.168	112	71 - 129	8118
Bromodichloromethane	mg/l	0.0500	0.0524	105	79 - 132	7850
Bromodichloromethane	mg/kg	0.0500	0.0579	116	76 - 131	8118
Trichlorofluoromethane	mg/l	0.0500	0.0468	94	53 - 151	7850
Trichlorofluoromethane	mg/kg	0.0500	0.0622	124	57 - 144	8118
VOA Surr 1,2-DCA-d4	% Rec			93	73 - 127	7850
VOA Surr, 1,2-DCAd4	% Rec			100	72 - 134	8118
VOA Surr Toluene-d8	% Rec			96	79 - 113	7850
VOA Surr Toluene-d8	% Rec			106	76 - 122	8118
VOA Surr, 4-BFB	% Rec			97	79 - 125	7850
VOA Surr, 4-BFB	% Rec			105	60 - 138	8118
VOA Surr, DBFM	% Rec			92	75 - 134	7850
VOA Surr, DBFM	% Rec			99	75 - 137	8118



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 6 Laboratory Receipt Date: 12/13/04

PEST/PCB/HERB	PARAMETERS					
Aroclor 1242	mg/kg	0.167	0.185	111	76 - 137	7626

Duplicates
Analyte units Orig. Val. Duplicate RPD Limit Q.C. Batch Sample Dup'd

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
TPH (Gasoline Range)	< 0.52	mg/kg	7052	12/14/04	11:11
TPH (Diesel Range)	< 10.0	mg/kg	7284	12/14/04	17:02
UST surr-Trifluorotoluene	89.	% Recovery	7052	12/14/04	11:11
EPH surr-o-Terphenyl	117.	% Recovery	7284	12/14/04	17:02
VOA PARAMETERS					
Acetone	< 0.00217	mg/l	7850	12/15/04	8:02
Acetone	< 0.0087	mg/kg	8118	12/15/04	11:41
Benzene	< 0.00025	mg/l	7850	12/15/04	8:02
Benzene	< 0.0008	mg/kg	8118	12/15/04	11:41
Bromobenzene	< 0.00019	mg/l	7850	12/15/04	8:02
Bromobenzene	< 0.00060	mg/kg	8118	12/15/04	11:41
Bromochloromethane	< 0.00039	mg/l	7850	12/15/04	8:02
Bromochloromethane	< 0.00080	mg/kg	8118	12/15/04	11:41
Bromoform	< 0.00017	mg/l	7850	12/15/04	8:02
Bromoform	< 0.0005	mg/kg	8118	12/15/04	11:41
Bromomethane	< 0.00031	mg/l	7850	12/15/04	8:02
Bromomethane	< 0.0013	mg/kg	8118	12/15/04	11:41
2-Butanone	< 0.00336	mg/l	7850	12/15/04	8:02
2-Butanone	< 0.00590	mg/kg	8118	12/15/04	11:41
n-Butylbenzene	< 0.00015	mg/l	7850	12/15/04	8:02
n-Butylbenzene	< 0.00060	mg/kg	8118	12/15/04	11:41
sec-Butylbenzene	< 0.00043	mg/l	7850	12/15/04	8:02
sec-Butylbenzene	< 0.00050	mg/kg	8118	12/15/04	11:41
tert-Butylbenzene	< 0.00035	mg/l	7850	12/15/04	8:02



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 7 Laboratory Receipt Date: 12/13/04

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
tert-Butylbenzene	< 0.00060	mg/kg	8118	12/15/04	11:41
Carbon disulfide	< 0.00022	mg/l	7850	12/15/04	8:02
Carbon disulfide	< 0.00050	mg/kg	8118	12/15/04	11:41
Carbon tetrachloride	< 0.00035	mg/l	7850	12/15/04	8:02
Carbon tetrachloride	< 0.0010	mg/kg	8118	12/15/04	11:41
Chlorobenzene	< 0.00019	mg/l	7850	12/15/04	8:02
Chlorobenzene	< 0.0001	mg/kg	8118	12/15/04	11:41
Chloroethane	< 0.00024	mg/l	7850	12/15/04	8:02
Chloroethane	< 0.0008	mg/kg	8118	12/15/04	11:41
Chloroform	< 0.00038	mg/l	7850	12/15/04	8:02
Chloroform	< 0.0006	mg/kg	8118	12/15/04	11:41
Chloromethane	< 0.00040	mg/l	7850	12/15/04	8:02
Chloromethane	< 0.0007	mg/kg	8118	12/15/04	11:41
2-Chlorotoluene	< 0.00019	mg/l	7850	12/15/04	8:02
2-Chlorotoluene	< 0.00080	mg/kg	8118	12/15/04	11:41
4-Chlorotoluene	< 0.00020	mg/l	7850	12/15/04	8:02
4-Chlorotoluene	< 0.00090	mg/kg	8118	12/15/04	11:41
1,2-Dibromo-3-chloropropane	< 0.00069	mg/l	7850	12/15/04	8:02
1,2-Dibromo-3-chloropropane	< 0.00100	mg/kg	8118	12/15/04	11:41
Dibromochloromethane	< 0.00029	mg/l	7850	12/15/04	8:02
Dibromochloromethane	< 0.0008	mg/kg	8118	12/15/04	11:41
1,2-Dibromoethane	< 0.00023	mg/l	7850	12/15/04	8:02
1,2-Dibromoethane	< 0.00080	mg/kg	8118	12/15/04	11:41
Dibromomethane	< 0.00038	mg/l	7850	12/15/04	8:02
Dibromomethane	< 0.00100	mg/kg	8118	12/15/04	11:41
1,2-Dichlorobenzene	< 0.00025	mg/l	7850	12/15/04	8:02
1,2-Dichlorobenzene	< 0.0006	mg/kg	8118	12/15/04	11:41
1,3-Dichlorobenzene	< 0.00034	mg/l	7850	12/15/04	8:02
1,3-Dichlorobenzene	< 0.0006	mg/kg	8118	12/15/04	11:41
1,4-Dichlorobenzene	< 0.00033	mg/l	7850	12/15/04	8:02
1,4-Dichlorobenzene	< 0.0007	mg/kg	8118	12/15/04	11:41
Dichlorodifluoromethane	< 0.00020	mg/l	7850	12/15/04	8:02
Dichlorodifluoromethane	< 0.0007	mg/kg	8118	12/15/04	11:41
1,1-Dichloroethane	< 0.00025	mg/l	7850	12/15/04	8:02
1,1-Dichloroethane	< 0.0006	mg/kg	8118	12/15/04	11:41
1,2-Dichloroethane	< 0.00039	mg/l	7850	12/15/04	8:02
1,2-Dichloroethane	< 0.0007	mg/kg	8118	12/15/04	11:41
1,1-Dichloroethene	< 0.00029	mg/l	7850	12/15/04	8:02



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 8 Laboratory Receipt Date: 12/13/04

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,1-Dichloroethene	< 0.0006	mg/kg	8118	12/15/04	11:41
cis-1,2-Dichloroethene	< 0.00032	mg/l	7850	12/15/04	8:02
cis-1,2-Dichloroethene	< 0.0007	mg/kg	8118	12/15/04	11:41
trans-1,2-Dichloroethene	< 0.00023	mg/l	7850	12/15/04	8:02
trans-1,2-Dichloroethene	< 0.0008	mg/kg	8118	12/15/04	11:41
1,2-Dichloropropane	< 0.00029	mg/l	7850	12/15/04	8:02
1,2-Dichloropropane	< 0.0007	mg/kg	8118	12/15/04	11:41
1,3-Dichloropropane	< 0.00025	mg/l	7850	12/15/04	8:02
1,3-Dichloropropane	< 0.00060	mg/kg	8118	12/15/04	11:41
2,2-Dichloropropane	< 0.00041	mg/l	7850	12/15/04	8:02
2,2-Dichloropropane	< 0.00050	mg/kg	8118	12/15/04	11:41
1,1-Dichloropropene	< 0.00017	mg/l	7850	12/15/04	8:02
1,1-Dichloropropene	< 0.00070	mg/kg	8118	12/15/04	11:41
cis-1,3-Dichloropropene	< 0.00020	mg/l	7850	12/15/04	8:02
cis-1,3-Dichloropropene	< 0.0005	mg/kg	8118	12/15/04	11:41
trans-1,3-Dichloropropene	< 0.00023	mg/l	7850	12/15/04	8:02
trans-1,3-Dichloropropene	< 0.0006	mg/kg	8118	12/15/04	11:41
Ethylbenzene	< 0.00019	mg/l	7850	12/15/04	8:02
Ethylbenzene	< 0.0005	mg/kg	8118	12/15/04	11:41
Hexachlorobutadiene	< 0.00040	mg/l	7850	12/15/04	8:02
Hexachlorobutadiene	< 0.00080	mg/kg	8118	12/15/04	11:41
2-Hexanone	< 0.00111	mg/l	7850	12/15/04	8:02
2-Hexanone	< 0.00410	mg/kg	8118	12/15/04	11:41
Isopropylbenzene	< 0.00043	mg/l	7850	12/15/04	8:02
Isopropylbenzene	< 0.00060	mg/kg	8118	12/15/04	11:41
p-Isopropyltoluene	< 0.00017	mg/l	7850	12/15/04	8:02
4-Isopropyltoluene	< 0.00060	mg/kg	8118	12/15/04	11:41
4-Methyl-2-pentanone	< 0.00083	mg/l	7850	12/15/04	8:02
4-Methyl-2-pentanone	< 0.00410	mg/kg	8118	12/15/04	11:41
Methylene chloride	< 0.00016	mg/l	7850	12/15/04	8:02
Methylene chloride	< 0.0008	mg/kg	8118	12/15/04	11:41
Naphthalene	< 0.00110	mg/l	7850	12/15/04	8:02
Naphthalene	< 0.00130	mg/kg	8118	12/15/04	11:41
n-Propylbenzene	< 0.00012	mg/l	7850	12/15/04	8:02
n-Propylbenzene	< 0.00050	mg/kg	8118	12/15/04	11:41
Styrene	< 0.00041	mg/l	7850	12/15/04	8:02
Styrene	< 0.00060	mg/kg	8118	12/15/04	11:41
1,1,1,2-Tetrachloroethane	< 0.00022	mg/l	7850	12/15/04	8:02



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 9 Laboratory Receipt Date: 12/13/04

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,1,1,2-Tetrachloroethane	< 0.00080	mg/kg	8118	12/15/04	11:41
1,1,2,2-Tetrachloroethane	< 0.00022	mg/l	7850	12/15/04	8:02
1,1,2,2-Tetrachloroethane	< 0.0006	mg/kg	8118	12/15/04	11:41
Tetrachloroethene	< 0.00022	mg/l	7850	12/15/04	8:02
Tetrachloroethene	< 0.0008	mg/kg	8118	12/15/04	11:41
Toluene	< 0.00017	mg/l	7850	12/15/04	8:02
Toluene	< 0.0005	mg/kg	8118	12/15/04	11:41
1,2,3-Trichlorobenzene	< 0.00029	mg/l	7850	12/15/04	8:02
1,2,3-Trichlorobenzene	< 0.00070	mg/kg	8118	12/15/04	11:41
1,2,4-Trichlorobenzene	< 0.00026	mg/l	7850	12/15/04	8:02
1,2,4-Trichlorobenzene	< 0.00080	mg/kg	8118	12/15/04	11:41
1,1,1-Trichloroethane	< 0.00036	mg/l	7850	12/15/04	8:02
1,1,1-Trichloroethane	< 0.0006	mg/kg	8118	12/15/04	11:41
1,1,2-Trichloroethane	< 0.00022	mg/l	7850	12/15/04	8:02
1,1,2-Trichloroethane	< 0.0007	mg/kg	8118	12/15/04	11:41
Trichloroethene	< 0.00027	mg/l	7850	12/15/04	8:02
Trichloroethene	< 0.0007	mg/kg	8118	12/15/04	11:41
1,2,3-Trichloropropane	< 0.00022	mg/l	7850	12/15/04	8:02
1,2,3-Trichloropropane	< 0.00080	mg/kg	8118	12/15/04	11:41
1,2,4-Trimethylbenzene	< 0.00025	mg/l	7850	12/15/04	8:02
1,2,4-Trimethylbenzene	< 0.0005	mg/kg	8118	12/15/04	11:41
1,3,5-Trimethylbenzene	< 0.00035	mg/l	7850	12/15/04	8:02
1,3,5-Trimethylbenzene	< 0.00050	mg/kg	8118	12/15/04	11:41
Vinyl chloride	< 0.00019	mg/l	7850	12/15/04	8:02
Vinyl chloride	< 0.0007	mg/kg	8118	12/15/04	11:41
Xylenes (Total)	< 0.00033	mg/l	7850	12/15/04	8:02
Xylenes (Total)	< 0.0013	mg/kg	8118	12/15/04	11:41
Bromodichloromethane	< 0.00024	mg/l	7850	12/15/04	8:02
Bromodichloromethane	< 0.0005	mg/kg	8118	12/15/04	11:41
Trichlorofluoromethane	< 0.00012	mg/l	7850	12/15/04	8:02
Trichlorofluoromethane	< 0.0006	mg/kg	8118	12/15/04	11:41
VOA Surr 1,2-DCA-d4	98.	% Rec	7850	12/15/04	8:02
VOA Surr, 1,2-DCAd4	110.	% Rec	8118	12/15/04	11:41
VOA Surr Toluene-d8	97.	% Rec	7850	12/15/04	8:02
VOA Surr Toluene-d8	104.	% Rec	8118	12/15/04	11:41
VOA Surr, 4-BFB	102.	% Rec	7850	12/15/04	8:02
VOA Surr, 4-BFB	105.	% Rec	8118	12/15/04	11:41
VOA Surr, DBFM	94.	% Rec	7850	12/15/04	8:02



PROJECT QUALITY CONTROL DATA Project Number: Project Name: EASTMONT TOWNE CENTER Page: 10 Laboratory Receipt Date: 12/13/04

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
VOA Surr, DBFM	97.	% Rec	8118	12/15/04	11:41
PEST/PCB/HERB PARAMETERS					
Aroclor 1016	< 0.0166	mg/kg	7626	12/16/04	6:19
Aroclor 1221	< 0.0333	mg/kg	7626	12/16/04	6:19
Aroclor 1232	< 0.0166	mg/kg	7626	12/16/04	6:19
Aroclor 1242	< 0.0166	mg/kg	7626	12/16/04	6:19
Aroclor 1248	< 0.0166	mg/kg	7626	12/16/04	6:19
Aroclor 1254	< 0.0166	mg/kg	7626	12/16/04	6:19
Aroclor 1260	< 0.0166	mg/kg	7626	12/16/04	6:19
pcb surr-TCMX	100.	% Rec	7626	12/16/04	6:19
8082 Surr DCB,s	94.	% Rec	7626	12/16/04	6:19

= Value outside Laboratory historical or method prescribed QC limits.



2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204 800-765-0980 • 615-726-3404 Fax

12/16/04

EBI CONSULTANTS 10966

FOUR A STREET BURLINGTON, MA 01803

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EASTMONT TOWNE CENTER Project Number: . Laboratory Project Number: 399919.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

		Page 1
Sample Identification	Lab Number	Collection Date
0171 5	04 3104046	10/0/04
SVI-5	04-A194046	12/ 9/04
SV2-5	04-A194047	12/ 9/04
SV3-12	04-A194048	12/ 9/04
SV4-25	04-A194049	12/10/04
SV5-10	04-A194050	12/10/04
SV6-10	04-A194051	12/10/04
SV6-26	04-A194052	12/10/04
SV7-20	04-A194053	12/10/04
SV8-10	04-A194054	12/10/04
Trip Blank	04-A194055	12/10/04



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Sample Identification _____

Report Approved By:

Page 2 Lab Number Collection Date _____

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Roxanne & Connor

Report Date: 12/16/04

Johnny A. Mitchell, Lab Director Michael H. Dunn, M.S., Technical Director Pamela A. Langford, Technical Services Eric S. Smith, QA/QC Director Sandra McMillin, Technical Services

Gail A. Lage, Technical Services Glenn L. Norton, Technical Services Kelly S. Comstock, Technical Services Roxanne L. Connor, Technical Services Mark Hollingsworth, Director of Project

Laboratory Certification Number: 01168CA

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CestAmeric ANALYTICAL TESTING CORPOR	Nashville Division Phone: 615-726-0177 2960 Foster Creighton Fax: 615-726-3404 Nashville, TN 37204												To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring									
Client Name	EBI	40	AS	VL	TIN	10		(Clien	t#:											\sim	
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City/State/Zip Code:	RU	eria	06	7	on		N	1A					•	Pr	oject #:		-					
Project Manager:	Ric	H MCKINNOY										ana ing Propinsi Ana ang ang	Sit	te/Local	tion ID:	<u>OH</u>	KH	ANO	1		State:	<u>A</u>
Telephone Number:	661-	F71	-	22	81		Fax	κ	SA	mi	2			Rep	ort To:	Ē	PI	•				
Sampler Name: (Print Name)	RICH	ma	K.	vne	ey_	RA	14	Inn	e y	101	ERIL	pusu	intra	5 Invo	ice To:	E	9T					
Sampler Signature:	2	m	2		ð				1			С	enj	Q	uote #:					PO#:		
			/		Matrix	Prese	ervatio	on & #	of Co	ntainer	9				Analyz	e For:						C Deliverable
Standard χ Rush (surcharges may apply) Hate Needed: <u>12-16-04</u> Fax Results: (Y) N E=mmRic SAMPLE ID SV 6-10 SV 6-26 SV 7-20 SV 8-10 SV 8-70	Date Sampled	ISHO I DE Sambled	C G = Grab, C = Composite	Field Fittered	SL - Shudge DW - Drinking War GW - Groundwarter S - Soil/Soi WW - Wastewarter Specify Oth	HNO3	HCI		Methanol	None Other (Specify)		XXXX X	N X X X X X X X X X X X X X X X X X X X	0 x x x x 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								None Level 2 (Batch QC) Level 3 Level 4 ther: EMARKS
			1																			
Special Instructions: Pg 21	2																LABO II F	RATO nit Leb Rec Let	Temp: Temp:	MENTS:):	
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Relinquished By:	1	Date:		Time	e:	Received By:							Date:		Time:		Bottles Supplied by Test America: Y N					
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estAmeric		ashville 60 Fos	Divis ter C	sion reigh 3720	nton 4	Phon Fax:	e: 6 6	15-7 15-7	26- 26-	0177 3404					To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring									
ANALYTICAL TESTING CORPO	ERI		97N.S	512	TINC	10			Clie	ent#:					Pr	oject Na	ime:	EAL	717	TONT	- 7	ouve	Center	
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Project Manager: Telephone Number:	R10 6101-0	ch 971-	<u>m</u> 22	6	1		Fa	x:	Sh	m	e				1.100	Repor	t To:	EB E	I 3 I					
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Gampor Gignere					Matrix	Prese	ervati	on &	# of	Cont	aínen	-	7	01	T	Ť			T		1		None	
Standard Rush (surcharges may apply) • Needed: <u>12-16</u>			Composite		W - Drinking Wa ater S - Soil/So ter Specify Oth								j S			0							(Batch QC) Level 3 Level 4 Other:	
	Jate Sampled	Time Sampleo	G = Grab, C =	Field Filtered	SL - Sludge D' GW - Groundwe WW - Wastewa	FONH3	ΗC	NaOH	H ₂ SO4	Methanol	None Other (Specify		201	10th	7ax	Real		 {	/		/		REMARKS	
SV1-5	12-9-04	1B00	6	F	5	$\left\{ \cdot \right\}$							X 				Ho	10					NOILATER Dempinio	
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SV4-10 SV4-25	12-10-0	10101	1							H		7	×	X	X	X								
SV5-10 SV5-25		1200		1	1		† -					1					HO	10				+-+		
pecial instructions: Pg 1	2,	E-n	AI	L	Per	21	5	in	ـــــــــــــــــــــــــــــــــــــ	7	-0	A16	8014	2					LAB	ORATOF Init Lab Rec Lat	RY CO Temp o Temp	MMEN S: :):		
Relinquished By: R.C. M	i	JZ Date:	11-0	1/-04/200 Received By:									Date: Time:				Custody Seals: Y N N/A Bottles Supplied by Test America: Y N							
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APPENDIX D

SOIL VAPOR ANALYTICAL LABORATORY REPORT

December 12, 2004

Jeff Smith EBI Consultants 6876 Susquehanna Trail South York, Pa 17403



Dear Jeff:

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Enclosed please find the report on the limited soil vapor investigation performed on December 10-12 at the Eastmont Town Center on 7200 Bancroft Avenue in Oakland, Ca. The report consists of the following sections:

- Technical approach with results and discussion.
- Spreadsheet of Results.
- Data quantitation sheets in LARWQCB format.
- QA/QC in LARWQCB format.
- Chromatograms.

If you have any questions or additional requirements, please do not hesitate to call.

Sincerely, which

Raphe Pavlick Director

cc: Rich McKinney

SOIL VAPOR TECHNICAL APPROACH

Soil samples were taken into polyacetate liners using Geoprobe patented stop-pin utilizing the MeisterProbe hydraulic installation system (a modified version of Geoprobe). After the soil samples were recovered, polyethylene tubing (1/4 inch) equipped with an anchor is inserted into the open annulus. A small amount of coarse sand is allowed to flow through the inside of the steel pipe so as to form a permeable sand pack at depth. The hole is then grouted to the next shallow depth with bentonite slurry formed in situ from granular bentonite. A second length of color-coded polyethylene tubing in inserted to depth, the process repeated, and the hole is then grouted to the surface. Three interior locations were installed using a limited access machine, the KlosetProbe; the only difference in technique is that one-inch steel tubing, rather than 1¼ inch, is used t advance the probes. The polyethylene tubing is connected to the sampling train, and soil vapor sampling is initiated. The tubing exiting the surface of the ground is connected to a glass sampling bulb fitted with Teflon stopcocks and a viton rubber sampling port. This bulb is connected in turn to a vacuum gauge, flowmeter, and portable sampling pump. Initially both stopcocks are closed, and the absence of flow and the presence of a slight vacuum is noted. This demonstrates that the sampling train on the far end of the bulb is leak-tight. Then the first stopcock (pump end) is opened; the absence of flow demonstrates that the sampling bulb itself is leaktight. The ground end of the bulb is then opened, and a flow of 150-200 ml/min is maintained for seven to ten purge volumes. During the sampling a leak-check compound such as isobutane is placed near and around the sample train. Any trace of this compound detected in the sample indicates the intrusion of ambient air into the sampling train, invalidating the results of that sample. No such leaks were detected with any of the samples. The stopcocks were then closed (pump end first), and the sample retained in the container. Approximately 25 NG each of deutero-chloroform, deutero-methylene chloride, deutero-acetone, deutero-toluene and deuterobenzene were added through the septum into the bulb. The recovery of these isotopically-labeled surrogate compounds demonstrates that the bulbs have remained leak-free up until the actual analysis. A recovery of 90% for the deuterated-benzene, deutero-methylene chloride, deuterated toluene and the deuterated chloroform is desirable; a recovery of less than 75% requires reinjection, resampling or may qualify the sample results. The deuterated acetone is added as a measure of water vapor in the sampling and analysis systems; a recovery of greater than 70% is acceptable, although levels of the water-soluble compounds (ketones) may be affected. In the event that water-soluble related compounds are detected, the deuterated acetone may be used as an internal standard for quantitation. All recoveries during this project were within acceptable range. These bulbs were then delivered to the mobile laboratory for analysis by GCMS.

The <u>analyses</u> of the soil vapor samples proceeded as follows. A 1 ml aliquot of soil vapor was withdrawn from each bulb and injected into a Hewlett-Packard model 6890 gas chromatograph interfaced to a Hewlett-Packard model 5973 mass spectrometer. Chromatography was performed in such a way that the combination of retention times and mass fragmentation allowed for the complete separation of all the target compounds. The mass spec was operated in *full scan* mode between 35 and 350 amu. This allows for the identification of any volatile organic species that may be present in the soil vapor.

The following laboratory <u>QA/QC</u> was performed. An initial five-point calibrations was run on August 27, 2004. A laboratory control standard (LCS) from *Absolute Standards* 8240 mix was run at the end of the same day. The daily standard, run on the sampling days, was made from *Ultra* lot T065. The initial calibration was also run on this standard stock. The surrogate calibration curve was run on Aldrich certified material. All results were within the LAWQCB and HGS requirements.

Two notable additions to the LAWQCB requirements were deemed necessary:

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- Five isotopically-labeled surrogates, D2-Methylene Chloride, D6-Benzene, D6-Acetone, D8-Toluene and D-Chloroform, were added to the collection vessel, a 125-ml glass bulb fitted with Teflon stopcocks and a viton rubber septum, to measure recovery percentages. The benzene, toluene, methylene chloride and chloroform surrogates are used to verify the recovery of the BTEX and chlorinated hydrocarbons respectively; a recovery of at least 90% is desired; less than 75% would necessitate reanalysis or resampling, or would *qualify* those data... The deuterated acetone provides a measure of the possible presence of water vapor in the sample and general condition of the chromatographic system in terms of hydration; a recovery of 70% of the acetone surrogate indicates acceptability of the sampling line should be investigated or chromatographic dehydration procedures should be considered. If ketones, alcohols, or other water soluble compounds are being targeted, the acetone surrogate may serve as an internal standard for their quantitation.
 - Pentane, isobutane, isopropanol or other vapor was used to surround the sampling train at the surface to identify possible ambient intrusion into the sampling train or down the outside surface of the sampling tubing connected to the subsurface. In the event a leakcheck compound is detected in the sample, a different leak-detecting compound will be used for a repeat sample to eliminate the possibility that the first compound is actually present in the soil vapor itself.

RESULTS AND DISCUSSION

Low concentrations of tetrachloroethylene (PCE) were found in three of the samples; the nested probe showed a decrease in concentration with depth. The highest concentration was 19 mcg/L, which is below levels normally found in the average dry cleaner.

Target compounds include all those listed in the initial calibration spreadsheet.

Because of differences in rounding philosophies between the Water Board forms (Quattro-Pro) and the spreadsheet (Excel), there may occasionally be a difference in the decimal point of a value. This is not considered significant and should not be a cause of concern.

All QA/QC requirements of HydroGeoSpectrum and LARWQCB have been met.

HydroGeoSpectrum does not accept any responsibility for other interpretation or utilization of these results.

Oakland/EBI

Soil Vapor (µg/L) *HydroGeoSpectrum*

LOCATION-	Date Sampled	PCE
depth(ft)		µg/L
SV1-7	12-Dec-04	19
SV1-17	12-Dec-04	3.2
SV2-5	12-Dec-04	1.5
SV3-11	12-Dec-04	Ν

PCE = Tetrachloroethylene

VOC = volatile organic compound

 $N = < 0.5 \, \mu g/L$

DATA

					SOIL G	as saivi	IPLE RESI	ULIS					
SITE NAME: Oaklan	d/EBI		LAB N	AME:	HydroG	eoSpect	rum (HGS))	DATE:	12 DEC	2004		
ANALYST: Raphe Pa	avlick			COLLE	ECTOR:	Raphe F	Pavlick		INSTRU	IMENT I	D 2415/	48201	
NORMAL INJECTION	I VOLUME	1 m	I										
Sample ID:			SV1			SV1			SV2			SV3	
		WC	DA7881-05	225	WC	DA7882-05	226	W	DA7883-05	226	WC	DA7884-05	226
Sampling Depth (ft)			7			-17			-5			-11	
Purge Volume (ml)			1800			2400			1650			2100	
Vacuum			NO			NO		NO		NO			
Sampling Time			1617			1623		1616 N		1627 S			
Injection Time			1532			1547		1610			1625		
Injection Volume			1ml			1ml			1ml			1ml	
Dilution Factor			1			1			1			1	
COMPOUND	DETECTOR	RT	AREA	CONC	RT	AREA	CONC	RT	AREA	CONC	RT	AREA	CONC
Tetrachloroethene	MS	9.96	109988	19.1	9.94	18487	3.2	9.94	8697	1.5	NONE	E DETEC	TED
Deutero-chloroform	MS	8.01	174867	92%	7.95	166531	88%	8.03	165687	87%	7.96	172810	91%
D6-BENZENE	MS	8.43	482809	91%	8.40	455220	86%	8.42	506084	95%	8.41	472760	89%
D6-ACETONE	MS	6.91	212651	110%	6.87	203119	106%	6.92	189491	98%	6.86	179716	93%
D2-Dichloromethane	MS	6.28	152560	100%	5.86	154012	101%	6.84	164882	108%	5.88	140001	92%
D8-TOLUENE	MS	9.55	565540	123%	9.54	471971	102%	9.54	451349	98%	9.54	373655	81%
Total Number of Peaks by	GCMS:	1	+ Surroga	ates	1	+ Surroga	ates	1	+ Surroga	ates	0	+ Surroga	ates

-

Unidentified peaks and/or other analytical remarks: UNITS: mcg/L

QA/QC

INITIAL CALIBRATION BY FULL SCAN MASS SPEC

LAB NAME: HydroGeoSpectrum DATE: 27 August 2004

ANALYST:Raphe Pavlick STD LOT#:ULTRA T065 INSTRUMENT ID:2415A8201-2

Cal	ibrat	tion Files										
500	-	=WOA7280.D	100 =	=WOA7281.	D 2	0 =	WOA7282	2.D				
5	-	=WOA7283.D	1000 =	=WOA7279.	D	=	:					
		Compound		500	100	20	5	1000	Avg		%RSD	AccRge
1)		Vinyl Chlo	ride	4.765	4.068	4.871	6.205	5.619	5.106	E3	16.15	30
2)		Bromometha	ne	0.828	0.631	1.024	0.798	0.811	0.818	E3	17.04	30
3)		Chloroetha	ne	1.147	1.282	1.556	1.974	1.827	1.557	E3	22.48	30
4)		1,1-Dichlo:	roethene	0.781	0.956	1.124	0.967	0.686	0.903	E4	19.00	20
6)		Methylene (Chloride	0.791	0.843	1.004	0.997	0.623	0.852	E4	18.63	20
7)		1,2-Dichlo:	roethene	1.744	2.397	2.170	2.614	2.476	2.280	E4	14.92	20
8)		1,1-Dichlo	roethane	1.693	2.262	2.145	2.015	1.609	1.945	E4	14.59	20
9)		Chloroform		1.432	1.932	1.897	1.890	1.421	1.714	E4	15.36	20
10)		1,2-Dichlo	roethane	0.922	0.891	1.021	1.139	1.081	1.011	E4	10.34	20
12)		1,1,1-Tric	hloroeth	a 1.036	1.005	1.117	1.515	1.433	1.221	E4	19.34	20
13)		Carbon Tet:	rachlori	d 0.751	0.871	0.893	1.100	1.020	0.927	E4	14.65	20
14)		Benzene		2.059	2.643	3.182	2.288	2.849	2.604	E4	17.09	20
15)		Trichloroe	thene	0.776	0.818	1.001	1.144	0.854	0.919	E4	16.51	20
16)		1,2-Dichlo	ropropan	e 1.889	1.962	2.009	2.193	1.609	1.932	E4	11.01	20
17)		Bromodichl	orometha	n 6.915	8.013	8.797	8.084	9.824	8.327	E3	12.90	20
18)		cis-1,3-Di	chloropr	o 0.709	0.814	1.093	0.838	0.973	0.885	E4	16.87	20
19)		trans-1,3-	Dichloro	p 5.569	4.976	5.782	7.511	6.945	6.157	E3	16.91	20
20)		1,1,2-Tric	hloroeth	a 6.214	6.850	8.516	9.797	7.259	7.727	E3	18.51	20
21)		Dibromochl	orometha	n 5.118	5.963	7.377	7.648	8.316	6.884	E3	19.00	20
22)		Bromoform		3.757	3.689	2.647	3.950	3.978	3.604	E3	15.23	20
24)		Toluene		1.744	1.740	2.102	1.960	1.794	1.868	E4	8.48	20
25)		Tetrachlor	oethene	4.270	5.673	7.189	5.960	5.608	5.740	E3	18.12	20
27)		Chlorobenz	ene	1.917	2.032	2.677	2.849	1.999	2.295	E4	18.89	20
28)		Ethylbenze	ne	1.117	1.122	1.492	1.625	1.091	1.289	E4	19.43	20
29)		Xylene (to	tal)	3.875	4.129	5.533	5.549	3.831	4.583	E4	19.24	20
30)		Styrene		2.174	2.327	3.180	3.305	2.400	2.677	E4	19.59	20
31)		1,1,1,2-Te	trachlor	o 5.306	7.022	6.689	4.836	6.701	6.111	E3	15.92	20
32)		1,1,2,2-Te	trachlor	o 5.779	5.600	6.681	7.035	6.173	6.254	E3	9.63	20
33)		FREON-11		2.509	2.185	2.532	1.709	2.363	2.260	E3	14.94	30
34)	s	Deutero-ch	loroform	1	1.901	1.876	1.912		1.896	E3	0.95	25
35)		FREON-12		2.030	2.470	2.172	3.529	3.342	2.709	E3	25.31	30
36)		FREON-113		0.605	0.836	0.622	1.038	0.658	0.752	E4	24.52	30
39)	S	D6-BENZENE	2		5.382	5.339	5.204		5.308	E3	1.75	25
41)	s	D6-ACETONE	6		2.067	1.941	1.768		1.925	E3	7.79	25
42)	S	D2-Dichlor	comethane	2	1.609	1.652	1.299		1.520	E3	12.68	25
43)		Freon-22		3.969	5.152	5.502	6.891	5.917	5.486	E3	19.49	30
44)		Freon-141E	3	0.705	1.359	0.878	0.770	0.761	0.894	E4	29.88	30
53)	S	D8-TOLUENE	2		4.582	4.829	4.413		4.608	E3	4.54	25

Evaluate Initial LCS Report

Data Acq C Sampl Misc MS Ir	File : C:\HPCHEM\1\DATA\WOA72 On : 27 Aug 2004 2:38 pm .e : LCS 50 ng : INITIAL 27AUG04 htegration Params: rteint.p	85.D		Ope Ins Mu	Vial: erator: st ltiplr:	: 1 Raphe GC/MS : 1.00	HGS Ins
Metho Title Last Respo	od : C:\HPCHEM\1\METHODS : FULL SCAN Update : Sun Aug 29 16:26:17 onse via : Single Level Calibr	N082704.M 2004 Cation	1 (RTE Ir	nteg:	rator)		
Min. Max.	RRF : 0.000 Min. Rel. RRF Dev : 25% Max. Rel.	Area : 50 Area : 150)% Max.)%	R.T	. Dev	0.50mi	n
	Compound	AvgRF	CCRF		%Dev A 	ccRge -	
1	Vinyl Chloride	5.106	5.738	EЗ	-12.4	20	
2	Bromomethane	818.347 8	355.620		-4.6	20	
3	Chloroethane	1.557	1.765	EЗ	-13.4	20	
4	1,1-Dichloroethene	9.026	9.187	E3	-1.8	15	
6	Methylene Chloride	8.517	8.334	EЗ	2.1	15	
7	1,2-Dichloroethene (cis)	22.802	22.989	ЕЗ	-0.8	15	
8	1,1-Dichloroethane	19.447	19.548	ЕЗ	-0.5	15	
9	Chloroform	17.145	17.499	ЕЗ	-2.1	15	
10	1,2-Dichloroethane	10.106	11.069	ЕЗ	-9.5	15	
12	1,1,1-Trichloroethane	12.211	12.904	ЕЗ	-5.7	15	
13	Carbon Tetrachloride	9.270	9.777	ЕЗ	-5.5	15	
14	Benzene	26.043	26.350	ЕЗ	-1.2	15	
15	Trichloroethene	9.188	8.642	E3	5.9	15	
16	1,2-Dichloropropane	19.322	19.548	ЕЗ	-1.2	15	
17	Bromodichloromethane	8.327	7.983	ЕЗ	4.1	15	
18	cis-1,3-Dichloropropene	8.855	10.039	ЕЗ	-13.4	15	
19	trans-1,3-Dichloropropene	6.157	5.675	ЕЗ	7.8	15	
20	1,1,2-Trichloroethane	7.727	7.008	ЕЗ	9.3	15	
21	Dibromochloromethane	6.884	6.069	E3	11.8	15	
24	Toluene	18.678	18.409	EЗ	1.4	15	
25	Tetrachloroethene	5.740	5.820	ЕЗ	-1.4	15	
27	Chlorobenzene	22.948	21.455	ЕЗ	6.5	15	
28	Ethylbenzene	12.893	11.927	E3	7.5	15	
29	Xvlene (total)	45.832	44.683	EЗ	2.5	15	
30	Stvrene	26.772	24.030	EЗ	10.2	15	
31	1.1.1.2-Tetrachloroethane	6.111	6.386	ЕЗ	-4.5	15	
32	1,1,2,2-Tetrachloroethane	6.254	5.723	ЕЗ	8.5	15	
33	FREON-11	2.260	1.939	ЕЗ	14.2	20	
35	FREON-12	2.709	2.863	EЗ	-5.7	20	
36	FREON-113	7.520	8.308	E3	-10.5	20	
43	Freon-22	5.486	6.290	ЕЗ	-14.7	20	
44	Freon-141B	8.944	7.645	ЕЗ	14.5	20	

	Evaluate Continui	ing Calibr	ation Rej	port			
Data Acq (Sampi Misc MS In	File : C:\HPCHEM\1\DATA\WOA78 On : 12 Dec 2004 11:17 am le : STANDARD 50ng : B1/ET 12DEC04 ntegration Params: rteint.p	367.D		Ope Ins Mul	Vial: rator: st : tiplr:	1 Raphe GC/MS 1.00	HGS Ins
Metho Title Last Respo	od : C:\HPCHEM\1\METHODS e : FULL SCAN Update : Sun Dec 12 11:38:40 onse via : Single Level Caliba	5\N082704.) 2004 ration	M (RTE I	ntegr	ator)		
Min. Max.	RRF : 0.000 Min. Rel. RRF Dev : 25% Max. Rel.	Area : 5 Area : 15	0% Max. 0%	R.T.	Dev	0.50mir	1
	Compound	AvgRF	CCRF	ę	Dev Ac	cRge	
$1 \\ 2 \\ 3 \\ 4 \\ 6 \\ 7 \\ 8 \\ 9 \\ 0 \\ 12 \\ 13 \\ 14 \\ 15 \\ 6 \\ 7 \\ 18 \\ 9 \\ 0 \\ 21 \\ 4 \\ 5 \\ 7 \\ 8 \\ 9 \\ 0 \\ 12 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 5 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	Vinyl Chloride Bromomethane Chloroethane 1,1-Dichloroethene Methylene Chloride 1,2-Dichloroethene (cis) 1,1-Dichloroethane Chloroform 1,2-Dichloroethane Carbon Tetrachloride Benzene Trichloroethene 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Dibromochloromethane Toluene Tetrachloroethene Chlorobenzene Ethylbenzene Xylene (total) Styrene 1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane FREON-11 FREON-12	5.106 818.347 1.557 9.026 8.517 22.802 19.447 17.145 10.106 12.211 9.270 26.043 9.188 19.322 8.327 8.855 6.157 7.727 6.884 18.678 5.740 22.948 12.893 45.832 26.772 6.111 6.254 2.260 2.709	4.142 899.020 1.308 9.558 9.618 22.634 19.369 15.791 8.743 11.733 10.000 23.883 7.939 18.689 7.293 8.805 6.859 7.881 6.268 16.566 5.049 20.714 13.064 39.412 24.283 5.332 5.888 2.367 2.210	E E E E E E E E E E E E E E E E E E E	$18.9 \\ -9.9 \\ 16.0 \\ -5.9 \\ 0.7 \\ 0.4 \\ 7.9 \\ 13.5 \\ 3.9 \\ -7.9 \\ 8.3 \\ 13.6 \\ 3.3 \\ 12.4 \\ 0.6 \\ -11.4 \\ -2.0 \\ 8.9 \\ 12.0 \\ 9.7 \\ -1.3 \\ 12.0 \\ 9.7 \\ 14.0 \\ 9.3 \\ 12.7 \\ 5.9 \\ -4.7 \\ 18.4 \end{bmatrix}$	$\begin{array}{c} 20\\ 20\\ 15\\ 15\\ 15\\ 15\\ 15\\ 15\\ 15\\ 15\\ 15\\ 15$	
36 43	FREON-113 Freon-22	7.520	4.655	ЕЗ ЕЗ	-5.1 15.1	20 20	

	Evaluate Daily LO	CS Report					
Data Acq (Samp Misc MS In	File : C:\HPCHEM\1\DATA\WOA78 On : 12 Dec 2004 4:40 pm le : LCS 50 ng : 12DEC04 ntegration Params: rteint.p	385.D		Op In Mu	Vial erator st ltiplr	: 1 : Raphe : GC/MS : 1.00	HGS Ins
Metho Titlo Last Respo	od : C:\HPCHEM\1\METHODS e : FULL SCAN Update : Sun Dec 12 16:56:39 onse via : Single Level Caliba	5\N082704.] 9 2004 ration	M (RTE I:	nteg	rator)		
Min. Max.	RRF : 0.000 Min. Rel. RRF Dev : 25% Max. Rel.	Area : 5 Area : 15	0% Max. 0%	R.T	. Dev	0.50min	
	Compound	AvgRF	CCRF		%Dev A	ccRge	
$\begin{array}{c}1\\2\\3\\4\\6\\7\\8\\9\\0\\2\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\2\\2\\2\\2\\2\\2\\2\\2$	Vinyl Chloride Bromomethane Chloroethane 1,1-Dichloroethene Methylene Chloride 1,2-Dichloroethene (cis) 1,1-Dichloroethane Chloroform 1,2-Dichloroethane Carbon Tetrachloride Benzene Trichloroethene 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene 1,1,2-Trichloroethane Dibromochloromethane Toluene Tetrachloroethene Chlorobenzene Ethylbenzene Xylene (total) Styrene 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane FREON-11 FREON-12 FREON-113	5.106 818.347 1.557 9.026 8.517 22.802 19.447 17.145 10.106 12.211 9.270 26.043 9.188 19.322 8.327 8.855 6.157 7.727 6.884 18.678 5.740 22.948 12.893 45.832 26.772 6.111 6.254 2.260 2.709 7.520	5.479 726.940 1.780 10.092 8.581 22.723 16.899 17.153 9.809 13.807 10.767 27.985 7.714 16.808 7.315 9.513 6.655 6.888 5.595 17.734 5.335 20.050 11.124 43.373 22.551 5.677 5.556 2.397 2.910 7.718	E3 E3EE2E2E2E2E2E2E2E2E2E2E2E2E2E2E2E2E2	-7.3 11.2 -14.3 -11.8 -0.8 0.3 13.1 -0.0 2.9 -13.1 -7.5 16.0 12.2 -7.4 -8.1 10.9 18.7 5.1 12.6 13.7 5.4 15.8 7.1 11.2 -6.1 -7.4 -2.6	25 25 20 20 20 20 20 20 20 20 20 20 20 20 20	
43	Freon-22	5.486	5.536	E3	-0.9	25	

Chromatograms

```
File : C:\HPCHEM\1\DATA\WOA7882.D
Operator : Raphe HGS
Acquired : 12 Dec 2004 3:47 pm using AcqMethod N082704
Instrument : GC/MS Ins
Sample Name: SV1-052265-17
Misc Info : Oakland/EMG 12DEC04 1623 T4
Vial Number: 1
```



File : C:\HPCHEM\1\DATA\WOA7883.D
Operator : Raphe HGS
Acquired : 12 Dec 2004 4:10 pm using AcqMethod N082704
Instrument : GC/MS Ins
Sample Name: SV2-052266-5
Misc Info : Oakland/EMG 12DEC04 1616 N11
Vial Number: 1



```
File : C:\HPCHEM\1\DATA\WOA7884.D
Operator : Raphe HGS
Acquired : 12 Dec 2004 4:25 pm using AcqMethod N082704
Instrument : GC/MS Ins
Sample Name: SV3-052267-11
Misc Info : Oakland/EMG 12DEC04 1627 S22
Vial Number: 1
```



```
File : C:\HPCHEM\1\DATA\WOA7881.D
Operator : Raphe HGS
Acquired : 12 Dec 2004 3:32 pm using AcqMethod N082704
Instrument : GC/MS Ins
Sample Name: SV1-05225-7
Misc Info : Oakland/EMG 12DEC04 1617 A8
Vial Number: 1
```



PES Environmental, Inc.

APPENDIX B

ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS



1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

PES Environ	mental, Inc.	
1682 Novato	Blvd., Suite	100
Novato, CA	94947	
Attn: Will	Mast	
Proje	ect Manager	
Samp.	le Number	

B106001

881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 Sample Description Proj. # 881.060.01.002 7000 Bancroft, Oakland B-6-G SOIL VAPOR

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	µg/l		µg/l
Benzene	<0.2	* • • • • • • • •	•••ND•••••
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1, 2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene	<0.2		ND
Trans-1, 3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	e<0.2		ND
Tetrachloroethene	<0.1		0.22
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		ND
Trichloroethene	<0.1		0.16
Vinyl Chloride	<0.2		ND
Total Xylenes	<0.5		ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1,2-Dichoroethene	<0.2		ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

MOBILE CHEM LABS, INC.

1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u> 881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-5-G SOIL VAPOR

B106002

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	µg/l		$\mu g/l$
Benzene	<0.2		ND
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1, 2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2	· · · · · · · · ·	ND
Cis-1,3-Dichloropropene	<0.2		ND
Trans-1,3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	e<0.2		ND
Tetrachloroethene	<0.1		0.42
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		ND
Trichloroethene	<0.1		ND
Vinyl Chloride	<0.2		ND
Total Xylenes			ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1,2-Dichoroethene	<0.2		ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

MOBILE CHEM LABS, INC.

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1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

PES Environmental, Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Will Mast Attn: Project Manager Sample Number

B106003

881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 Sample Description Proj. # 881.060.01.002 7000 Bancroft, Oakland B-7-G SOIL VAPOR

EPA METHOD 8260 PURGEABLE ORGANICS Detection Limit

	Detection	Limit	Results
	µg∕l		$\mu g/l$
Benzene	<0.2		ND
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1, 2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene	<0.2		•••••ND••••••
Trans-1, 3-Dichloropropene	2<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	<0.2		ND
Tetrachloroethene	<0.1		6.4
Toluene	<0.2		•••••ND••••••
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		ND
Trichloroethene	<0.1		0.15
Vinyl Chloride	<0.2		•••••ND•••••••
Total Xylenes	<0.5		ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		•••••ND•••••••
Cis-1,2-Dichoroethene	<0.2		ND
Note: Duplicate Deviation	n is 3.2 %		
Note: Analysis was perfor	med using	EPA meth	ods 5030 & 8260B.

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PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u>

B106004

881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-3-G SOIL VAPOR

EPA METHOD 8260 <u>PURGEABLE ORGANICS</u> Detection Limit Results

μg/l	µg/l
Benzene	•••••••ND•••••
Bromodichloromethane<0.1	ND
Bromoform<0.1	ND
Bromomethane	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chloroethane<0.2	ND
Chloroform	ND
Chloromethane	ND
Dibromochloromethane<0.1	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane<0.2	•••••••••••ND••••••
1,1-Dichloroethene	ND
Trans-1,2-Dichloroethene<0.2	ND
1,2-Dichloropropane<0.2	ND
Cis-1,3-Dichloropropene<0.2	ND
Trans-1,3-Dichloropropene<0.2	ND
Ethylbenzene<0.2	••••••••••••••••••••••••••••••••••••••
Methylene Chloride	••••••••••ND
1,1,2,2-Tetrachloroethane<0.2	ND
Tetrachloroethene<0.1	0.15
Toluene<0.2	••••••ND•••••••
1,1,1-Trichloroethane<0.1	ND
1,1,2-Trichloroethane<0.2	••••••
Trichloroethene	ND
Vinyl Chloride	••••••ND••••••
Total Xylenes	ND
Carbon Disulfide	ND
Styrene	ND
Cis-1,2-Dichoroethene<0.2	••••••ND.•••••
Note: Spike Recovery is 97 %	

Note: Analysis was performed using EPA methods 5030 & 8260B.

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1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u> 881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-8-G SOIL VAPOR

B106005

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	μg/l		μg/l
Benzene	<0.2		ND
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND.
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0 1		ND
Chloroethane			ND
Chloroform	<0.2		ND
Chloremethane	<0.2	•••••	ND
		• • • • • •	ND
Dibromochioromethane			····ND. · · · · · · · · · · · · · · · · · · ·
1,1-Dichloroethane	<0.2		•••••ND•••••••
1,2-Dichloroethane	<0.2	• • • • • •	ND
1,1-Dichloroethene	<0.2	• • • • • •	•••••ND••••••
Trans-1,2-Dichloroethene	<0.2	•••••	•••••ND.•••••
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene.	<0.2		ND
Trans-1, 3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	e<0.2		ND
Tetrachloroethene	<0.1		20
Toluene	<0.2		ND
1.1.1-Trichloroethane	<0.1		ND
1 1 2-Trichloroethane			ND.
Trichloroethene	< 0 1		3 9
Vinyl Chloride			ND
Total Vylonog			ND
Corbon Digulfido			ND
Carbon Disulline		•••••	ND
styrene			•••••ND
Cis-1,2-Dichoroethene			0.42

Note: Analysis was performed using EPA methods 5030 & 8260B.

MOBILE CHEM LABS, INC.

1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u> 881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-9-G SOIL VAPOR

B106006

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	μg/l		$\mu g/l$
Benzene	<0.2		ND
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1,2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene	<0.2		ND
Trans-1,3-Dichloropropene	<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	<0.2		ND
Tetrachloroethene	<0.1		36
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1.1.2-Trichloroethane	<0.2		ND
Trichloroethene	<0.1		0.30
Vinvl Chloride	<0.2		ND
Total Xvlenes		-	ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1.2-Dichoroethene	<0.2		ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

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PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u> 881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-10-G SOIL VAPOR

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B106007

EPA METHOD 8260 PURGEABLE ORGANICS

	Derection	DTULTC	Results
	µg/1		µg/l
Benzene			••••••ND.•••••
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1, 2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene.	<0.2		ND
Trans-1, 3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	e<0.2	—	ND
Tetrachloroethene	<0.1		. 16
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		••••••ND••••••
Trichloroethene	<0.1		• 11 ••••
Vinyl Chloride	<0.2		ND
Total Xylenes	<0.5		ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1,2-Dichoroethene	<0.2		. 0.26

Note: Analysis was performed using EPA methods 5030 & 8260B.

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PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u>

B106008

881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-4-G SOIL VAPOR

Results

<u>EPA METHOD 8260</u> <u>PURGEABLE ORGANICS</u> Detection Limit

μg/1	$\mu g/l$
Benzene	
Bromodichloromethane	ND
Bromoform	
Bromomethane	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
Dibromochloromethane<0.1	ND
1,1-Dichloroethane<0.2	ND
1,2-Dichloroethane	•••••••••••ND••••••
1,1-Dichloroethene	ND
Trans-1,2-Dichloroethene<0.2	ND
1,2-Dichloropropane<0.2	ND
Cis-1,3-Dichloropropene<0.2	ND
Trans-1,3-Dichloropropene<0.2	ND
Ethylbenzene<0.2	••••••••••••ND••••••
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane<0.2	ND
Tetrachloroethene	0.26
Toluene	ND
1,1,1-Trichloroethane<0.1	ND
1,1,2-Trichloroethane<0.2	ND
Trichloroethene	ND
Vinyl Chloride	••••••••••ND••••••
Total Xylenes<0.5	••••••••••ND••••••
Carbon Disulfide<0.2	ND
Styrene	ND
Cis-1,2-Dichoroethene<0.2	ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

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PES Environmental,Inc. 1682 Novato Blvd., Suite 100 Novato, CA 94947 Attn: Will Mast Project Manager <u>Sample Number</u>

B106009

881.060.01.002\2162\014344 Date Sampled:10-09-06 Date Received:10-09-06 Date Analyzed:10-09-06 <u>Sample Description</u> Proj. # 881.060.01.002 7000 Bancroft, Oakland B-2-G SOIL VAPOR

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	µg/l		$\mu g/l$
Benzene	<0.2		ND
Bromodichloromethane	<0.1		ND
Bromoform	<0.1		••••ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		••••ND••••••
1,1-Dichloroethane	<0.2		••••ND.•••••
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1, 2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		••••ND
Cis-1,3-Dichloropropene.	<0.2		••••ND.•••••
Trans-1,3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		••••ND••••••
1,1,2,2-Tetrachloroethane	e<0.2		ND
Tetrachloroethene	<0.1		0.62
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		••••ND••••••
Trichloroethene	<0.1		ND
Vinyl Chloride	<0.2		ND
Total Xylenes	<0.5		ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1,2-Dichoroethene	<0.2		ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

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PES Environr	mental,Inc.
1682 Novato	Blvd., Suite 100
Novato, CA	94947
Attn: Will	Mast
Proje	ect Manager
Samp]	le Number

B106010

881.060.01.002\2162\01434	4
Date Sampled:10-09-0	6
Date Received:10-09-0	6
Date Analyzed:10-09-0	6
Sample Descriptio	n
Proj. # 881.060.01.00	2
7000 Bancroft, Oaklan	d
B-1-G SOIL VAPOR	

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	μg/1		µg/l
Benzene	<0.2		ND
Bromodichloromethane	<0.1		••••••ND•••••••
Bromoform	<0.1		ND
Bromomethane	<0.2		ND
Carbon Tetrachloride	<0.1		ND
Chlorobenzene	<0.1		ND
Chloroethane	<0.2		ND
Chloroform	<0.2		ND
Chloromethane	<0.2		ND
Dibromochloromethane	<0.1		ND
1,1-Dichloroethane	<0.2		ND
1,2-Dichloroethane	<0.2		ND
1,1-Dichloroethene	<0.2		ND
Trans-1,2-Dichloroethene.	<0.2		ND
1,2-Dichloropropane	<0.2		ND
Cis-1,3-Dichloropropene.	<0.2		ND
Trans-1, 3-Dichloropropene	e<0.2		ND
Ethylbenzene	<0.2		ND
Methylene Chloride	<0.2		ND
1,1,2,2-Tetrachloroethane	e<0.2		ND
Tetrachloroethene	<0.1		ND
Toluene	<0.2		ND
1,1,1-Trichloroethane	<0.1		ND
1,1,2-Trichloroethane	<0.2		ND
Trichloroethene	<0.1		ND
Vinyl Chloride	<0.2		ND
Total Xylenes	<0.5		ND
Carbon Disulfide	<0.2		ND
Styrene	<0.2		ND
Cis-1.2-Dichoroethene	<0.2		ND

Note: Analysis was performed using EPA methods 5030 & 8260B.

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PES Environmental, Inc. Engineering & Environmental Services		1682 NOVATO BOULEVARD, SUITE 100 NOVATO, CALIFORNIA 94947 (415) 899-1600 FAX (415) 899-1601
LABORATORY: Mabile Chem Labs	SAMPLERS: JUSTIA Patterson	ANALYSIS REQUESTED
JOB NUMBER: 881.060,01.002		
NAME/LOCATION Sparkle Cleaners		
PROJECT MANAGER: Will Mast	RECORDER: Justin Putterson	
DATE	MATRIX # of Containers & Preservatives DEPTH	8010 8021 8021 815M 8015M meters
YR MO DY TIME	Vapor Water Sedim't LTAL MI N N N N N N N N N N N N N N N N N N	EPA 5035. EPA 5035. EPA 5035. TPHg by 5 TPHd by 5 TPHmo by EPA 8270. MNA Para
0610091203 $B-6$		X
0610091220 B-5-6	X	X
0610091720 B-7-6	\mathbf{X}	X
0610091335 B-3-6	\times	X
0610091425 3-8-6	X	X
0610091450 8-9-6	X	Χ
0610091510 B-10-6	X	X
0610091555 B-4-G	X	X
0610091625 B-2-6	X	X
0610091720 B-1-6		

NOTES	CHAIN OF CUSTODY RECORD			
Turn Around Time: ON SITE	RELINQUISHED BY: (signature)	RECEIVED BY: (Signature) DATE	TIME	
	RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	TIME	
	RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature) DATE	TIME	
	RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature) DATE	TIME	
	DISPATCHED BY: (Signature) DATE	TIME RECEIVED FOR LAS BY (Signature) DATE	TIME	
	METHOD OF SHIPMENT:	· · · · · · · · · · · · · · · · · · ·		

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

SEVERN TRENT **STL**

ANALYTICAL REPORT

Job Number: 720-5877-1 SDG Number: 881.060.01.002 Job Description: Sparkle Cleaners

> For: PES Environmental, Inc. 1682 Novato Boulevard Suite 100 Novato, CA 94947-7021

Attention: Mr. Will Mast

Abanaf Sal D

Afsaneh Salimpour Project Manager I asalimpour@stl-inc.com 10/16/2006

Project Manager: Afsaneh Salimpour

EXECUTIVE SUMMARY - Detections

Client: PES Environmental, Inc.

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method	
720-5877-1	B-10-4.5'					
Tetrachloroethene		2500	790	ug/Kg	8260B	
720-5877-2	B-9-4.5'					
Tetrachloroethene		3000	830	ug/Kg	8260B	
720-5877-3	B-8-4.5'					
Tetrachloroethene		1400	830	ug/Kg	8260B	

METHOD SUMMARY

Client: PES Environmental, Inc.

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Description		Lab Location	Method	Preparation Method
Matrix:	Solid			
Volatile C	Drganic Compounds by GC/MS (Low Level)	STL SF	SW846 8260	3
	Purge-and-Trap for Aqueous Samples/High	STL SF		SW846 5030B
	Closed System Purge & Trap/Laboratory	STL SF		SW846 5035
Matrix:	Water			
Volatile C	Drganic Compounds by GC/MS (Low Level)	STL SF	SW846 8260	3
	Purge-and-Trap	STL SF		SW846 5030B

LAB REFERENCES:

STL SF = STL San Francisco

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: PES Environmental, Inc.

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Method	Analyst	Analyst ID
SW846 8260B	Chen, Amy	AC
SW846 8260B	Lee, Michael	ML

SAMPLE SUMMARY

Client: PES Environmental, Inc.

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received	
B-10-4.5'	Solid	10/09/2006 1220	10/09/2006 1626	
B-9-4.5'	Solid	10/09/2006 1210	10/09/2006 1626	
B-8-4.5'	Solid	10/09/2006 1150	10/09/2006 1626	
B-4-4.5'	Solid	10/09/2006 1100	10/09/2006 1626	
B-3-2.25'	Solid	10/09/2006 0940	10/09/2006 1626	
B-5-4.5'	Solid	10/09/2006 1000	10/09/2006 1626	
B-7-4.5'	Solid	10/09/2006 1120	10/09/2006 1626	
B-6-4.5'	Solid	10/09/2006 1110	10/09/2006 1626	
B-1-4.5'	Solid	10/09/2006 1045	10/09/2006 1626	
B-2-4.5'	Solid	10/09/2006 1030	10/09/2006 1626	
B-3-W	Water	10/09/2006 1400	10/09/2006 1626	
B-3-19.5'	Solid	10/09/2006 1420	10/09/2006 1626	
	Client Sample ID B-10-4.5' B-9-4.5' B-8-4.5' B-4-4.5' B-3-2.25' B-5-4.5' B-7-4.5' B-7-4.5' B-1-4.5' B-2-4.5' B-3-W B-3-19.5'	Client Sample ID Client Matrix B-10-4.5' Solid B-9-4.5' Solid B-8-4.5' Solid B-4.4.5' Solid B-3-2.25' Solid B-7-4.5' Solid B-3-4.5' Solid	Client Sample IDClient MatrixDate/Time SampledB-10-4.5'Solid10/09/2006 1220B-9-4.5'Solid10/09/2006 1210B-8-4.5'Solid10/09/2006 1150B-4-4.5'Solid10/09/2006 1100B-3-2.25'Solid10/09/2006 0940B-5-4.5'Solid10/09/2006 1000B-7-4.5'Solid10/09/2006 1000B-7-4.5'Solid10/09/2006 1120B-6-4.5'Solid10/09/2006 1110B-1-4.5'Solid10/09/2006 1045B-2-4.5'Solid10/09/2006 1045B-2-4.5'Solid10/09/2006 1030B-3-WWater10/09/2006 1400B-3-19.5'Solid10/09/2006 1420	

Analytical Data

Client: PES Environmental, Inc.

Client Sample ID: B-10-4.5'

Lab Sample ID: 720-5877-1 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061220Date Received:10/09/20061626

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method:	8260B	Analysis Batch: 720-14178	Instrument ID:	Varian 3900D
Preparation:	5030B	Prep Batch: 720-14303	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	200		Initial Weight/Volu	ume: 6.30 g
Date Analyzed:	10/11/2006 1454		Final Weight/Volu	ıme: 10 mL
Date Prepared:	10/10/2006 1000			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		790
1,1-Dichloroethane		ND		790
Dichlorodifluoromethane		ND		1600
Vinyl chloride		ND		790
Chloroethane		ND		1600
Trichlorofluoromethane		ND		790
Methylene Chloride		ND		1600
trans-1,2-Dichloroethene		ND		790
cis-1,2-Dichloroethene		ND		790
Chloroform		ND		790
1,1,1-Trichloroethane		ND		790
Carbon tetrachloride		ND		790
1,2-Dichloroethane		ND		790
Trichloroethene		ND		790
1,2-Dichloropropane		ND		790
Dichlorobromomethane		ND		790
trans-1,3-Dichloropropene		ND		790
cis-1,3-Dichloropropene		ND		790
1,1,2-Trichloroethane		ND		790
Tetrachloroethene		2500		790
Chlorodibromomethane		ND		790
Chlorobenzene		ND		790
Bromoform		ND		790
1,1,2,2-Tetrachloroethane		ND		790
1,3-Dichlorobenzene		ND		790
1,4-Dichlorobenzene		ND		790
1,2-Dichlorobenzene		ND		790
Chloromethane		ND		1600
Bromomethane		ND		1600
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		790
EDB		ND		790
1,2,4-Trichlorobenzene		ND		790
Benzene		ND		790
Toluene		ND		790
Ethylbenzene		ND		790
Xylenes, Total		ND		1600
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		111		70 - 130
4-Bromofluorobenzene		107	60 - 140	
1,2-Dichloroethane-d4 (Surr)		105		60 - 140
Job Number: 720-5877-1 Sdg Number: 881.060.01.002

10/09/2006 1210

10/09/2006 1626

Date Sampled:

Date Received:

Client: PES Environmental, Inc.

Client Sample ID: B-9-4.5'

Lab Sample ID: 720-5877-2 Client Matrix: Solid

Method:	8260B	Analysis Batch: 720-14178	Instrument ID:	Varian 3900D
Preparation:	5030B	Prep Batch: 720-14303	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	200		Initial Weight/Volu	ıme: 6.04 g
Date Analyzed:	10/11/2006 1527		Final Weight/Volu	me: 10 mL
Date Prepared:	10/10/2006 1000			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		830
1,1-Dichloroethane		ND		830
Dichlorodifluoromethane		ND		1700
Vinyl chloride		ND		830
Chloroethane		ND		1700
Trichlorofluoromethane		ND		830
Methylene Chloride		ND		1700
trans-1,2-Dichloroethene		ND		830
cis-1,2-Dichloroethene		ND		830
Chloroform		ND		830
1,1,1-Trichloroethane		ND		830
Carbon tetrachloride		ND		830
1,2-Dichloroethane		ND		830
Trichloroethene		ND		830
1,2-Dichloropropane		ND		830
Dichlorobromomethane		ND		830
trans-1,3-Dichloropropene		ND		830
cis-1,3-Dichloropropene		ND		830
1,1,2-Trichloroethane		ND		830
Tetrachloroethene		3000		830
Chlorodibromomethane		ND		830
Chlorobenzene		ND		830
Bromoform		ND		830
1,1,2,2-Tetrachloroethane		ND		830
1,3-Dichlorobenzene		ND		830
1,4-Dichlorobenzene		ND		830
1,2-Dichlorobenzene		ND		830
Chloromethane		ND		1700
Bromomethane		ND		1700
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		830
EDB		ND		830
1,2,4-Trichlorobenzene		ND		830
Benzene		ND		830
Toluene		ND		830
Ethylbenzene		ND		830
Xylenes, Total		ND		1700
Surrogate		%Rec	ŀ	Acceptance Limits
Toluene-d8 (Surr)		110		70 - 130
4-Bromofluorobenzene		107		60 - 140
1,2-Dichloroethane-d4 (Surr)		108		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-8-4.5'

Lab Sample ID: 720-5877-3 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061150Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14178	Instrument ID:	Varian 3900D
Preparation:	5030B	Prep Batch: 720-14303	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	200		Initial Weight/Volu	ume: 6.02 g
Date Analyzed:	10/11/2006 1601		Final Weight/Volu	ıme: 10 mL
Date Prepared:	10/10/2006 1000			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		830
1,1-Dichloroethane		ND		830
Dichlorodifluoromethane		ND		1700
Vinyl chloride		ND		830
Chloroethane		ND		1700
Trichlorofluoromethane		ND		830
Methylene Chloride		ND		1700
trans-1,2-Dichloroethene		ND		830
cis-1,2-Dichloroethene		ND		830
Chloroform		ND		830
1,1,1-Trichloroethane		ND		830
Carbon tetrachloride		ND		830
1,2-Dichloroethane		ND		830
Trichloroethene		ND		830
1,2-Dichloropropane		ND		830
Dichlorobromomethane		ND		830
trans-1,3-Dichloropropene		ND		830
cis-1,3-Dichloropropene		ND		830
1,1,2-Trichloroethane		ND		830
Tetrachloroethene		1400		830
Chlorodibromomethane		ND		830
Chlorobenzene		ND		830
Bromoform		ND		830
1,1,2,2-Tetrachloroethane		ND		830
1,3-Dichlorobenzene		ND		830
1,4-Dichlorobenzene		ND		830
1,2-Dichlorobenzene		ND		830
Chloromethane		ND		1700
Bromomethane		ND		1700
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		830
EDB		ND		830
1,2,4-Trichlorobenzene		ND		830
Benzene		ND		830
Toluene		ND		830
Ethylbenzene		ND		830
Xylenes, Total		ND		1700
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		105		70 - 130
4-Bromofluorobenzene		106		60 - 140
1,2-Dichloroethane-d4 (Surr)		102		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-4-4.5'

Lab Sample ID: 720-5877-4 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061100Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.22 g
Date Analyzed:	10/10/2006 1545		Final Weight/Volu	ime: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.0
1,1-Dichloroethane		ND		4.0
Dichlorodifluoromethane		ND		8.0
Vinyl chloride		ND		4.0
Chloroethane		ND		8.0
Trichlorofluoromethane		ND		4.0
Methylene Chloride		ND		8.0
trans-1,2-Dichloroethene		ND		4.0
cis-1,2-Dichloroethene		ND		4.0
Chloroform		ND		4.0
1,1,1-Trichloroethane		ND		4.0
Carbon tetrachloride		ND		4.0
1,2-Dichloroethane		ND		4.0
Trichloroethene		ND		4.0
1,2-Dichloropropane		ND		4.0
Dichlorobromomethane		ND		4.0
trans-1,3-Dichloropropene		ND		4.0
cis-1,3-Dichloropropene		ND		4.0
1,1,2-Trichloroethane		ND		4.0
Tetrachloroethene		ND		4.0
Chlorodibromomethane		ND		4.0
Chlorobenzene		ND		4.0
Bromoform		ND		4.0
1,1,2,2-Tetrachloroethane		ND		4.0
1,3-Dichlorobenzene		ND		4.0
1,4-Dichlorobenzene		ND		4.0
1,2-Dichlorobenzene		ND		4.0
Chloromethane		ND		8.0
Bromomethane		ND		8.0
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.0
EDB		ND		4.0
1,2,4-Trichlorobenzene		ND		4.0
Benzene		ND		4.0
Toluene		ND		4.0
Ethylbenzene		ND		4.0
Xylenes, Total		ND		8.0
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		93		70 - 130
4-Bromofluorobenzene		87		60 - 140
1,2-Dichloroethane-d4 (Surr)		98		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-3-2.25'

Lab Sample ID: 720-5877-5 Client Matrix: Solid

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Dreneration:	6200D	Drop Dotob: 720 14127		eilasturswoldstal200610\10
Preparation.	5035	Prep Batch. 720-14137	Lab File ID.	c.\satumws\uata\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.18 g
Date Analyzed:	10/10/2006 1620		Final Weight/Volu	me: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.0
1,1-Dichloroethane		ND		4.0
Dichlorodifluoromethane		ND		8.1
Vinyl chloride		ND		4.0
Chloroethane		ND		8.1
Trichlorofluoromethane		ND		4.0
Methylene Chloride		ND		8.1
trans-1,2-Dichloroethene		ND		4.0
cis-1,2-Dichloroethene		ND		4.0
Chloroform		ND		4.0
1,1,1-Trichloroethane		ND		4.0
Carbon tetrachloride		ND		4.0
1,2-Dichloroethane		ND		4.0
Trichloroethene		ND		4.0
1,2-Dichloropropane		ND		4.0
Dichlorobromomethane		ND		4.0
trans-1,3-Dichloropropene		ND		4.0
cis-1,3-Dichloropropene		ND		4.0
1,1,2-Trichloroethane		ND		4.0
Tetrachloroethene		ND		4.0
Chlorodibromomethane		ND		4.0
Chlorobenzene		ND		4.0
Bromoform		ND		4.0
1,1,2,2-Tetrachloroethane		ND		4.0
1,3-Dichlorobenzene		ND		4.0
1,4-Dichlorobenzene		ND		4.0
1,2-Dichlorobenzene		ND		4.0
Chloromethane		ND		8.1
Bromomethane		ND		8.1
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.0
EDB		ND		4.0
1,2,4-Trichlorobenzene		ND		4.0
Benzene		ND		4.0
Toluene		ND		4.0
Ethylbenzene		ND		4.0
Xylenes, Total		ND		8.1
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		84		70 - 130
4-Bromofluorobenzene		79		60 - 140
1,2-Dichloroethane-d4 (Surr)		87		60 - 140

 Date Sampled:
 10/09/2006
 0940

 Date Received:
 10/09/2006
 1626

Client: PES Environmental, Inc.

Client Sample ID: B-5-4.5'

Lab Sample ID: 720-5877-6 Client Matrix: Solid

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: Preparation:	8260B 5035	Analysis Batch: 720-14118 Prep Batch: 720-14137	Instrument ID: Lab File ID:	Varian 3900G c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Vol	ume: 6.11 g
Date Analyzed:	10/10/2006 1728		Final Weight/Volu	ume: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.1
1,1-Dichloroethane		ND		4.1
Dichlorodifluoromethane		ND		8.2
Vinyl chloride		ND		4.1
Chloroethane		ND		8.2
Trichlorofluoromethane		ND		4.1
Methylene Chloride		ND		8.2
trans-1,2-Dichloroethene		ND		4.1
cis-1,2-Dichloroethene		ND		4.1
Chloroform		ND		4.1
1,1,1-Trichloroethane		ND		4.1
Carbon tetrachloride		ND		4.1
1,2-Dichloroethane		ND		4.1
Trichloroethene		ND		4.1
1,2-Dichloropropane		ND		4.1
Dichlorobromomethane		ND		4.1
trans-1,3-Dichloropropene		ND		4.1
cis-1,3-Dichloropropene		ND		4.1
1,1,2-Trichloroethane		ND		4.1
Tetrachloroethene		ND		4.1
Chlorodibromomethane		ND		4.1
Chlorobenzene		ND		4.1
Bromoform		ND		4.1
1,1,2,2-Tetrachloroethane		ND		4.1
1,3-Dichlorobenzene		ND		4.1
1,4-Dichlorobenzene		ND		4.1
1,2-Dichlorobenzene		ND		4.1
Chloromethane		ND		8.2
Bromomethane		ND		8.2
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.1
EDB		ND		4.1
1,2,4-Trichlorobenzene		ND		4.1
Benzene		ND		4.1
Toluene		ND		4.1
Ethylbenzene		ND		4.1
Xylenes, Total		ND		8.2
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		94		70 - 130
4-Bromofluorobenzene		96		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140

Date Sampled:10/09/20061000Date Received:10/09/20061626

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

10/09/2006 1120

10/09/2006 1626

Date Sampled:

Date Received:

Client: PES Environmental, Inc.

Client Sample ID: B-7-4.5'

Lab Sample ID: 720-5877-7 Client Matrix: Solid

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.27 g
Date Analyzed:	10/10/2006 1943		Final Weight/Volu	me: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.0
1,1-Dichloroethane		ND		4.0
Dichlorodifluoromethane		ND		8.0
Vinyl chloride		ND		4.0
Chloroethane		ND		8.0
Trichlorofluoromethane		ND		4.0
Methylene Chloride		ND		8.0
trans-1,2-Dichloroethene		ND		4.0
cis-1,2-Dichloroethene		ND		4.0
Chloroform		ND		4.0
1,1,1-Trichloroethane		ND		4.0
Carbon tetrachloride		ND		4.0
1,2-Dichloroethane		ND		4.0
Trichloroethene		ND		4.0
1,2-Dichloropropane		ND		4.0
Dichlorobromomethane		ND		4.0
trans-1,3-Dichloropropene		ND		4.0
cis-1,3-Dichloropropene		ND		4.0
1,1,2-Trichloroethane		ND		4.0
Tetrachloroethene		ND		4.0
Chlorodibromomethane		ND		4.0
Chlorobenzene		ND		4.0
Bromoform		ND		4.0
1,1,2,2-Tetrachloroethane		ND		4.0
1,3-Dichlorobenzene		ND		4.0
1,4-Dichlorobenzene		ND		4.0
1,2-Dichlorobenzene		ND		4.0
Chloromethane		ND		8.0
Bromomethane		ND		8.0
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.0
EDB		ND		4.0
1,2,4-Trichlorobenzene		ND		4.0
Benzene		ND		4.0
Toluene		ND		4.0
Ethylbenzene		ND		4.0
Xylenes, Total		ND		8.0
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		85		70 - 130
4-Bromofluorobenzene		78		60 - 140
1,2-Dichloroethane-d4 (Surr)		89		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-6-4.5'

Lab Sample ID: 720-5877-8 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061110Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.08 g
Date Analyzed:	10/10/2006 1802		Final Weight/Volu	ime: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.1
1,1-Dichloroethane		ND		4.1
Dichlorodifluoromethane		ND		8.2
Vinyl chloride		ND		4.1
Chloroethane		ND		8.2
Trichlorofluoromethane		ND		4.1
Methylene Chloride		ND		8.2
trans-1,2-Dichloroethene		ND		4.1
cis-1,2-Dichloroethene		ND		4.1
Chloroform		ND		4.1
1,1,1-Trichloroethane		ND		4.1
Carbon tetrachloride		ND		4.1
1,2-Dichloroethane		ND		4.1
Trichloroethene		ND		4.1
1,2-Dichloropropane		ND		4.1
Dichlorobromomethane		ND		4.1
trans-1,3-Dichloropropene		ND		4.1
cis-1,3-Dichloropropene		ND		4.1
1,1,2-Trichloroethane		ND		4.1
Tetrachloroethene		ND		4.1
Chlorodibromomethane		ND		4.1
Chlorobenzene		ND		4.1
Bromoform		ND		4.1
1,1,2,2-Tetrachloroethane		ND		4.1
1,3-Dichlorobenzene		ND		4.1
1,4-Dichlorobenzene		ND		4.1
1,2-Dichlorobenzene		ND		4.1
Chloromethane		ND		8.2
Bromomethane		ND		8.2
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.1
EDB		ND		4.1
1,2,4-Trichlorobenzene		ND		4.1
Benzene		ND		4.1
Toluene		ND		4.1
Ethylbenzene		ND		4.1
Xylenes, Total		ND		8.2
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		95		70 - 130
4-Bromofluorobenzene		96		60 - 140
1,2-Dichloroethane-d4 (Surr)		91		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-1-4.5'

Lab Sample ID: 720-5877-9 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061045Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.24 g
Date Analyzed:	10/10/2006 1836		Final Weight/Volu	ime: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.0
1,1-Dichloroethane		ND		4.0
Dichlorodifluoromethane		ND		8.0
Vinyl chloride		ND		4.0
Chloroethane		ND		8.0
Trichlorofluoromethane		ND		4.0
Methylene Chloride		ND		8.0
trans-1,2-Dichloroethene		ND		4.0
cis-1,2-Dichloroethene		ND		4.0
Chloroform		ND		4.0
1,1,1-Trichloroethane		ND		4.0
Carbon tetrachloride		ND		4.0
1,2-Dichloroethane		ND		4.0
Trichloroethene		ND		4.0
1,2-Dichloropropane		ND		4.0
Dichlorobromomethane		ND		4.0
trans-1,3-Dichloropropene		ND		4.0
cis-1,3-Dichloropropene		ND		4.0
1,1,2-Trichloroethane		ND		4.0
Tetrachloroethene		ND		4.0
Chlorodibromomethane		ND		4.0
Chlorobenzene		ND		4.0
Bromoform		ND		4.0
1,1,2,2-Tetrachloroethane		ND		4.0
1,3-Dichlorobenzene		ND		4.0
1,4-Dichlorobenzene		ND		4.0
1,2-Dichlorobenzene		ND		4.0
Chloromethane		ND		8.0
Bromomethane		ND		8.0
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.0
EDB		ND		4.0
1,2,4-Trichlorobenzene		ND		4.0
Benzene		ND		4.0
Toluene		ND		4.0
Ethylbenzene		ND		4.0
Xylenes, Total		ND		8.0
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		91		70 - 130
4-Bromofluorobenzene		83		60 - 140
1,2-Dichloroethane-d4 (Surr)		91		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-2-4.5'

Lab Sample ID: 720-5877-10 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061030Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ume: 5.86 g
Date Analyzed:	10/10/2006 1910		Final Weight/Volu	ıme: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.3
1,1-Dichloroethane		ND		4.3
Dichlorodifluoromethane		ND		8.5
Vinyl chloride		ND		4.3
Chloroethane		ND		8.5
Trichlorofluoromethane		ND		4.3
Methylene Chloride		ND		8.5
trans-1,2-Dichloroethene		ND		4.3
cis-1,2-Dichloroethene		ND		4.3
Chloroform		ND		4.3
1,1,1-Trichloroethane		ND		4.3
Carbon tetrachloride		ND		4.3
1,2-Dichloroethane		ND		4.3
Trichloroethene		ND		4.3
1,2-Dichloropropane		ND		4.3
Dichlorobromomethane		ND		4.3
trans-1,3-Dichloropropene		ND		4.3
cis-1,3-Dichloropropene		ND		4.3
1,1,2-Trichloroethane		ND		4.3
Tetrachloroethene		ND		4.3
Chlorodibromomethane		ND		4.3
Chlorobenzene		ND		4.3
Bromoform		ND		4.3
1,1,2,2-Tetrachloroethane		ND		4.3
1,3-Dichlorobenzene		ND		4.3
1,4-Dichlorobenzene		ND		4.3
1,2-Dichlorobenzene		ND		4.3
Chloromethane		ND		8.5
Bromomethane		ND		8.5
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.3
EDB		ND		4.3
1,2,4-Trichlorobenzene		ND		4.3
Benzene		ND		4.3
Toluene		ND		4.3
Ethylbenzene		ND		4.3
Xylenes, Total		ND		8.5
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		87		70 - 130
4-Bromofluorobenzene		84		60 - 140
1,2-Dichloroethane-d4 (Surr)		89		60 - 140

Client: PES Environmental, Inc.

Client Sample ID: B-3-W

Lab Sample ID: 720-5877-11 Client Matrix: Water

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method:	8260B	Analysis Batch: 720-14081	Instrument ID:	Varian 3	900	F
Preparation:	5030B		Lab File ID:	c:\saturr	nws\	data\200610\10
Dilution:	4.0		Initial Weight/Vol	ume:	40	mL
Date Analyzed:	10/10/2006 2030		Final Weight/Volu	ume:	40	mL
Date Prepared:	10/10/2006 2030					

Analyte	Result (ug/L)	Qualifier	RL
1,1-Dichloroethene	ND		2.0
1,1-Dichloroethane	ND		2.0
Dichlorodifluoromethane	ND		2.0
Vinyl chloride	ND		2.0
Chloroethane	ND		4.0
Trichlorofluoromethane	ND		4.0
Methylene Chloride	ND		20
trans-1,2-Dichloroethene	ND		2.0
cis-1,2-Dichloroethene	ND		2.0
Chloroform	ND		4.0
1,1,1-Trichloroethane	ND		2.0
Carbon tetrachloride	ND		2.0
1,2-Dichloroethane	ND		2.0
Trichloroethene	ND		2.0
1,2-Dichloropropane	ND		2.0
Dichlorobromomethane	ND		2.0
trans-1,3-Dichloropropene	ND		2.0
cis-1,3-Dichloropropene	ND		2.0
1,1,2-Trichloroethane	ND		2.0
Tetrachloroethene	ND		2.0
Chlorodibromomethane	ND		2.0
Chlorobenzene	ND		2.0
Bromoform	ND		4.0
1,1,2,2-Tetrachloroethane	ND		2.0
1,3-Dichlorobenzene	ND		2.0
1,4-Dichlorobenzene	ND		2.0
1,2-Dichlorobenzene	ND		2.0
Chloromethane	ND		4.0
Bromomethane	ND		4.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0
EDB	ND		2.0
1,2,4-Trichlorobenzene	ND		4.0
Benzene	ND		2.0
Toluene	ND		2.0
Ethylbenzene	ND		2.0
Xylenes, Total	ND		4.0
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	103		77 - 121
4-Bromofluorobenzene	104		79 - 118
1,2-Dichloroethane-d4 (Surr)	95		78 - 117

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061400Date Received:10/09/20061626

Client: PES Environmental, Inc.

Client Sample ID: B-3-19.5'

Lab Sample ID: 720-5877-12 Client Matrix: Solid

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Date Sampled:10/09/20061420Date Received:10/09/20061626

Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ume: 5.97 g
Date Analyzed:	10/10/2006 1329		Final Weight/Volu	ime: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		4.2
1,1-Dichloroethane		ND		4.2
Dichlorodifluoromethane		ND		8.4
Vinyl chloride		ND		4.2
Chloroethane		ND		8.4
Trichlorofluoromethane		ND		4.2
Methylene Chloride		ND		8.4
trans-1,2-Dichloroethene		ND		4.2
cis-1,2-Dichloroethene		ND		4.2
Chloroform		ND		4.2
1,1,1-Trichloroethane		ND		4.2
Carbon tetrachloride		ND		4.2
1,2-Dichloroethane		ND		4.2
Trichloroethene		ND		4.2
1,2-Dichloropropane		ND		4.2
Dichlorobromomethane		ND		4.2
trans-1,3-Dichloropropene		ND		4.2
cis-1,3-Dichloropropene		ND		4.2
1,1,2-Trichloroethane		ND		4.2
Tetrachloroethene		ND		4.2
Chlorodibromomethane		ND		4.2
Chlorobenzene		ND		4.2
Bromoform		ND		4.2
1,1,2,2-Tetrachloroethane		ND		4.2
1,3-Dichlorobenzene		ND		4.2
1,4-Dichlorobenzene		ND		4.2
1,2-Dichlorobenzene		ND		4.2
Chloromethane		ND		8.4
Bromomethane		ND		8.4
1,1,2-Trichloro-1,2,2-trifluoroethan	e	ND		4.2
EDB		ND		4.2
1,2,4-Trichlorobenzene		ND		4.2
Benzene		ND		4.2
Toluene		ND		4.2
Ethylbenzene		ND		4.2
Xylenes, Total		ND		8.4
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		99		70 - 130
4-Bromofluorobenzene		98		60 - 140
1,2-Dichloroethane-d4 (Surr)		98		60 - 140

DATA REPORTING QUALIFIERS

Lab Section

Qualifier

Description

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-140	81				
LCS 720-14081/1	Lab Control Spike	Т	Water	8260B	
MB 720-14081/2	Method Blank	Т	Water	8260B	
720-5859-B-1 MS	Matrix Spike	Т	Water	8260B	
720-5859-C-1 MSD	Matrix Spike Duplicate	Т	Water	8260B	
720-5877-11	B-3-W	Т	Water	8260B	
Analysis Batch:720-141	18				
LCS 720-14137/1-A	Lab Control Spike	Т	Solid	8260B	720-14137
LCSD 720-14137/2-A	Lab Control Spike Duplicate	Т	Solid	8260B	720-14137
MB 720-14137/3-A	Method Blank	Т	Solid	8260B	720-14137
720-5877-4	B-4-4.5'	Т	Solid	8260B	720-14137
720-5877-5	B-3-2.25'	Т	Solid	8260B	720-14137
720-5877-6	B-5-4.5'	Т	Solid	8260B	720-14137
720-5877-7	B-7-4.5'	Т	Solid	8260B	720-14137
720-5877-8	B-6-4.5'	Т	Solid	8260B	720-14137
720-5877-9	B-1-4.5'	Т	Solid	8260B	720-14137
720-5877-10	B-2-4.5'	Т	Solid	8260B	720-14137
720-5877-12	B-3-19.5'	Т	Solid	8260B	720-14137
Prep Batch: 720-14137					
LCS 720-14137/1-A	Lab Control Spike	т	Solid	5035	
LCSD 720-14137/2-A	Lab Control Spike Duplicate	Т	Solid	5035	
MB 720-14137/3-A	Method Blank	Т	Solid	5035	
720-5877-4	B-4-4.5'	Т	Solid	5035	
720-5877-5	B-3-2.25'	Т	Solid	5035	
720-5877-6	B-5-4.5'	Т	Solid	5035	
720-5877-7	B-7-4.5'	Т	Solid	5035	
720-5877-8	B-6-4.5'	Т	Solid	5035	
720-5877-9	B-1-4.5'	Т	Solid	5035	
720-5877-10	B-2-4.5'	Т	Solid	5035	
720-5877-12	B-3-19.5'	Т	Solid	5035	
Analysis Batch:720-141	78				
LCS 720-14303/1-A	Lab Control Spike	т	Solid	8260B	720-14303
LCSD 720-14303/2-A	Lab Control Spike Duplicate	Т	Solid	8260B	720-14303
MB 720-14303/3-A	Method Blank	Т	Solid	8260B	720-14303
720-5877-1	B-10-4.5'	Т	Solid	8260B	720-14303
720-5877-2	B-9-4.5'	т	Solid	8260B	720-14303
720-5877-3	B-8-4.5'	Т	Solid	8260B	720-14303

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 720-14303					
LCS 720-14303/1-A	Lab Control Spike	Т	Solid	5030B	
LCSD 720-14303/2-A	Lab Control Spike Duplicate	Т	Solid	5030B	
MB 720-14303/3-A	Method Blank	Т	Solid	5030B	
720-5877-1	B-10-4.5'	Т	Solid	5030B	
720-5877-2	B-9-4.5'	Т	Solid	5030B	
720-5877-3	B-8-4.5'	Т	Solid	5030B	

Report Basis

T = Total

Method Blank - Batch: 720-14081

 Lab Sample ID:
 MB 720-14081/2

 Client Matrix:
 Water

 Dilution:
 1.0

 Date Analyzed:
 10/10/2006 1058

 Date Prepared:
 10/10/2006 1058

Analysis Batch: 720-14081 Prep Batch: N/A Units: ug/L

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Method: 8260B Preparation: 5030B

Instrument ID: Varian 3900F Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
1,1-Dichloroethene	ND		0.50
1,1-Dichloroethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
Vinyl chloride	ND		0.50
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
Methylene Chloride	ND		5.0
trans-1,2-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
Chloroform	ND		1.0
1,1,1-Trichloroethane	ND		0.50
Carbon tetrachloride	ND		0.50
1,2-Dichloroethane	ND		0.50
Trichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
Dichlorobromomethane	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Chlorodibromomethane	ND		0.50
Chlorobenzene	ND		0.50
Bromoform	ND		1.0
1,1,2,2-Tetrachloroethane	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,2-Dichlorobenzene	ND		0.50
Chloromethane	ND		1.0
Bromomethane	ND		1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
EDB	ND		0.50
1,2,4-Trichlorobenzene	ND		1.0
Benzene	ND		0.50
Toluene	ND		0.50
Ethylbenzene	ND		0.50
Xylenes, Total	ND		1.0
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	106	77 - 121	
4-Bromofluorobenzene	108	79 - 118	
1,2-Dichloroethane-d4 (Surr)	99	78 - 117	

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Lab Control Spike - Batch: 720-14081

Client: PES Environmental, Inc.

1,2-Dichloroethane-d4 (Surr)

Method: 8260B Preparation: 5030B

78 - 117

Lab Sample ID:LCS 720-14081/1Client Matrix:WaterDilution:1.0Date Analyzed:10/10/2006Date Prepared:10/10/2006	Analysis Batch: Prep Batch: N/A Units: ug/L	720-14081	Instrument ID: Varian 3900F Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL			
Analyte	Spike Amount	Result	% Rec.	Limit	Qual	
1,1-Dichloroethene	20.0	18.8	94	65 - 125		
Trichloroethene	20.0	17.9	89	74 - 134		
Chlorobenzene	20.0	20.6	103	61 - 121		
Surrogate	% R	% Rec		Acceptance Limits		
Toluene-d8 (Surr)	10	6		77 - 121		
4-Bromofluorobenzene	10	3		79 - 118		

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Quality Control Results

Client: PES Environmental, Inc.

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-14081

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Method: 8260B Preparation: 5030B

MS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-5859-B-1 MS Water 1.0 10/10/2006 1239 10/10/2006 1239	Analysis Batch: Prep Batch: N/A	720-14081	Instrument ID: Varian 3900F Lab File ID: c:\saturnws\data\200610\ Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL
MSD Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	720-5859-C-1 MSD Water 1.0 10/10/2006 1312 10/10/2006 1312	Analysis Batch: Prep Batch: N/A	720-14081	Instrument ID: Varian 3900F Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

	<u>%</u>	Rec.				
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
1,1-Dichloroethene	100	98	65 - 125	2	20	
Trichloroethene	92	89	74 - 134	3	20	
Chlorobenzene	105	102	61 - 121	3	20	
Surrogate		MS % Rec	MSD %	% Rec	Acce	ptance Limits
Toluene-d8 (Surr)		106	104		77	7 - 121
4-Bromofluorobenzene		104	110		79	9 - 118
1,2-Dichloroethane-d4 (Surr)		100	99		78	3 - 117

Method Blank - Batch: 720-14137

 Lab Sample ID:
 MB 720-14137/3-A

 Client Matrix:
 Solid

 Dilution:
 1.0

 Date Analyzed:
 10/10/2006 1255

 Date Prepared:
 10/10/2006 1130

Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Method: 8260B Preparation: 5035

Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Dichlorodifluoromethane	ND		10
Vinyl chloride	ND		5.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		5.0
Methylene Chloride	ND		10
trans-1,2-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon tetrachloride	ND		5.0
1,2-Dichloroethane	ND		5.0
Trichloroethene	ND		5.0
1,2-Dichloropropane	ND		5.0
Dichlorobromomethane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
Chlorobenzene	ND		5.0
Bromoform	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
1,3-Dichlorobenzene	ND		5.0
1,4-Dichlorobenzene	ND		5.0
1,2-Dichlorobenzene	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0
EDB	ND		5.0
1,2,4-Trichlorobenzene	ND		5.0
Benzene	ND		5.0
Toluene	ND		5.0
Ethylbenzene	ND		5.0
Xylenes, Total	ND		10
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	89	70 - 130	
4-Bromofluorobenzene	87	60 - 140	
1,2-Dichloroethane-d4 (Surr)	94	60 - 140	

Date Analyzed: 10/10/2006 1221

Date Prepared: 10/10/2006 1130

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14137

Method: 8260B Preparation: 5035

Final Weight/Volume: 10 mL

LCS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	LCS 720-14137/1-A Solid 1.0 10/10/2006 1147 10/10/2006 1130	Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample ID Client Matrix:): LCSD 720-14137/2-A Solid 1.0	Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\101 Initial Weight/Volume: 5.00 g

		<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1-Dichloroethene	76	85	65 - 125	11	20		
Trichloroethene	80	80	74 - 134	1	20		
Chlorobenzene	93	99	61 - 121	6	20		
Surrogate		_CS % Rec	LCSD %	Rec	Accep	otance Limits	
Toluene-d8 (Surr)	;	36	85		7	0 - 130	
4-Bromofluorobenzene	1	35	86		6	0 - 140	
1,2-Dichloroethane-d4 (Surr)	ł	32	86		6	0 - 140	

Method Blank - Batch: 720-14303

Lab Sample ID:MB 720-14303/3-AClient Matrix:SolidDilution:200Date Analyzed:10/11/2006Date Prepared:10/10/2006

Analysis Batch: 720-14178 Prep Batch: 720-14303 Units: ug/Kg

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Method: 8260B Preparation: 5030B

Instrument ID: Varian 3900D Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,1-Dichloroethene	ND		1000
1,1-Dichloroethane	ND		1000
Dichlorodifluoromethane	ND		2000
Vinyl chloride	ND		1000
Chloroethane	ND		2000
Trichlorofluoromethane	ND		1000
Methylene Chloride	ND		2000
trans-1,2-Dichloroethene	ND		1000
cis-1,2-Dichloroethene	ND		1000
Chloroform	ND		1000
1,1,1-Trichloroethane	ND		1000
Carbon tetrachloride	ND		1000
1,2-Dichloroethane	ND		1000
Trichloroethene	ND		1000
1,2-Dichloropropane	ND		1000
Dichlorobromomethane	ND		1000
trans-1,3-Dichloropropene	ND		1000
cis-1,3-Dichloropropene	ND		1000
1,1,2-Trichloroethane	ND		1000
Tetrachloroethene	ND		1000
Chlorodibromomethane	ND		1000
Chlorobenzene	ND		1000
Bromoform	ND		1000
1,1,2,2-Tetrachloroethane	ND		1000
1,3-Dichlorobenzene	ND		1000
1,4-Dichlorobenzene	ND		1000
1,2-Dichlorobenzene	ND		1000
Chloromethane	ND		2000
Bromomethane	ND		2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000
EDB	ND		1000
1,2,4-Trichlorobenzene	ND		1000
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Xylenes, Total	ND		2000
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	111	70 - 130	
4-Bromofluorobenzene	107	60 - 140	
1,2-Dichloroethane-d4 (Surr)	112	60 - 140	

Quality Control Results

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14303

Method: 8260B Preparation: 5030B

LCS Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	ID: LCS 720-14303/1-A Solid 200 10/11/2006 1239 10/10/2006 1000	Analysis Batch: 720-14178 Prep Batch: 720-14303 Units: ug/Kg	Instrument ID: Varian 3900D Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample	e ID: LCSD 720-14303/2-A	Analysis Batch: 720-14178	Instrument ID: Varian 3900D

 Client Matrix:
 Solid

 Dilution:
 200

 Date Analyzed:
 10/11/2006
 1313

 Date Prepared:
 10/10/2006
 1000

Analysis Batch: 720-1417 Prep Batch: 720-14303 Units: ug/Kg

Instrument ID: Varian 3900D Lab File ID: c:\saturnws\data\200610\101 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

	<u>9</u>	<u>6 Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1-Dichloroethene	94	93	65 - 125	1	20		
Trichloroethene	89	95	74 - 134	6	20		
Chlorobenzene	106	102	61 - 121	4	20		
Surrogate	L	CS % Rec	LCSD %	Rec	Acce	otance Limits	
Toluene-d8 (Surr)	1	15	112		7	0 - 130	
4-Bromofluorobenzene	1	11	100		6	0 - 140	
1,2-Dichloroethane-d4 (Surr)	1	08	102		6	0 - 140	

DES Environ Engineering & Environ LABORATORY STL JOB NUMBER: STL NAME / LOCATION: Sfarkic PROJECT MANAGER: Will	SAMPLERS:	N OF CUSTON 720-58 Justin Patters	DY RECOR 877	D 102176	1682 NOVATO BOULEVARD, SUITE 100 NOVATO, CALIFORNIA 94947 (415) 899-1600 FAX (415) 899-1601 ANALYSIS REQUESTED	
DATE YR MO DY TIME	SAMPLE NUMBER / DESIGNATION	Vapor Water Sedim't	# of Containers & Preservatives	DEPTH IN FEET	EPA 5035/8010 EPA 5035/8021 EPA 5035/8260B TPHg by 5035/80 TPHd by 80150A	TPHmo by 8015M EPA 8270C MNA Parameters
$\begin{array}{c} 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 $	$\begin{array}{c} B - 1 & 0 - 4 & 5 \\ B - 9 & - 4 & 5 \\ B - 8 & - 4 & 5 \\ B - 4 & - 4 & 5 \\ \end{array}$	4 4 4 4	4 4 4 4 4 4	4.5		
0 a 6 1 0 0 9 0 9 4 0 0 6 1 0 0 9 1 6 0 0 0 6 1 0 0 9 1 1 2 0 0 6 1 0 0 9 1 1 2 0	B - B - 225 B - 5 - 4.5 B - 7 - 4.5 B - 6 - 4.5	4 4 4 8	4 4 4 4	4,5 4,5 4,5 4,5		
0610091045 0610091030 0610091400 0610091400	$ B - 1 - 4, 5' \\ B - 2 - 4, 5' \\ B - 3 - 19, 5' \\ B - 3 - 19, 5' $		4 4 3 4	4.5		

NOTES	CHAIN OF CUSTODY RECORD					
Turn Around Time: Standard Sday TAT	HELINOUSHED BY ISprayfit		RECEIVED BY: (Signature) #1010	DATE	TIME	
	RELINBUISHED BY: (Symmer)		RECEIVED BY: (Signature)	DATE	TIME	
	RELINQÜISHED BY: (Signawa)		RECEIVED BY; (Signature)	DATE	TIME	
The	RELINQUISHED BY: (Signature)		RECEIVED BY (Synature)	DATE	TIME	
	DISPATCHED BY: (Synatom)	DATE	TIME RECEIVED FOR CAB BY (Signand)	IN THE	TIME	
	METHOD OF SHIPMENT:		- D2º	79/06	16.2	

LOGIN SAMPLE RECEIPT CHECK LIST

Client: PES Environmental, Inc.

Job Number: 720-5877-1 Sdg Number: 881.060.01.002

Login Number: 5877

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



ANALYTICAL REPORT

Job Number: 720-5901-1

Job Description: Sparkle Cleaners/881.060.01.002

For: PES Environmental, Inc. 1682 Novato Boulevard Suite 100 Novato, CA 94947-7021

Attention: Mr. Will Mast

Atamp Sal D

Afsaneh Salimpour Project Manager I asalimpour@stl-inc.com 10/16/2006

Project Manager: Afsaneh Salimpour

EXECUTIVE SUMMARY - Detections

Client: PES Environmental, Inc.

Job Number: 720-5901-1

			•		
Lab Sample ID	Client Sample ID	Beault / Qualifier	Reporting	Unito	Mathad
Analyte		Result / Qualmer	Limit	Units	Method

No Detections

METHOD SUMMARY

Client: PES Environmental, Inc.

Job Number: 720-5901-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS (Low Level)	STL SF	SW846 8260E	3
Closed System Purge & Trap/Laboratory	STL SF		SW846 5035

LAB REFERENCES:

STL SF = STL San Francisco

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: PES Environmental, Inc.

Job Number: 720-5901-1

MethodAnalystAnalyst IDSW8468260BLee, MichaelML

SAMPLESUMMARY

Client: PES Environmental, Inc.

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			Date/Time	Date/Time
<u>Lab Sample ID</u>	ClientSampleIC	Client Metrix	Sampled	Received
720-5901-1	B-1-19.5'	Solid	10/10/2006 1020	10/10/2006 1620
720-5901-2	B-4-19.5'	Solid	10/10/2006 1300	10/10/2006 1620
720-5901-3	B-2-19.5'	Solid	10/10/2006 1600	10/10/2006 1620

Client: PES Environmental, Inc.

Client Sample ID: B-1-19.5'

Lab Sample ID:720-5901-1Client Matrix:Solid

8260B Volatile Organic Compounds by GC/MS (Low Level)

	•			
Method:	8260B	Analysis Batch: 720-14118	Instrument ID:	Varian 3900G
Preparation:	5035	Prep Batch: 720-14137	Lab File ID:	c:\saturnws\data\200610\10
Dilution:	1.0		Initial Weight/Volu	ıme: 6.37 g
Date Analyzed:	10/10/2006 2017		Final Weight/Volu	me: 10 mL
Date Prepared:	10/10/2006 1130			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		3.9
1,1-Dichloroethane		ND		3.9
Dichlorodifluoromethane		ND		7.8
Vinyl chloride		ND		3.9
Chloroethane		ND		7.8
Trichlorofluoromethane		ND		3.9
Methylene Chloride		ND		7.8
trans-1,2-Dichloroethene		ND		3.9
cis-1,2-Dichloroethene		ND		3.9
Chloroform		ND		3.9
1,1,1-Trichloroethane		ND		3.9
Carbon tetrachloride		ND		3.9
1,2-Dichloroethane		ND		3.9
Trichloroethene		ND		3.9
1,2-Dichloropropane		ND		3.9
Dichlorobromomethane		ND		3.9
trans-1,3-Dichloropropene		ND		3.9
cis-1,3-Dichloropropene		ND		3.9
1,1,2-Trichloroethane		ND		3.9
Tetrachloroethene		ND		3.9
Chlorodibromomethane		ND		3.9
Chlorobenzene		ND		3.9
Bromoform		ND		3.9
1,1,2,2-Tetrachloroethane		ND		3.9
1,3-Dichlorobenzene		ND		3.9
1,4-Dichlorobenzene		ND		3.9
1,2-Dichlorobenzene		ND		3.9
Chloromethane		ND		7.8
Bromomethane		ND		7.8
1,1,2-Trichloro-1,2,2-trifluoroethar	e	ND		3.9
EDB		ND		3.9
1,2,4-Trichlorobenzene		ND		3.9
Benzene		ND		3.9
Toluene		ND		3.9
Ethylbenzene		ND		3.9
Xylenes, Total		ND		7.8
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		90		70 - 130
4-Bromofluorobenzene		87		60 - 140
1,2-Dichloroethane-d4 (Surr)		87		60 - 140

Job Number: 720-5901-1

10/10/2006 1020

10/10/2006 1620

Date Sampled:

Date Received:

Job Number: 720-5901-1

Client: PES Environmental, Inc.

Client Sample ID: B-4-19.5'

Lab Sample ID:	720-5901-2	Date Sampled:	10/10/2006	1300
Client Matrix:	Solid	Date Received:	10/10/2006	1620
Lab Sample ID:	720-5901-2	Date Sampled:	10/10/2006	13
Client Matrix:	Solid	Date Received:	10/10/2006	16

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 10/11/2006 1429 10/10/2006 1420	Analysis Batch: 720-14170 Prep Batch: 720-14186	Instrument ID: Lab File ID: Initial Weight/Vo Final Weight/Vol	Varian 3900G c:\saturnws\data\200610\10 lume: 6.39 g lume: 10 mL
--	--	--	---	---

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		3.9
1.1-Dichloroethane		ND		3.9
Dichlorodifluoromethane		ND		7.8
Vinyl chloride		ND		3.9
Chloroethane		ND		7.8
Trichlorofluoromethane		ND		3.9
Methylene Chloride		ND		7.8
trans-1,2-Dichloroethene		ND		3.9
cis-1,2-Dichloroethene		ND		3.9
Chloroform		ND		3.9
1,1,1-Trichloroethane		ND		3.9
Carbon tetrachloride		ND		3.9
1,2-Dichloroethane		ND		3.9
Trichloroethene		ND		3.9
1,2-Dichloropropane		ND		3.9
Dichlorobromomethane		ND		3.9
trans-1,3-Dichloropropene		ND		3.9
cis-1,3-Dichloropropene		ND		3.9
1,1,2-Trichloroethane		ND		3.9
Tetrachloroethene		ND		3.9
Chlorodibromomethane		ND		3.9
Chlorobenzene		ND		3.9
Bromoform		ND		3.9
1,1,2,2-Tetrachloroethane		ND		3.9
1,3-Dichlorobenzene		ND		3.9
1,4-Dichlorobenzene		ND		3.9
1,2-Dichlorobenzene		ND		3.9
Chloromethane		ND		7.8
Bromomethane		ND		7.8
1,1,2-Trichloro-1,2,2-trifluoroethan	е	ND		3.9
EDB		ND		3.9
1,2,4-Trichlorobenzene		ND		3.9
Benzene		ND		3.9
Toluene		ND		3.9
Ethylbenzene		ND		3.9
Xylenes, Total		ND		7.8
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		82		70 - 130
4-Bromofluorobenzene		73		60 - 140
1,2-Dichloroethane-d4 (Surr)		86		60 - 140

Job Number: 720-5901-1

Client: PES Environmental, Inc.

Client Sample ID: B-2-19.5'

 Lab Sample ID:
 720-5901-3
 Date Sampled:
 10/10/2006
 1600

 Client Matrix:
 Solid
 Date Received:
 10/10/2006
 1620

Method: Preparation: Dilution: Date Analyzed:	8260B 5035 1.0 10/10/2006 205	Analysis Batch: 720-14118 Prep Batch: 720-14137	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200610\10 ime: 6.49 g me: 10 mL
Date Prepared:	10/10/2006 113	0		

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
1,1-Dichloroethene		ND		3.9
1,1-Dichloroethane		ND		3.9
Dichlorodifluoromethane		ND		7.7
Vinyl chloride		ND		3.9
Chloroethane		ND		7.7
Trichlorofluoromethane		ND		3.9
Methylene Chloride		ND		7.7
trans-1,2-Dichloroethene		ND		3.9
cis-1,2-Dichloroethene		ND		3.9
Chloroform		ND		3.9
1,1,1-Trichloroethane		ND		3.9
Carbon tetrachloride		ND		3.9
1,2-Dichloroethane		ND		3.9
Trichloroethene		ND		3.9
1,2-Dichloropropane		ND		3.9
Dichlorobromomethane		ND		3.9
trans-1,3-Dichloropropene		ND		3.9
cis-1,3-Dichloropropene		ND		3.9
1,1,2-Trichloroethane		ND		3.9
Tetrachloroethene		ND		3.9
Chlorodibromomethane		ND		3.9
Chlorobenzene		ND		3.9
Bromoform		ND		3.9
1,1,2,2-Tetrachloroethane		ND		3.9
1,3-Dichlorobenzene		ND		3.9
1,4-Dichlorobenzene		ND		3.9
1,2-Dichlorobenzene		ND		3.9
Chloromethane		ND		7.7
Bromomethane		ND		7.7
1,1,2-Trichloro-1,2,2-trifluoroethan	е	ND		3.9
EDB		ND		3.9
1,2,4-Trichlorobenzene		ND		3.9
Benzene		ND		3.9
Toluene		ND		3.9
Ethylbenzene		ND		3.9
Xylenes, Total		ND		7.7
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		85		70 - 130
4-Bromofluorobenzene		84		60 - 140
1,2-Dichloroethane-d4 (Surr)		90		60 - 140

DATA REPORTING QUALIFIERS

Lab Section

Qualifier

Description

Quality Control Results

Client: PES Environmental, Inc.

Job Number: 720-5901-1

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-14	118				
LCS 720-14137/1-A	Lab Control Spike	Т	Solid	8260B	720-14137
LCSD 720-14137/2-A	Lab Control Spike Duplicate	Т	Solid	8260B	720-14137
MB 720-14137/3-A	Method Blank	Т	Solid	8260B	720-14137
720-5901-1	B-1-19.5'	Т	Solid	8260B	720-14137
720-5901-3	B-2-19.5'	Т	Solid	8260B	720-14137
Prep Batch: 720-14137					
LCS 720-14137/1-A	Lab Control Spike	т	Solid	5035	
LCSD 720-14137/2-A	Lab Control Spike Duplicate	т	Solid	5035	
MB 720-14137/3-A	Method Blank	Т	Solid	5035	
720-5901-1	B-1-19.5'	т	Solid	5035	
720-5901-3	B-2-19.5'	Т	Solid	5035	
Analysis Batch:720-14	170				
LCS 720-14186/1-A	Lab Control Spike	т	Solid	8260B	720-14186
LCSD 720-14186/2-A	Lab Control Spike Duplicate	Т	Solid	8260B	720-14186
MB 720-14186/3-A	Method Blank	Т	Solid	8260B	720-14186
720-5901-2	B-4-19.5'	Т	Solid	8260B	720-14186
Prep Batch: 720-14186	6				
LCS 720-14186/1-A	Lab Control Spike	Т	Solid	5035	
LCSD 720-14186/2-A	Lab Control Spike Duplicate	Ť	Solid	5035	
MB 720-14186/3-A	Method Blank	Ť	Solid	5035	
720-5901-2	B-4-19.5'	Ť	Solid	5035	

<u>Report Basis</u>

T = Total

Method Blank - Batch: 720-14137

 Lab Sample ID:
 MB 720-14137/3-A

 Client Matrix:
 Solid

 Dilution:
 1.0

 Date Analyzed:
 10/10/2006 1255

 Date Prepared:
 10/10/2006 1130

Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg

Quality Control Results

Job Number: 720-5901-1

Method: 8260B Preparation: 5035

Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Dichlorodifluoromethane	ND		10
Vinyl chloride	ND		5.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		5.0
Methylene Chloride	ND		10
trans-1,2-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon tetrachloride	ND		5.0
1,2-Dichloroethane	ND		5.0
Trichloroethene	ND		5.0
1,2-Dichloropropane	ND		5.0
Dichlorobromomethane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
Chlorobenzene	ND		5.0
Bromoform	ND		5.0
1.1.2.2-Tetrachloroethane	ND		5.0
1.3-Dichlorobenzene	ND		5.0
1,4-Dichlorobenzene	ND		5.0
1.2-Dichlorobenzene	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0
EDB	ND		5.0
1.2.4-Trichlorobenzene	ND		5.0
Benzene	ND		5.0
Toluene	ND		5.0
Ethylbenzene	ND		5.0
Xylenes, Total	ND		10
Surrogate	% Rec	Acceptance Limits	
Toluene-d8 (Surr)	89	70 - 130	
4-Bromofluorobenzene	87	60 - 140	
1,2-Dichloroethane-d4 (Surr)	94	60 - 140	

Quality Control Results

Method: 8260B

Preparation: 5035

Job Number: 720-5901-1

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14137

LCS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	LCS 720-14137/1-A Solid 1.0 10/10/2006 1147 10/10/2006 1130	Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCSD 720-14137/2-A Solid 1.0 10/10/2006 1221 10/10/2006 1130	Analysis Batch: 720-14118 Prep Batch: 720-14137 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\10' Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

		<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1-Dichloroethene	76	85	65 - 125	11	20		
Trichloroethene	80	80	74 - 134	1	20		
Chlorobenzene	93	99	61 - 121	6	20		
Surrogate		LCS % Rec	LCSD %	Rec	Accep	otance Limits	
Toluene-d8 (Surr)		86	85		7	0 - 130	
4-Bromofluorobenzene		85	86		6	0 - 140	
1,2-Dichloroethane-d4 (Surr)		82	86		6	0 - 140	

Method Blank - Batch: 720-14186

 Lab Sample ID:
 MB 720-14186/3-A

 Client Matrix:
 Solid

 Dilution:
 1.0

 Date Analyzed:
 10/11/2006
 1355

 Date Prepared:
 10/10/2006
 1420

Analysis Batch: 720-14170 Prep Batch: 720-14186 Units: ug/Kg

Quality Control Results

Job Number: 720-5901-1

Method: 8260B Preparation: 5035

Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Dichlorodifluoromethane	ND		10
Vinyl chloride	ND		5.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		5.0
Methylene Chloride	ND		10
trans-1,2-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon tetrachloride	ND		5.0
1,2-Dichloroethane	ND		5.0
Trichloroethene	ND		5.0
1,2-Dichloropropane	ND		5.0
Dichlorobromomethane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
Chlorobenzene	ND		5.0
Bromoform	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
1,3-Dichlorobenzene	ND		5.0
1,4-Dichlorobenzene	ND		5.0
1,2-Dichlorobenzene	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0
EDB	ND		5.0
1,2,4-Trichlorobenzene	ND		5.0
Benzene	ND		5.0
Toluene	ND		5.0
Ethylbenzene	ND		5.0
Xylenes, Total	ND		10
Surrogate	% Rec	Acce	ptance Limits
Toluene-d8 (Surr)	88	7	70 - 130
4-Bromofluorobenzene	83	e	60 - 140
1,2-Dichloroethane-d4 (Surr)	91	6	60 - 140
Quality Control Results

Method: 8260B

Preparation: 5035

Final Weight/Volume: 10 mL

Client: PES Environmental, Inc.

Date Analyzed: Date Prepared:

Job Number: 720-5901-1

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-14186

10/11/2006 1321

10/10/2006 1420

LCS Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCS 720-14186/1-A Solid 1.0 10/11/2006 1247 10/10/2006 1420	Analysis Batch: 720-14170 Prep Batch: 720-14186 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200610\1(Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample	ID: LCSD 720-14186/2-A	Analysis Batch: 720-14170	Instrument ID: Varian 3900G
Client Matrix:	Solid	Prep Batch: 720-14186	Lab File ID: c:\saturnws\data\200610\101
Dilution:	1.0	Units: ug/Kg	Initial Weight/Volume: 5.00 g

		<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1-Dichloroethene	86	84	65 - 125	3	20		
Trichloroethene	81	77	74 - 134	5	20		
Chlorobenzene	98	94	61 - 121	5	20		
Surrogate		LCS % Rec	LCSD %	Rec	Accep	otance Limits	
Toluene-d8 (Surr)		89	84		7	0 - 130	
4-Bromofluorobenzene		87	86		6	0 - 140	
1,2-Dichloroethane-d4 (Surr)		90	83		6	0 - 140	

Calculations are performed before rounding to avoid round-off errors in calculated results.

PES Environmental, Inc. Engineering & Environmental Services LABORATORY. STL JOB NUMBER: 881.060.01.002	CHA SAMPLERS:	Un OF CUSTODY	RECOR	D 1682 NOVATO BOU NOVATO, CALI 107-20 8 (415) 899-1600 P ANALYSIS REQUE	-EVARD, SUITE 100 FORNIA 94947 AX (415) 899-1601 STED
NAME / LOCATION _ 5 Parkle Cleaners Oaklan	1	1 40-370	1	notes	
PROJECT MANAGER WILL Mast	RECORDER	Justin Patterson		4 015M	
DATE SAMPLE NUMBER /	MATRIX	# of Containers & Preservatives	DEPTH	5/8010 5/8021 5/8260E 5035/80 8015M 3/0 3/0 3/0 3/0 3/0 3/0 3/0 3/0 3/0 3/0	
YR MO DY TIME	Vapor Water Sedim't	Unpres EnCoro H ₂ SO ₄ HNO ₅ HCI	FEET	EPA 503 EPA 503 EPA 503 TPHd by TPHd by TPHMo t TPHMo t MNA Par MNA Par	
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NOTES			CHAIN OF C	USTODY RECORD	1.0
Turn Around Time: Standard 5 day TAT		RELINGUMMED BY 15 Mattison	- FECENE	OBY (System) STZ-SF	DATE TIME
		S The STL-ST	-	an an a star State and a	10/10/04 1620
		metandulometrur (Synataw)	RECEIVE	O BY. (Sepanne)	DATE TIME
		RELINQUISHED BY: (Sepanne)	RECEIVED	D BY. (Separate)	DATE TIME
		DISPATCHED BY: (September)	DATE TIME	RECEIVED THE LASS SY TEGRALIZE	DATE TIME
χ		METHOD OF SHIPMENT:		/	

WHITE Laboratory COPY VELLOW-Project Office Copy PINK-Field or Office Copy

LOGIN SAMPLE RECEIPT CHECK LIST

Client: PES Environmental, Inc.

Job Number: 720-5901-1

Login Number: 5901

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



881.060.01.003\2162\014153

PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-1.5-2.0 SOIL

B116023

Detection	Limit	Results
µg/kg		µq∕kq
Benzene		ND
Bromodichloromethane<2.0		ND
Bromoform<2.0		ND
Bromomethane		ND
Carbon Tetrachloride<2.0		ND
Chlorobenzene		ND
Chloroethane		ND
Chloroform		ND
Chloromethane<5.0		ND
Dibromochloromethane<2.0		ND
1,1-Dichloroethane		ND
1,2-Dichloroethane		ND
1,1-Dichloroethene		ND
Trans-1,2-Dichloroethene<5.0		ND
1,2-Dichloropropane<5.0		ND
Cis-1,3-Dichloropropene<5.0		ND
Trans-1, 3-Dichloropropene<5.0		ND
Ethylbenzene		ND
Methylene Chloride		ND
1,1,2,2-Tetrachloroethane<5.0		ND
Tetrachloroethene<2.0		53
Toluene		ND
1,1,1-Trichloroethane<5.0		ND
1,1,2-Trichloroethane<5.0		ND
Trichloroethene<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-1.5-2.0 SOIL

B116023

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg
Vinyl Chloride	<5.0		ND
Total Xylenes	<10.0		ND
Acetone	<10.0		ND
2-Butanone	<20.0		ND
Carbon Disulfide	<5.0		ND
2-Hexanone	<5.0		ND
4-Methyl-2-Pentanone	<5.0		ND
Styrene	<5.0		ND
Vinyl Acetate	<20.0		ND
Cis-1,2-Dichloroethene	<5.0		ND

QA/QC: LCS recovery is 110 % Duplicate Decviation is 19 %

Note: Analysis was performed using EPA methods 5030 and 8260

MOBILE CHEM LABS, INC.

molel wans

Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-5.5-6.0 SOIL

B116024

	Detection	Limit	Results	
	µq/kq		µq/kq	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Frans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene.	<5.0		ND	
Frans-1,3-Dichloropropene	e<5.0		ND	
Ethylbenzene	<5.0		ND	
Methylene Chloride	<5.0		ND	
1,1,2,2-Tetrachloroethane	e<5.0		ND	
Tetrachloroethene	<2.0		49	
Foluene	<5.0		•••••ND	
1,1,1-Trichloroethane	<5.0		•••••ND••••	• • • • •
1,1,2-Trichloroethane	<5.0		ND	
Trichloroethene	<2.0		ND	



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-5.5-6.0 SOIL

B116024

EPA METHOD 8260 PURGEABLE ORGANICS

Ι	Detection µg/kg	Limit	Results µq/kq	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-9.5-10.0 SOIL

B116025

	Detection	Limit	Results
	µa∕ka		μg/kg
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		•••••ND••••••
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		••••••ND•••••••
Chloroethane	<5.0		••••••ND••••••••
Chloroform	<5.0		ND
Chloromethane	<5.0		••••••ND•••••••
Dibromochloromethane	<2.0		••••••ND•••••••
1,1-Dichloroethane	<5.0		••••••ND
1,2-Dichloroethane	<5.0		••••••ND•••••••
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene	<5.0	• • • • •	••••••ND
1,2-Dichloropropane	<5.0	• • • • •	ND
Cis-1,3-Dichloropropene.	<5.0		••••••••••••••••••••••••••••••••••••••
Trans-1, 3-Dichloropropen	e<5.0		••••••ND•••••••
Ethylbenzene	<5.0	• • • • •	••••••ND
Methylene Chloride	<5.0	• • • • •	••••••ND
1,1,2,2-Tetrachloroethan	e<5.0		•••••ND
Tetrachloroethene	<2.0		8.9
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		•••••ND
1,1,2-Trichloroethane	<5.0		•••••ND••••••
Trichloroethene	<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-9.5-10.0 SOIL

B116025

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection $\mu g/kg$	Limit	Results µg/kg
Vincel Chlomide	4F O		ND
Vinyi Chioride	<5.0	•••••	ND
Total Aylenes	<10.0		ND
	<10.0	• • • • • • • •	ND
2-Butanone	<20.0	• • • • • • •	ND
Carbon Disulfide	<5.0		ND
2-Hexanone	<5.0		ND
4-Methy1-2-Pentanone	<5.0	• • • • • • •	ND
Styrene	<5.0	• • • • • • •	ND
Vinyl Acetate	<20.0	• • • • • • •	ND
Cis-1,2-Dichloroethene	<5.0		ND

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-17.5-18.0 SOIL

B116026

	Detection	Limit	Results	
	$\mu q/kq$		µg/kg	
	, .			
Benzene	<5.0		ND	ž
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	3
Chlorobenzene	<2.0		ND	•
Chloroethane	<5.0		ND	3
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	3
Dibromochloromethane	<2.0		ND	
1,1-Dichloroethane	<5.0		ND	1.0
1,2-Dichloroethane	<5.0		ND	1
1,1-Dichloroethene	<5.0		ND	,
Trans-1,2-Dichloroethene	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	ş
Cis-1,3-Dichloropropene.	<5.0		ND	
Trans-1,3-Dichloropropen	e<5.0		•••••ND••••••	
Ethylbenzene	<5.0		ND	
Methylene Chloride	<5.0		ND	
1,1,2,2-Tetrachloroethan	e<5.0		ND	
Tetrachloroethene	••••<2.0		ND	9
Toluene	<5.0		•••••ND••••••	
1,1,1-Trichloroethane	<5.0		ND	
1,1,2-Trichloroethane	<5.0		ND	1
Trichloroethene	<2.0		ND	



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-11-17.5-18.0 SOIL

B116026

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results	
	μg/ kg		μg/ kg	
Vinyl Chloride	<5.0		ND	
Fotal Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



1678 Reliez Valley Road • Lafayette, CA 94549 Phone (925) 945-1266 • Fax (925) 943-6884

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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-1.5-2.0 SOIL

B116027

	Detection	Limit	Results
	µq∕kq		$\mu q/kq$
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		••••••ND•••••••
1,1-Dichloroethene	<5.0		ND
Trans-1,2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene	<5.0		ND
Trans-1,3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	e<5.0		ND
Tetrachloroethene	<2.0		ND
Toluene	<5.0	• • • •	ND
1,1,1-Trichloroethane	<5.0	••••	ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-1.5-2.0 SOIL

B116027

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	Spike Recovery
Vinyl Chloride Total Xylenes	<5.0 <10.0	•••••	ND	
Acetone	<10.0		ND	
2-Hexanone	<<5.0		ND ND	
Styrene	<5.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

QA/QC: Sample blank is none detected

Note: Analysis was performed using EPA methods 5030 and 8260

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Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-5.5-6.0 SOIL

B116028

	Detection	Limit	Results
	µg∕kg		µg∕kg
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		•••••ND.•••••
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene.	<5.0		ND
Trans-1, 3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	≘<5.0		ND
Tetrachloroethene	<2.0		ND
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-5.5-6.0 SOIL

B116028

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone			ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Spike Recovery is 94 %

Note: Analysis was performed using EPA methods 5030 and 8260

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Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-9.5-10.0 SOIL

B116029

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	• •
Bromoform	<2.0		ND	• •
Bromomethane	<5.0		ND	• •
Carbon Tetrachloride	<2.0		ND	• •
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	• •
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	• •
Dibromochloromethane	<2.0		ND	• •
1,1-Dichloroethane	<5.0		•••••ND.•••••	• •
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	• •
Trans-1,2-Dichloroethene	<5.0		ND	• •
1,2-Dichloropropane	<5.0		•••••ND	• •
Cis-1,3-Dichloropropene.	<5.0		•••••ND•••••	• •
Trans-1,3-Dichloropropene	e<5.0		••••ND•••••	• •
Ethylbenzene	<5.0		ND	• •
Methylene Chloride	<5.0		ND	• •
1,1,2,2-Tetrachloroethane	e<5.0		ND	• •
Tetrachloroethene	<2.0		5.5	• •
Toluene	<5.0		ND	• •
1,1,1-Trichloroethane	<5.0		•••••ND	• •
1,1,2-Trichloroethane	<5.0		ND	• •
Trichloroethene	<2.0		ND	



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-12-9.5-10.0 SOIL

B116029

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection $\mu g/kg$	Limit	Results µg/kg	
Vinvl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0	• • • • • •	ND	• • •
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		•••••ND•••••	• • •
Vinyl Acetate	<20.0		ND	• • •
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-1.5-2.0 SOIL

B116030

	Detection	Limit	Results	
	µq/kq		µq/kq	
	, .		, 57 5	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		••••••ND••••••	• •
Bromoform	<2.0		ND	• •
Bromomethane	<5.0		ND	• •
Carbon Tetrachloride	<2.0		ND	• •
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	• •
Chloroform	<5.0		ND	
Chloromethane	<5.0		••••••ND••••••	••
Dibromochloromethane	<2.0		•••••ND•••••	•••
1,1-Dichloroethane	<5.0		••••••ND•••••	• •
1,2-Dichloroethane	<5.0	• • • •	•••••ND••••••	• •
1,1-Dichloroethene	<5.0		ND	••
Trans-1,2-Dichloroethene.	<5.0		• • • • • • • • ND • • • • • •	• •
1,2-Dichloropropane	<5.0		• • • • • • • • ND • • • • • • •	
Cis-1,3-Dichloropropene.	<5.0	• • • •	• • • • • • • • ND • • • • • • •	• •
Trans-1,3-Dichloropropene	2<5.0	• • • •	• • • • • • • • ND • • • • • • •	••
Ethylbenzene	<5.0	• • • •	• • • • • • • • ND • • • • • • •	• •
Methylene Chloride	<5.0	• • • •	••••••ND••••••	••
1,1,2,2-Tetrachloroethane	e<5.0		••••••ND••••••	••
Tetrachloroethene	<2.0		••••••ND••••••	• •
Toluene	<5.0	• • • •	••••••ND.•••••	• •
1,1,1-Trichloroethane	<5.0	• • • •	••••••ND•••••	
1,1,2-Trichloroethane	<5.0		•••••••ND••••••	••••
Trichloroethene	<2.0		ND	



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-1.5-2.0 SOIL

B116030

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	•••
Total Xylenes	<10.0		ND	• •
Acetone	<10.0		ND	• •
2-Butanone	<20.0		ND	• •
Carbon Disulfide	<5.0		ND	• •
2-Hexanone	<5.0		ND	• •
4-Methyl-2-Pentanone	<5.0		ND	• •
Styrene	<5.0		ND	• •
Vinyl Acetate	<20.0		ND	• •
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-5.5-6.0 SOIL

B116031

	Detection	Limit	Results
	µq/kq		µa∕ka
	1 37 3		, 5, 5
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1,2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene.	<5.0		ND
Trans-1,3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	e<5.0		ND
Tetrachloroethene	<2.0		ND
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-5.5-6.0 SOIL

B116031

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µq/kq	Limit	Results µq/kq	
Vinyl Chloride	<5.0		ND	,
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		•••••ND••••••	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	2
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0	•••••	ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-9.5-10.0 SOIL

B116032

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	• • •
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	• • •
1,1-Dichloroethane	<5.0		ND	• • •
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	• • •
Trans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene	<5.0		•••••ND•••••	
Trans-1,3-Dichloropropene	<5.0	• • • • •	ND	
Ethylbenzene	<5.0		•••••ND	
Methylene Chloride	<5.0		ND	
1,1,2,2-Tetrachloroethane	<5.0		ND	• • •
Tetrachloroethene	<2.0		3.9	• • •
Toluene	<5.0		ND	• • •
1,1,1-Trichloroethane	<5.0		ND	•••
1,1,2-Trichloroethane	<5.0		•••••ND	•••
Trichloroethene	<2.0	1.0000000000000000000000000000000000000	•••••ND••••	



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

B116032

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-9.5-10.0 SOIL

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg
Vinyl Chloride	<10 0		ND
Acetone	<10.0		ND
2-Butanone	<20.0	• • • • • • • •	ND
2-Hexanone	<5.0		ND
4-Methyl-2-Pentanone	<5.0	· · · · · · · · ·	ND
Vinvl Acetate	<20.0		ND
Cis-1,2-Dichloroethene	<5.0		ND

Note: Analysis was performed using EPA methods 5030 and 8260

MOBILE CHEM LABS, INC.

Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-17.5-18.0 SOIL

B116033

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Benzene		2012.2	ND	
Bromodichloromethane	<2 0	00°0110° 40 40	ND	•••
Bromodorm	<2 0		ND	••••
Bromonothano	<5 0		ND	•••
Carbon Motrachlorido			ND	••••
Calbon Tetrachioride		• • • • •	••••••ND	• • •
Chiorobenzene	<2.0		••••••ND•••••	• • •
	<5.0		·····ND·····	• • •
	<5.0	• • • • •	•••••ND•••••	• • •
Chloromethane	<5.0		•••••ND•••••	• • •
Dibromochloromethane	<2.0		•••••ND•••••	• • •
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene	<5.0		ND	
Trans-1,3-Dichloropropene	<5.0		ND	
Ethylbenzene	<5.0		ND	
Methylene Chloride	<5.0		ND	
1,1,2,2-Tetrachloroethane	<5.0		ND	
Tetrachloroethene	<2.0		ND	
Toluene	<5.0		ND	
1 1 1-Trichloroethane	< 5.0		ND	
1 1 2-Trichloroethane	< 5.0	10.50 8.40 10	ND	a 213
Trichloroethene	<2 0	• • • • •	ND	• • •
TTTOHTOTOCOLOGIE	•••• <u>~</u>			



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-13-17.5-18.0 SOIL

B116033

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene			ND	

Note: Analysis was performed using EPA methods 5030 and 8260

MOBILE CHEM LABS, INC.

Ronald G. Evans Lab Director



881.060.01.003\2162\014153

PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-1.5-2.0 SOIL

B116034

	Detection	Limit	Results
	µq/kq		µq∕kq
	1 37 3		1-373
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		•••••ND•••••
Trans-1,2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		••••••ND
Cis-1,3-Dichloropropene.	<5.0		ND
Trans-1,3-Dichloropropene	e<5.0		•••••ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		•••••ND
1,1,2,2-Tetrachloroethane	e<5.0	• • • •	•••••ND.••••
Tetrachloroethene	<2.0	••••	. 4.3
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0	• • • •	••••••ND
Trichloroethene	<2.0		ND



Date Sampled: 11-13-06 Date Received: 11-13-06 Date Analyzed: 11-13-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-1.5-2.0 SOIL

B116034

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		•••••ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



881.060.01.003\2162\014153

PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-15-3.5-4.0 SOIL

B116035

	Detection	Limit	Results	
	µg/kg		µq∕kq	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		•••••ND	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene	<5.0		•••••ND.••••	
Trans-1, 3-Dichloropropene	e<5.0		ND	
Ethylbenzene	<5.0		ND	
Methylene Chloride			ND	• • •
1,1,2,2-Tetrachloroethane	e<5.0		ND	
Tetrachloroethene	<2.0		ND	
Toluene	<5.0	• • • • •	ND	
1,1,1-Trichloroethane	<5.0		ND	• • •
1,1,2-Trichloroethane	<5.0	• • • • •	•••••ND	• • •
Trichloroethene	<2.0		•••••ND.••••	



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-15-3.5-4.0 SOIL

B116035

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Vinyl Chloride	<5.0		ND	e
Total Xylenes	<10.0		ND	ł
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	į
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	ł
4-Methyl-2-Pentanone	<5.0		ND	,
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	į
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



881.060.01.003\2162\014153

PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-15-9.5-10.0 SOIL

B116036

	Detection	Limit	Results
	µg∕kg		µg∕kg
Benzene	<5.0		••••••ND••••••
Bromodichloromethane	<2.0		•••••••ND••••••••
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		•••••••ND••••••
Trans-1, 2-Dichloroethene.	<5.0		••••••ND•••••••
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene	<5.0		ND
Trans-1,3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	e<5.0		••••••ND••••••
Tetrachloroethene	<2.0		ND
Toluene	<5.0		••••••ND••••••
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-15-9.5-10.0 SOIL

B116036

EPA METHOD 8260 PURGEABLE ORGANICS

Detection Limit µg/kg	Results µg/kg
Vinyl Chloride	ND
Total Xylenes	ND
Acetone	ND
2-Butanone	ND
Carbon Disulfide	ND
2-Hexanone	ND
4-Methyl-2-Pentanone<5.0	ND
Styrene<5.0	ND
Vinyl Acetate	ND
Cis-1,2-Dichloroethene<5.0	ND

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-16-W WATER

B116037

	Detection	Limit	Results
	$\mu q/l$		$\mu q/l$
	, 5,		
Benzene	<5.0		••••••ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		•••••ND.•••••
Chloroform	<5.0		ND
Chloromethane	<5.0		•••••ND••••••
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		•••••ND•••••
1,2-Dichloroethane	<5.0		•••••ND••••••
1,1-Dichloroethene	<5.0	• • • •	•••••ND••••••
Trans-1,2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		•••••ND••••••
Cis-1,3-Dichloropropene.	<5.0		•••••ND
Trans-1,3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		•••••ND••••••
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	e<5.0		ND
Tetrachloroethene	<2.0		ND
Toluene	<5.0		•••••ND••••••
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

B116037

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-16-W WATER

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/l	Limit	Results µg/l
Vinyl Chloride	<5.0		•••••ND•••••••
Total Xylenes	<10.0		ND
Acetone	<10.0		ND
2-Butanone	<20.0		ND
Carbon Disulfide	<5.0		ND
2-Hexanone	<5.0		ND
4-Methyl-2-Pentanone	<5.0		ND
Styrene	<5.0		ND
Vinyl Acetate	<20.0		ND
Cis-1,2-Dichloroethene	<5.0		ND

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-5.5-6.0 SOIL

B116038

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	$\mu q/kq$		µq∕kq
			, .
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		•••••ND
Cis-1,3-Dichloropropene.	<5.0		ND
Trans-1, 3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		•••••ND.•••••
1,1,2,2-Tetrachloroethane	e<5.0		ND
Tetrachloroethene	<2.0		25
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		•••••ND••••••
Trichloroethene	<2.0		ND

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Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-5.5-6.0 SOIL

B116038

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride Total Xylenes	<5.0 <10.0		NDND.	
Acetone 2-Butanone	<10.0	• • • • • • •	ND	
Carbon Disulfide 2-Hexanone	<5.0 <5.0	• • • • • •	ND	•••
4-Methyl-2-Pentanone	<5.0	•••••	ND	• • •
Vinyl Acetate	<20.0		ND.	•••
Cis-1,2-Dichloroethene	<5.0		• • • • • • • ND • • • • • • •	• • •

Note: Duplicate Deviation is 13 % LCS Recovery is 83 % Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-9.5-10.0 SOIL

B116039

	Detection	Limit	Results	
	$\mu q/kq$		µq∕kq	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		•••••ND•••••	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene.	<5.0		ND	• • •
1,2-Dichloropropane	<5.0		ND	• • •
Cis-1,3-Dichloropropene	<5.0		•••••ND•••••	• • •
Trans-1,3-Dichloropropene	e<5.0		•••••ND•••••	
Ethylbenzene	<5.0		•••••ND	• • •
Methylene Chloride	<5.0		ND	• • •
1,1,2,2-Tetrachloroethane	e<5.0		•••••ND.••••	• • •
Tetrachloroethene	<2.0		•••••ND	• • •
Toluene	<5.0	• • • • •	•••••ND•••••	
1,1,1-Trichloroethane	<5.0		•••••ND	•••
1,1,2-Trichloroethane	<5.0		•••••ND	
Trichloroethene	<2.0		ND	


Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-9.5-10.0 SOIL

B116039

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride Total Xvlenes	<5.0 <10.0	•••••	ND	••••
Acetone	<10.0		ND	•••
Carbon Disulfide	<5.0	•••••	ND	• • •
4-Methyl-2-Pentanone	<5.0		ND	
Styrene Vinyl Acetate	<20.0		ND	•••
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Spike Recovery is 88 %

Note: Analysis was performed using EPA methods 5030 and 8260

MOBILE CHEM LABS, INC.

Ronald G. Evans Lab Director



Phone (925) 945-1266 • Fax (925) 943-6884

881.060.01.003\2162\014153

PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-17.5-18.0 SOIL

B116040

	Detection	Limit	Results	
	µg/kg		µq/kq	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	• • •
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	• • •
Chloroform	<5.0	Sec. eres	ND	• • •
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	• • •
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	• • •
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	• • •
Cis-1,3-Dichloropropene.	<5.0		ND	
Trans-1, 3-Dichloropropene	e<5.0		ND	•••
Ethylbenzene			ND	• • •
Methylene Chloride	<5.0		ND	• • •
1,1,2,2-Tetrachloroethane	e<5.0		ND	• • •
Tetrachloroethene	<2.0		ND	• • •
Toluene	<5.0		ND	• • •
1,1,1-Trichloroethane	<5.0		•••••ND.••••	• • •
1,1,2-Trichloroethane	<5.0		ND	
Trichloroethene	<2.0		ND	



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-14-17.5-18.0 SOIL

B116040

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Vinyl Chloride	<5.0		ND	• • •
Fotal Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-1.5-2.0 SOIL

B116041

	Detection	Limit	Results
	µq∕kq		µa∕ka
	1- 57 5		F- 57 5
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene	<5.0		ND
Trans-1, 3-Dichloropropene	e<5.0		••••••ND••••••
Ethylbenzene	<5.0		••••••ND•••••
Methylene Chloride	<5.0		••••••ND•••••••
1,1,2,2-Tetrachloroethane	e<5.0		ND
Tetrachloroethene	<2.0		. 110
Toluene	<5.0		••••••ND••••••
1,1,1-Trichloroethane	<5.0		••••••ND••••••
1,1,2-Trichloroethane	<5.0		••••••ND•••••••
Trichloroethene	<2.0		. 6.8



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-1.5-2.0 SOIL

B116041

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	• •
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-5.5-6.0 SOIL

B116042

	Detection	Limit	Results	
	µq/kq		$\mu q/kq$	
	1 57 5		, ,, ,,	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		••••••ND•••••	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		••••••ND•••••	
1,1-Dichloroethene	<5.0		•••••ND•••••	
Trans-1, 2-Dichloroethene.	<5.0		••••••ND•••••	
1,2-Dichloropropane	<5.0		••••••ND•••••	• • • •
Cis-1,3-Dichloropropene	<5.0		••••••ND•••••	• • • •
Trans-1,3-Dichloropropene	e<5.0		••••••ND•••••	• • • •
Ethylbenzene	<5.0		•••••ND•••••	
Methylene Chloride	<5.0		•••••ND•••••	• • • •
1,1,2,2-Tetrachloroethane	e<5.0		••••••ND•••••	••••
Tetrachloroethene	<2.0		. 65 .	
Toluene	<5.0		•••••ND•••••	
1,1,1-Trichloroethane	<5.0	• • • •	••••••ND	• • • •
1,1,2-Trichloroethane	<5.0		•••••ND••••	• • • •
Trichloroethene	<2.0		ND	



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-5.5-6.0 SOIL

B116042

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	•••
Acetone	<10.0		ND	
2-Butanone Carbon Disulfide	<20.0		ND	•••
2-Hexanone 4-Methyl-2-Pentanone	····<5.0		ND	•••
Styrene	<5.0	• • • • • •	ND	•••
Cis-1,2-Dichloroethene	<20.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-9.5-10.0 SOIL

B116043

	Detection	Limit	Results
	µq/kq		µq/kq
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene	<5.0		ND
Trans-1, 3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	e<5.0		••••••ND••••••
Tetrachloroethene	<2.0		. 13
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-9.5-10.0 SOIL

B116043

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg
Vinyl Chloride	<5.0	•••••	ND
Acetone	<10.0		ND
2-Butanone Carbon Disulfide	<20.0 <5.0		ND
2-Hexanone	<5.0	••••	ND
styrene	<5.0		ND
Vinyl Acetate Cis-1,2-Dichloroethene	<20.0 <5.0		ND

Note: Analysis was performed using EPA methods 5030 and 8260

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Mondall Grand

Ronald G. Evans Lab Director



Phone (925) 945-1266 • Fax (925) 943-6884

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PES Environmental, Inc. 1682 Novato Blvd., #100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-17.5-18.0 SOIL

B116044

	Detection	Limit	Results
	µg∕kg		μg/kg
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene.	<5.0		ND
Trans-1,3-Dichloropropene	e<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	≥<5.0		ND
Tetrachloroethene	<2.0		2.0
Toluene	<5.0		ND
1,1,1-Trichloroethane	<5.0		•••••ND••••••
1,1,2-Trichloroethane	<5.0		ND
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-18-17.5-18.0 SOIL

B116044

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	
Total Xylenes	<10.0		ND	
Acetone	<10.0		ND	
2-Butanone	<20.0		ND	
Carbon Disulfide	<5.0		ND	
2-Hexanone	<5.0		ND	
4-Methyl-2-Pentanone	<5.0		ND	
Styrene	<5.0		ND	
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-11.5-12.0 SOIL

B116045

	Detection	Limit	Results
	µq/kq		µq/kq
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		•••••ND•••••
1,1-Dichloroethene	<5.0		••••••ND••••••
Trans-1, 2-Dichloroethene.	<5.0		••••••ND•••••••
1,2-Dichloropropane	<5.0		••••••ND••••••
Cis-1,3-Dichloropropene	<5.0		••••••ND••••••
Trans-1, 3-Dichloropropene	<5.0	• • • •	••••••ND••••••
Ethylbenzene	<5.0		••••••ND••••••
Methylene Chloride	<5.0		••••••ND••••••
1,1,2,2-Tetrachloroethane	<5.0		•••••ND••••••
Tetrachloroethene	<2.0		••••••ND.•••••
Toluene	<5.0		••••••ND•••••
1,1,1-Trichloroethane	<5.0	• • • •	ND
1,1,2-Trichloroethane	<5.0	••••	ND
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-11.5-12.0 SOIL

B116045

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride Total Xylenes	<5.0 <10.0		ND	
Acetone	<10.0 <20.0		ND	•••
Carbon Disulfide 2-Hexanone	····.<5.0 ····.<5.0		ND	
4-Methyl-2-Pentanone Styrene	<5.0 <5.0		ND	• • •
Vinyl Acetate Cis-1,2-Dichloroethene	<20.0 <5.0		ND	•••

Note: Analysis was performed using EPA methods 5030 and 8260

MOBILE CHEM LABS, INC.

and Devens

Ronald G. Evans Lab Director



Phone (925) 945-1266 • Fax (925) 943-6884

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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-21-W WATER

B116046

	Detection	Limit	Results	
	μg/1		$\mu g/l$	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene.	<5.0		ND	• • • • •
Trans-1,3-Dichloropropene	e<5.0		•••••ND••••	
Ethylbenzene	<5.0		ND	
Methylene Chloride	<5.0		ND	• • • • •
1,1,2,2-Tetrachloroethane	e<5.0		ND	• • • • •
Tetrachloroethene	<2.0		40	• • • • •
Toluene	<5.0		ND	• • • • •
1,1,1-Trichloroethane	<5.0		ND	• • • • •
1,1,2-Trichloroethane	<5.0		ND	
Trichloroethene	<2.0		2.1	



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-21-W WATER

B116046

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection	Limit	Results
	μg/1		μg/l
Vinyl Chloride	<5.0		ND
Total Xylenes	<10.0		ND
Acetone	<10.0		ND
2-Butanone	<20.0		ND
Carbon Disulfide	<5.0		ND
2-Hexanone	<5.0		ND
4-Methyl-2-Pentanone	<5.0		•••••ND•••••••
Styrene	<5.0		ND
Vinyl Acetate	<20.0		ND
Cis-1,2-Dichloroethene	<5.0		ND

Note: Analysis was performed using EPA methods 5030 and 8260

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Kondal Devous

Ronald G. Evans Lab Director



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Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-5.5-6.0 SOIL

B116047

	Detection µg/kg	Limit	Results µg/kg
Benzene	<5.0		ND
Bromodichloromethane	<2.0		ND
Bromoform	<2.0		ND
Bromomethane	<5.0		ND
Carbon Tetrachloride	<2.0		ND
Chlorobenzene	<2.0		ND
Chloroethane	<5.0		ND
Chloroform	<5.0		ND
Chloromethane	<5.0		ND
Dibromochloromethane	<2.0		ND
1,1-Dichloroethane	<5.0		ND
1,2-Dichloroethane	<5.0		ND
1,1-Dichloroethene	<5.0		ND
Trans-1, 2-Dichloroethene.	<5.0		ND
1,2-Dichloropropane	<5.0		ND
Cis-1,3-Dichloropropene	<5.0		ND
Trans-1, 3-Dichloropropene	<5.0		ND
Ethylbenzene	<5.0		ND
Methylene Chloride	<5.0		ND
1,1,2,2-Tetrachloroethane	<5.0		ND
Tetrachloroethene	<2.0		30
Toluene	<5.0		•••••ND•••••
1,1,1-Trichloroethane	<5.0		ND
1,1,2-Trichloroethane	<5.0		•••••ND•••••
Trichloroethene	<2.0		ND



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

B116047

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-5.5-6.0 SOIL

EPA METHOD 8260 PURGEABLE ORGANICS

ection µg/kg	Limit	Results µg/kg	
.<5.0 <10.0 <20.0 .<5.0 .<5.0 .<5.0 .<5.0 <20.0 .<5.0		ND	
	ection µg/kg .<5.0 <10.0 <20.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0	ection Limit µg/kg .<5.0 <10.0 .00 .00 .20.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 .<5.0 	ection Limit Results μg/kg μg/kg .<5.0

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director



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PES Environmental, Inc. 1682 Novato Blvd.,#100 Novato, CA 94947 Attn: Will Mast Project Manager

Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-9.5-10.0 SOIL

B116048

	Detection	Limit	Results	
	µg∕kg		µg∕kg	
Benzene	<5.0		ND	
Bromodichloromethane	<2.0		ND	
Bromoform	<2.0		ND	
Bromomethane	<5.0		ND	
Carbon Tetrachloride	<2.0		ND	
Chlorobenzene	<2.0		ND	
Chloroethane	<5.0		ND	
Chloroform	<5.0		ND	
Chloromethane	<5.0		ND	
Dibromochloromethane	<2.0		ND	
1,1-Dichloroethane	<5.0		ND	
1,2-Dichloroethane	<5.0		ND	
1,1-Dichloroethene	<5.0		ND	
Trans-1,2-Dichloroethene.	<5.0		ND	
1,2-Dichloropropane	<5.0		ND	
Cis-1,3-Dichloropropene.	<5.0		ND	
Trans-1, 3-Dichloropropene	e<5.0		ND	
Ethylbenzene	<5.0		ND	
Methylene Chloride	<5.0		ND	
1,1,2,2-Tetrachloroethane	e<5.0		ND	
Tetrachloroethene	<2.0		ND]
Toluene	<5.0		ND	
1,1,1-Trichloroethane	<5.0		ND	
1,1,2-Trichloroethane	<5.0		ND	
Trichloroethene	<2.0		ND	



Date Sampled: 11-14-06 Date Received: 11-14-06 Date Analyzed: 11-14-06

Sample Number

Sample Description 7200 Bancroft Ave. Oakland, CA Project # 881.060.01.003 B-20-9.5-10.0 SOIL

B116048

EPA METHOD 8260 PURGEABLE ORGANICS

	Detection µg/kg	Limit	Results µg/kg	
Vinyl Chloride	<5.0		ND	• • •
lotal Xylenes Acetone	<10.0		ND.	:::
2-Butanone	<20.0	•••••	ND	• • •
2-Hexanone	<5.0		ND.	
4-Methyl-2-Pentanone	<5.0	• • • • •	ND	• • •
Vinyl Acetate	<20.0		ND	
Cis-1,2-Dichloroethene	<5.0		ND	

Note: Analysis was performed using EPA methods 5030 and 8260

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Ronald G. Evans Lab Director

Consultant Name PES		Site Name/Lo		nce	160	strum	Samp G.L	er Name					105 678 AF	BILI 3 RE AYI) 94	E C Elli Elli 5-1	Hei 52 \ 12, (1268	n l Vav Ca S	AB LLE 94	S, Y 54
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8-11-9.5-10.0	9/13	1037		X	Y	Y		<			1								
B-11-17.5-18.0	9/13	11:58		X		X		<											-
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SAMPLE ID NUMBER	DATE	TIME	LAB ID#	PRE	SAMPL SERVA	E	Sui	MATRO	626618													
B-15-3-5-4.0	11/14/06	800		X		· · · ·	X		X								+	-			1	+
B-15-9.5-10.0	11/14/06	855		×			Y		×												1	+
B-16-W	11	945	-		¥	:		X	+													\top
8-14-5.5-6.0	11/14/06	952		X			X		X											,		
B-14-9.5-16.0	11/14/06	1006		X		1	X		X													T
B-14-17.5-180	11/14/26	1025		X			X															-
B-18-1-5-2.0	11/14/06	1050		X		- <u>*</u>	×		×													
13-18-5.5-6.0	11/14/06	1105		Y		31	+		X													
13-18-7.5-10.0	11/14/06	1130		X		4	X		X													1
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B-20-11.5-12.0	11/14/06	1355		~			14.	M.	4													
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B-20-9.5.10.0	11/14/06	1340		X			X		X					·								
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SEVERN TRENT **STL**

ANALYTICAL REPORT

Job Number: 720-6509-1

Job Description: Sparkler Cleaner

For: PES Environmental, Inc. 1682 Novato Boulevard Suite 100 Novato, CA 94947-7021

Attention: Mr. Will Mast

Sharn

Dimple Sharma Project Manager I dsharma@stl-inc.com 11/17/2006

Project Manager: Surinder Sidhu

Severn Trent Laboratories, Inc. STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566 Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

EXECUTIVE SUMMARY - Detections

Client: PES Environmental, Inc.

Job Number: 720-6509-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method	
720-6509-1	B-23-2.0					
Tetrachloroethene		59	4.2	ug/Kg	8260B	
720-6509-3	B-23-10.0					
Tetrachloroethene		8.3	4.7	ug/Kg	8260B	
720-6509-5	B-24-2.0					
Tetrachloroethene		77	4.4	ug/Kg	8260B	
720-6509-6	B-24-6.0					
Tetrachloroethene		72	4.1	ug/Kg	8260B	
720-6509-7	B-24-10.0					
Tetrachloroethene		8.2	4.2	ug/Kg	8260B	
720-6509-8	B-24-18.0					
Tetrachloroethene		6.1	3.9	ug/Kg	8260B	
720-6509-9	B-25-2.0					
Tetrachloroethene		140	4.5	ug/Kg	8260B	
720-6509-10	B-25-6.0					
Tetrachloroethene		57	4.5	ug/Kg	8260B	
720-6509-12	B-25-18.0					
Tetrachloroethene		36	4.2	ug/Kg	8260B	
720-6509-14	B-22-W					
Tetrachloroethene Trichloroethene		19 2.4	1.0 1.0	ug/L ug/L	8260B 8260B	

METHOD SUMMARY

Client: PES Environmental, Inc.

Descript	ion	Lab Location	Method	Preparation Method
Matrix:	Solid			
Volatile Or	rganic Compounds by GC/MS (Low Level)	STL SF	SW846 8	3260B
	Closed System Purge & Trap/Laboratory	STL SF		SW846 5035
Matrix:	Water			
Volatile Or	rganic Compounds by GC/MS (Low Level)	STL SF	SW846 8	3260B
	Purge-and-Trap	STL SF		SW846 5030B

LAB REFERENCES:

STL SF = STL San Francisco

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: PES Environmental, Inc.

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-6509-1	B-23-2.0	Solid	11/15/2006 0910	11/15/2006 1840
720-6509-2	B-23-6.0	Solid	11/15/2006 0925	11/15/2006 1840
720-6509-3	B-23-10.0	Solid	11/15/2006 0927	11/15/2006 1840
720-6509-4	B-23-18.0	Solid	11/15/2006 1015	11/15/2006 1840
720-6509-5	B-24-2.0	Solid	11/15/2006 1255	11/15/2006 1840
720-6509-6	B-24-6.0	Solid	11/15/2006 1300	11/15/2006 1840
720-6509-7	B-24-10.0	Solid	11/15/2006 1315	11/15/2006 1840
720-6509-8	B-24-18.0	Solid	11/15/2006 1330	11/15/2006 1840
720-6509-9	B-25-2.0	Solid	11/15/2006 1415	11/15/2006 1840
720-6509-10	B-25-6.0	Solid	11/15/2006 1425	11/15/2006 1840
720-6509-11	B-25-10.0	Solid	11/15/2006 1430	11/15/2006 1840
720-6509-12	B-25-18.0	Solid	11/15/2006 1508	11/15/2006 1840
720-6509-13	B-19-W	Water	11/14/2006 1250	11/15/2006 1840
720-6509-14	B-22-W	Water	11/14/2006 1610	11/15/2006 1840
720-6509-15TB	TRIP-1	Water	11/14/2006 0000	11/15/2006 1840

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-23-2.0

Lab Sample ID:	720-6509-1	Date Sampled:	11/15/2006 0910
Client Matrix:	Solid	Date Received:	11/15/2006 1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1342 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 5.94 g ume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.2
Chlorobenzene		ND		4.2
1,2-Dichlorobenzene		ND		4.2
1,3-Dichlorobenzene		ND		4.2
1,4-Dichlorobenzene		ND		4.2
1,1-Dichloropropene		ND		4.2
1,1-Dichloroethane		ND		4.2
1,2-Dichloroethane		ND		4.2
1,1-Dichloroethene		ND		4.2
cis-1,2-Dichloroethene		ND		4.2
trans-1,2-Dichloroethene		ND		4.2
Ethylbenzene		ND		4.2
1,1,1,2-Tetrachloroethane		ND		4.2
1,1,2,2-Tetrachloroethane		ND		4.2
Tetrachloroethene		59		4.2
Toluene		ND		4.2
1,1,1-Trichloroethane		ND		4.2
1,1,2-Trichloroethane		ND		4.2
Trichloroethene		ND		4.2
Vinyl chloride		ND		4.2
Xylenes, Total		ND		8.4
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		91		60 - 140
1,2-Dichloroethane-d4 (Surr)		96		60 - 140
Toluene-d8 (Surr)		92		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-23-6.0

Lab Sample ID:	720-6509-2	Date Sampled:	11/15/2006 0925
Client Matrix:	Solid	Date Received:	11/15/2006 1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1416 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 5.05 g ume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		5.0
Chlorobenzene		ND		5.0
1,2-Dichlorobenzene		ND		5.0
1,3-Dichlorobenzene		ND		5.0
1,4-Dichlorobenzene		ND		5.0
1,1-Dichloropropene		ND		5.0
1,1-Dichloroethane		ND		5.0
1,2-Dichloroethane		ND		5.0
1,1-Dichloroethene		ND		5.0
cis-1,2-Dichloroethene		ND		5.0
trans-1,2-Dichloroethene		ND		5.0
Ethylbenzene		ND		5.0
1,1,1,2-Tetrachloroethane		ND		5.0
1,1,2,2-Tetrachloroethane		ND		5.0
Tetrachloroethene		ND		5.0
Toluene		ND		5.0
1,1,1-Trichloroethane		ND		5.0
1,1,2-Trichloroethane		ND		5.0
Trichloroethene		ND		5.0
Vinyl chloride		ND		5.0
Xylenes, Total		ND		9.9
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		92		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140
Toluene-d8 (Surr)		91		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-23-10.0

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Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1450 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 5.33 g ume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.7
Chlorobenzene		ND		4.7
1,2-Dichlorobenzene		ND		4.7
1,3-Dichlorobenzene		ND		4.7
1,4-Dichlorobenzene		ND		4.7
1,1-Dichloropropene		ND		4.7
1,1-Dichloroethane		ND		4.7
1,2-Dichloroethane		ND		4.7
1,1-Dichloroethene		ND		4.7
cis-1,2-Dichloroethene		ND		4.7
trans-1,2-Dichloroethene		ND		4.7
Ethylbenzene		ND		4.7
1,1,1,2-Tetrachloroethane		ND		4.7
1,1,2,2-Tetrachloroethane		ND		4.7
Tetrachloroethene		8.3		4.7
Toluene		ND		4.7
1,1,1-Trichloroethane		ND		4.7
1,1,2-Trichloroethane		ND		4.7
Trichloroethene		ND		4.7
Vinyl chloride		ND		4.7
Xylenes, Total		ND		9.4
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		99		60 - 140
1,2-Dichloroethane-d4 (Surr)		96		60 - 140
Toluene-d8 (Surr)		91		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-23-18.0

 Lab Sample ID:
 720-6509-4
 Date Sampled:
 11/15/2006
 1015

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method: Preparation: Dilution: Date Analyzed:	8260B 5035 1.0 11/16/2006 1524	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 5.98 g ume: 10 mL
Date Prepared:	11/16/2006 0900			

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.2
Chlorobenzene		ND		4.2
1,2-Dichlorobenzene		ND		4.2
1,3-Dichlorobenzene		ND		4.2
1,4-Dichlorobenzene		ND		4.2
1,1-Dichloropropene		ND		4.2
1,1-Dichloroethane		ND		4.2
1,2-Dichloroethane		ND		4.2
1,1-Dichloroethene		ND		4.2
cis-1,2-Dichloroethene		ND		4.2
trans-1,2-Dichloroethene		ND		4.2
Ethylbenzene		ND		4.2
1,1,1,2-Tetrachloroethane		ND		4.2
1,1,2,2-Tetrachloroethane		ND		4.2
Tetrachloroethene		ND		4.2
Toluene		ND		4.2
1,1,1-Trichloroethane		ND		4,2
1,1,2-Trichloroethane		ND		4.2
Trichloroethene		ND		4.2
Vinyl chloride		ND		4.2
Xylenes, Total		ND		8.4
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		104		60 - 140
1,2-Dichloroethane-d4 (Surr)		95		60 - 140
Toluene-d8 (Surr)		94		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-24-2.0

 Lab Sample ID:
 720-6509-5
 Date Sampled:
 11/15/2006
 1255

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method:8Preparation:5Dilution:1Date Analyzed:1Date Prepared:1	3260B 5035 1.0 11/16/2006 1308 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3 c:\saturn ume: ume:	900G ws\data\200611\11 5.68 g 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.4
Chlorobenzene		ND		4.4
1,2-Dichlorobenzene		ND		4.4
1,3-Dichlorobenzene		ND		4.4
1,4-Dichlorobenzene		ND		4.4
1,1-Dichloropropene		ND		4.4
1,1-Dichloroethane		ND		4.4
1,2-Dichloroethane		ND		4.4
1,1-Dichloroethene		ND		4.4
cis-1,2-Dichloroethene		ND		4.4
trans-1,2-Dichloroethene		ND		4.4
Ethylbenzene		ND		4.4
1,1,1,2-Tetrachloroethane		ND		4.4
1,1,2,2-Tetrachloroethane		ND		4.4
Tetrachloroethene		77		4.4
Toluene		ND		4.4
1,1,1-Trichloroethane		ND		4.4
1,1,2-Trichloroethane		ND		4.4
Trichloroethene		ND		4.4
Vinyl chloride		ND		4.4
Xylenes, Total		ND		8.8
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		96		60 - 140
1,2-Dichloroethane-d4 (Surr)		96		60 - 140
Toluene-d8 (Surr)		94		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-24-6.0

 Lab Sample ID:
 720-6509-6
 Date Sampled:
 11/15/2006
 1300

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method: Preparation: Dilution: Date Analyzed:	8260B 5035 1.0 11/16/2006 1558	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 6.04 g ume: 10 mL
Date Prepared:	11/16/2006 0900			ine. to me

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.1
Chlorobenzene		ND		4.1
1,2-Dichlorobenzene		ND		4.1
1,3-Dichlorobenzene		ND		4.1
1,4-Dichlorobenzene		ND		4.1
1,1-Dichloropropene		ND		4.1
1,1-Dichloroethane		ND		4.1
1,2-Dichloroethane		ND		4.1
1,1-Dichloroethene		ND		4.1
cis-1,2-Dichloroethene		ND		4.1
trans-1,2-Dichloroethene		ND		4.1
Ethylbenzene		ND		4.1
1,1,1,2-Tetrachloroethane		ND		4.1
1,1,2,2-Tetrachloroethane		ND		4.1
Tetrachloroethene		72		4.1
Toluene		ND		4.1
1,1,1-Trichloroethane		ND		4.1
1,1,2-Trichloroethane		ND		4.1
Trichloroethene		ND		4.1
Vinyl chloride		ND		4.1
Xylenes, Total		ND		8.3
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		96		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140
Toluene-d8 (Surr)		93		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-24-10.0

 Lab Sample ID:
 720-6509-7
 Date Sampled:
 11/15/2006
 1315

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1632 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Vo Final Weight/Vol	Varian 3900G c:\saturnws\data\200611\11 lume: 5.89 g lume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.2
Chlorobenzene		ND		4.2
1,2-Dichlorobenzene		ND		4.2
1,3-Dichlorobenzene		ND		4.2
1,4-Dichlorobenzene		ND		4.2
1,1-Dichloropropene		ND		4.2
1,1-Dichloroethane		ND		4.2
1,2-Dichloroethane		ND		4.2
1,1-Dichloroethene		ND		4.2
cis-1,2-Dichloroethene		ND		4.2
trans-1,2-Dichloroethene		ND		4.2
Ethylbenzene		ND		4.2
1,1,1,2-Tetrachloroethane		ND		4.2
1,1,2,2-Tetrachloroethane		ND		4.2
Tetrachloroethene		8.2		4.2
Toluene		ND		4.2
1,1,1-Trichloroethane		ND		4.2
1,1,2-Trichloroethane		ND		4.2
Trichloroethene		ND		4.2
Vinyl chloride		ND		4.2
Xylenes, Total		ND		8.5
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		93		60 - 140
1,2-Dichloroethane-d4 (Surr)		87		60 - 140
Toluene-d8 (Surr)		91		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-24-18.0

 Lab Sample ID:
 720-6509-8
 Date Sampled:
 11/15/2006
 1330

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method: 8260B Analysis Batch: 720-15491 Preparation: 5035 Prep Batch: 720-15494 Dilution: 1.0 Integration: Date Analyzed: 11/16/2006 1706 Integration: Date Prepared: 11/16/2006 0900 Integration:	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900G c:\saturnws\data\200611\11 ume: 6.33 g ume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		3.9
Chlorobenzene		ND		3.9
1,2-Dichlorobenzene		ND		3.9
1,3-Dichlorobenzene		ND		3.9
1,4-Dichlorobenzene		ND		3.9
1,1-Dichloropropene		ND		3.9
1,1-Dichloroethane		ND		3.9
1,2-Dichloroethane		ND		3.9
1,1-Dichloroethene		ND		3.9
cis-1,2-Dichloroethene		ND		3.9
trans-1,2-Dichloroethene		ND		3.9
Ethylbenzene		ND		3.9
1,1,1,2-Tetrachloroethane		ND		3.9
1,1,2,2-Tetrachloroethane		ND		3.9
Tetrachloroethene		6.1		3.9
Toluene		ND		3.9
1,1,1-Trichloroethane		ND		3.9
1,1,2-Trichloroethane		ND		3.9
Trichloroethene		ND		3.9
Vinyl chloride		ND		3.9
Xylenes, Total		ND		7.9
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		89		60 - 140
1,2-Dichloroethane-d4 (Surr)		91		60 - 140
Toluene-d8 (Surr)		92		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-25-2.0

Lab Sample ID:	720-6509-9	Date Sampled:	11/15/2006 1415
Client Matrix:	Solid	Date Received:	11/15/2006 1840

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.5
Chlorobenzene		ND		4.5
1,2-Dichlorobenzene		ND		4.5
1,3-Dichlorobenzene		ND		4.5
1,4-Dichlorobenzene		ND		4.5
1,1-Dichloropropene		ND		4.5
1,1-Dichloroethane		ND		4.5
1,2-Dichloroethane		ND		4.5
1,1-Dichloroethene		ND		4.5
cis-1,2-Dichloroethene		ND		4.5
trans-1,2-Dichloroethene		ND		4.5
Ethylbenzene		ND		4.5
1,1,1,2-Tetrachloroethane		ND		4.5
1,1,2,2-Tetrachloroethane		ND		4.5
Tetrachloroethene		140		4.5
Toluene		ND		4.5
1,1,1-Trichloroethane		ND		4.5
1,1,2-Trichloroethane		ND		4.5
Trichloroethene		ND		4.5
Vinyl chloride		ND		4.5
Xylenes, Total		ND		9.0
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		69		60 - 140
1,2-Dichloroethane-d4 (Surr)		85		60 - 140
Toluene-d8 (Surr)		79		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-25-6.0

 Lab Sample ID:
 720-6509-10
 Date Sampled:
 11/15/2006
 1425

 Client Matrix:
 Solid
 Date Received:
 11/15/2006
 1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1813 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Vol Final Weight/Vol	Varian 3900G c:\saturnws\data\200611\11 lume: 5.52 g ume: 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.5
Chlorobenzene		ND		4.5
1,2-Dichlorobenzene		ND		4.5
1,3-Dichlorobenzene		ND		4.5
1,4-Dichlorobenzene		ND		4.5
1,1-Dichloropropene		ND		4.5
1,1-Dichloroethane		ND		4.5
1,2-Dichloroethane		ND		4.5
1,1-Dichloroethene		ND		4.5
cis-1,2-Dichloroethene		ND		4.5
trans-1,2-Dichloroethene		ND		4.5
Ethylbenzene		ND		4.5
1,1,1,2-Tetrachloroethane		ND		4.5
1,1,2,2-Tetrachloroethane		ND		4.5
Tetrachloroethene		57		4.5
Toluene		ND		4.5
1,1,1-Trichloroethane		ND		4.5
1,1,2-Trichloroethane		ND		4.5
Trichloroethene		ND		4.5
Vinyl chloride		ND		4.5
Xylenes, Total		ND		9.1
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		92		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140
Toluene-d8 (Surr)		92		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-25-10.0

Lab Sample ID:	720-6509-11	Date Sampled:	11/15/2006	1430
Client Matrix:	Solid	Date Received:	11/15/2006	1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5035 1.0 11/16/2006 1847 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494	Instrument ID: Lab File ID: Initial Weight/Vol Final Weight/Vol	Varian 3900G c:\saturnws\data\200611\1 lume: 5.78 g lume: 10 mL	1
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.3
Chlorobenzene		ND		4.3
1,2-Dichlorobenzene		ND		4.3
1,3-Dichlorobenzene		ND		4.3
1,4-Dichlorobenzene		ND		4.3
1,1-Dichloropropene		ND		4.3
1,1-Dichloroethane		ND		4.3
1,2-Dichloroethane		ND		4.3
1,1-Dichloroethene		ND		4.3
cis-1,2-Dichloroethene		ND		4.3
trans-1,2-Dichloroethene		ND		4.3
Ethylbenzene		ND		4.3
1,1,1,2-Tetrachloroethane		ND		4.3
1,1,2,2-Tetrachloroethane		ND		4.3
Tetrachloroethene		ND		4.3
Toluene		ND		4.3
1,1,1-Trichloroethane		ND		4.3
1,1,2-Trichloroethane		ND		4.3
Trichloroethene		ND		4.3
Vinyl chloride		ND		4.3
Xylenes, Total		ND		8.7
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		93		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140
Toluene-d8 (Surr)		92		70 - 130
Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-25-18.0

Lab Sample ID:720-6509-12DaClient Matrix:SolidDa	ate Sampled:	11/15/2006	1508
	ate Received:	11/15/2006	1840

Method: 8260B Preparation: 5035 Dilution: 1.0 Date Analyzed: 11/16/2006 192 Date Prepared: 11/16/2006 090	Analysis Batch: 720-15491 Prep Batch: 720-15494 1	Instrument ID: Vai Lab File ID: c:\s Initial Weight/Volume Final Weight/Volume:	ian 3900G aturnws\data\200611\11 : 5.89 g 10 mL
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Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	RL
Benzene		ND		4.2
Chlorobenzene		ND		4.2
1,2-Dichlorobenzene		ND		4.2
1,3-Dichlorobenzene		ND		4.2
1,4-Dichlorobenzene		ND		4.2
1,1-Dichloropropene		ND		4.2
1,1-Dichloroethane		ND		4.2
1,2-Dichloroethane		ND		4.2
1,1-Dichloroethene		ND		4.2
cis-1,2-Dichloroethene		ND		4.2
trans-1,2-Dichloroethene		ND		4.2
Ethylbenzene		ND		4.2
1,1,1,2-Tetrachloroethane		ND		4.2
1,1,2,2-Tetrachloroethane		ND		4.2
Tetrachloroethene		36		4.2
Toluene		ND		4.2
1,1,1-Trichloroethane		ND		4.2
1,1,2-Trichloroethane		ND		4.2
Trichloroethene		ND		4.2
Vinyl chloride		ND		4.2
Xylenes, Total		ND		8.5
Surrogate		%Rec		Acceptance Limits
4-Bromofluorobenzene		93		60 - 140
1,2-Dichloroethane-d4 (Surr)		94		60 - 140
Toluene-d8 (Surr)		91		70 - 130

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-19-W

Lab Sample ID:	720-6509-13	Date Sampled:	11/14/2006 1250
Client Matrix:	Water	Date Received:	11/15/2006 1840

Method:826Preparation:503Dilution:4.0Date Analyzed:11/Date Prepared:11/	60B 30B 0 /16/2006 1718 /16/2006 1718	Analysis Batch: 720-15486	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900 c:\saturnws\ ume: 40 ume: 40	D data\200611\11 mL mL
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Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		2.0
1,2-Dichlorobenzene	ND		2.0
1,3-Dichlorobenzene	ND		2.0
1,4-Dichlorobenzene	ND		2.0
1,1-Dichloropropene	ND		2.0
1,1-Dichloroethane	ND		2.0
1,2-Dichloroethane	ND		2.0
1,1-Dichloroethene	ND		2.0
cis-1,2-Dichloroethene	ND		2.0
trans-1,2-Dichloroethene	ND		2.0
Ethylbenzene	ND		2.0
1,1,1,2-Tetrachloroethane	ND		2.0
1,1,2,2-Tetrachloroethane	ND		2.0
Tetrachloroethene	ND		2.0
Toluene	ND		2.0
1,1,1-Trichloroethane	ND		2.0
1,1,2-Trichloroethane	ND		2.0
Trichloroethene	ND		2.0
Vinyl chloride	ND		2.0
Xylenes, Total	ND		4.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	98		79 - 118
1,2-Dichloroethane-d4 (Surr)	102		78 - 117
Toluene-d8 (Surr)	96		77 - 121

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: B-22-W

Lab Sample ID:	720-6509-14	Date Sampled:	11/14/2006 1610
Client Matrix:	Water	Date Received:	11/15/2006 1840

Method: Preparation: Dilution:	8260B 5030B 2.0	Analysis Batch: 720-15486	Instrument ID: Lab File ID: Initial Weight/Volu	Varian 3900D c:\saturnws\data\2 ıme: 40 mL	00611\11
Date Analyzed:	11/16/2006 1645		Final Weight/Volu	me: 40 mL	
Date Prepared:	11/16/2006 1645				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		1.0
1,2-Dichlorobenzene	ND		1.0
1,3-Dichlorobenzene	ND		1.0
1,4-Dichlorobenzene	ND		1.0
1,1-Dichloropropene	ND		1.0
1,1-Dichloroethane	ND		1.0
1,2-Dichloroethane	ND		1.0
1,1-Dichloroethene	ND		1.0
cis-1,2-Dichloroethene	ND		1.0
trans-1,2-Dichloroethene	ND		1.0
Ethylbenzene	ND		1.0
1,1,1,2-Tetrachloroethane	ND		1.0
1,1,2,2-Tetrachloroethane	ND		1.0
Tetrachloroethene	19		1.0
Toluene	ND		1.0
1,1,1-Trichloroethane	ND		1.0
1,1,2-Trichloroethane	ND		1.0
Trichloroethene	2.4		1.0
Vinyl chloride	ND		1.0
Xylenes, Total	ND		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	98		79 - 118
1,2-Dichloroethane-d4 (Surr)	102		78 - 117
Toluene-d8 (Surr)	101		77 - 121

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Client Sample ID: TRIP-1

Lab Sample ID:	720-6509-15TB	Date Sampled:	11/14/2006 0000
Client Matrix:	Water	Date Received:	11/15/2006 1840

Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B 5030B 1.0 11/16/2006 1611 11/16/2006 1611	Analysis Batch: 720-15486	Instrument ID: Lab File ID: Initial Weight/Volu Final Weight/Volu	Varian 3900D c:\saturnws\data\200611\11 ume: 40 mL ume: 40 mL
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Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,1-Dichloropropene	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
Ethylbenzene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	101		79 - 118
1,2-Dichloroethane-d4 (Surr)	100		78 - 117
Toluene-d8 (Surr)	103		77 - 121

DATA REPORTING QUALIFIERS

Lab Section

Qualifier

Description

Client: PES Environmental, Inc.

Job Number: 720-6509-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-1548	36				
LCS 720-15486/1	Lab Control Spike	Т	Water	8260B	
MB 720-15486/2	Method Blank	т	Water	8260B	
720-6509-13	B-19-W	т	Water	8260B	
720-6509-14	B-22-W	Т	Water	8260B	
720-6509-15TB	TRIP-1	Т	Water	8260B	
Analysis Batch:720-1549	91				
LCS 720-15494/1-AA	Lab Control Spike	Т	Solid	8260B	720-15494
LCSD 720-15494/2-AA	Lab Control Spike Duplicate	Т	Solid	8260B	720-15494
MB 720-15494/3-AA	Method Blank	Т	Solid	8260B	720-15494
720-6509-1	B-23-2.0	Т	Solid	8260B	720-15494
720-6509-2	B-23-6.0	Т	Solid	8260B	720-15494
720-6509-3	B-23-10.0	Т	Solid	8260B	720-15494
720-6509-4	B-23-18.0	Т	Solid	8260B	720-15494
720-6509-5	B-24-2.0	Т	Solid	8260B	720-15494
720-6509-6	B-24-6.0	Т	Solid	8260B	720-15494
720-6509-7	B-24-10.0	Т	Solid	8260B	720-15494
720-6509-8	B-24-18.0	Т	Solid	8260B	720-15494
720-6509-9	B-25-2.0	т	Solid	8260B	720-15494
720-6509-10	B-25-6.0	Т	Solid	8260B	720-15494
720-6509-11	B-25-10.0	Т	Solid	8260B	720-15494
720-6509-12	B-25-18.0	Т	Solid	8260B	720-15494
Prep Batch: 720-15494					
LCS 720-15494/1-AA	Lab Control Spike	Т	Solid	5035	
_CSD 720-15494/2-AA	Lab Control Spike Duplicate	Т	Solid	5035	
MB 720-15494/3-AA	Method Blank	Т	Solid	5035	
720-6509-1	B-23-2.0	Т	Solid	5035	
720-6509-2	B-23-6.0	Т	Solid	5035	
720-6509-3	B-23-10.0	Т	Solid	5035	
720-6509-4	B-23-18.0	Т	Solid	5035	
720-6509-5	B-24-2.0	Т	Solid	5035	
720-6509-6	B-24-6.0	Т	Solid	5035	
720-6509-7	B-24-10.0	Т	Solid	5035	
720-6509-8	B-24-18.0	т	Solid	5035	
720-6509-9	B-25-2.0	Т	Solid	5035	
720-6509-10	B-25-6.0	т	Solid	5035	
720-6509-11	B-25-10.0	т	Solid	5035	
720-6509-12	B-25-18.0	Т	Solid	5035	

<u>Report Basis</u>

T = Total

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: PES Environmental, Inc.

Method Blank - Batch: 720-15486

Lab Sample ID: MB 720-15486/2 Client Matrix: Water Dilution: 1.0 Date Analyzed: 11/16/2006 1109 Date Prepared: 11/16/2006 1109 Analysis Batch: 720-15486 Prep Batch: N/A Units: ug/L

Instrument ID: Varian 3900D Lab File ID: c:\saturnws\data\200611\11 Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

Method: 8260B Preparation: 5030B

Quality Control Results

Job Number: 720-6509-1

Analyte	Result	Qual	RL
Benzene	ND		0.50
Chlorobenzene	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,1-Dichloropropene	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
Ethylbenzene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
Surrogate	% Rec	Acceptance L	imits
4-Bromofluorobenzene	98	79 - 118	
1.2-Dichloroethane-d4 (Surr)	103	78 - 117	
Toluene-d8 (Surr)	103	77 - 121	

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Quality Control Results

Job Number: 720-6509-1

Client: PES Environmental, Inc.

Lab Control Spike - Batch: 720-15486

Method: 8260B Preparation: 5030B

Analyte		Spike Amount	Result	% Rec.	Limit	Qual
Date Prepared:	11/16/2006 1035					
Date Analyzed:	11/16/2006 1035			Final Weigh	nt/Volume: 40 mL	
Dilution:	1.0	Units: ug/L		Initial Weig	ht/Volume: 40 mL	
Client Matrix:	Water	Prep Batch: N/A		Lab File ID:	c:\saturnws\data\	200611\11
Lab Sample ID:	LCS 720-15486/1	Analysis Batch: 7	720-15486	Instrument	ID: Varian 3900D	

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Benzene	20.0	19.1	95	69 - 129	
Chlorobenzene	20.0	19.7	98	61 - 121	
1,1-Dichloroethene	20.0	17.8	89	65 - 125	
Toluene	20.0	19.8	99	70 - 130	
Trichloroethene	20.0	18.3	91	74 - 134	
Surrogate	% R	lec	Ace	ceptance Limits	
4-Bromofluorobenzene	10	1		79 - 118	
1,2-Dichloroethane-d4 (Surr)	93			78 - 117	
Toluene-d8 (Surr)	10	5		77 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: PES Environmental, Inc.

Method Blank - Batch: 720-15494

Lab Sample ID:MB 720-15494/3-AAClient Matrix:SolidDilution:1.0Date Analyzed:11/16/2006Date Prepared:11/16/2006

Analysis Batch: 720-15491 Prep Batch: 720-15494 Units: ug/Kg

Quality Control Results

Job Number: 720-6509-1

Method: 8260B Preparation: 5035

Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200611\1* Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		5.0
Chlorobenzene	ND		5.0
1,2-Dichlorobenzene	ND		5.0
1,3-Dichlorobenzene	ND		5.0
1,4-Dichlorobenzene	ND		5.0
1,1-Dichloropropene	ND		5.0
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
trans-1,2-Dichloroethene	ND		5.0
Ethylbenzene	ND		5.0
1,1,1,2-Tetrachloroethane	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Toluene	ND		5.0
1,1,1-Trichloroethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Trichloroethene	ND		5.0
Vinyl chloride	ND		5.0
Xylenes, Total	ND		10
Surrogate	% Rec	Acceptance Limits	3
4-Bromofluorobenzene	90	60 - 140	
1,2-Dichloroethane-d4 (Surr)	93	60 - 140	
Toluene-d8 (Surr)	89	70 - 130	

Quality Control Results

Method: 8260B

Preparation: 5035

Client: PES Environmental, Inc.

Job Number: 720-6509-1

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-15494

LCS Lab Sample ID: Client Matrix: Dilution: Date Analyzed: Date Prepared:	LCS 720-15494/1-AA Solid 1.0 11/16/2006 1127 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200611\1' Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL
LCSD Lab Sample II Client Matrix: Dilution: Date Analyzed: Date Prepared:	D: LCSD 720-15494/2-AA Solid 1.0 11/16/2006 1200 11/16/2006 0900	Analysis Batch: 720-15491 Prep Batch: 720-15494 Units: ug/Kg	Instrument ID: Varian 3900G Lab File ID: c:\saturnws\data\200611\111 Initial Weight/Volume: 5.00 g Final Weight/Volume: 10 mL

	-	<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	83	73	69 - 129	12	20		
Chlorobenzene	92	82	61 - 121	11	20		
1,1-Dichloroethene	83	74	65 - 125	12	20		
Toluene	87	77	70 - 130	12	20		
Trichloroethene	86	77	74 - 134	11	20		
Surrogate		LCS % Rec	LCSD %	Rec	Accep	otance Limits	
4-Bromofluorobenzene	9	90	90		6	0 - 140	
1,2-Dichloroethane-d4 (Surr)	\$	95	89		6	0 - 140	
Toluene-d8 (Surr)		89	86		7	0 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

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LOGIN SAMPLE RECEIPT CHECK LIST

Client: PES Environmental, Inc.

Job Number: 720-6509-1

Login Number: 6509

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Trip-1 not listed on COC, logged
There are no discrepancies between the sample IDs on the containers and the COC.	False	Rec'd TRIP-1 not listed on the COC 1-40mlHcl
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	no time TRIP-1
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	TRIP-1
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

PES Environmental, Inc.

APPENDIX C

VERIFICATION AND WASTE CHARACTERIZATION SAMPLING AND ANALYSIS PLAN

APPENDIX C

Verification and Waste Characterization Sampling and Analysis Plan Voluntary Soil Remediation Sparkle Cleaners, Eastmont Town Center 7000 Bancroft Avenue Oakland, California

INTRODUCTION

This Verification and Waste Characterization Sampling and Analysis Plan is an element of the Remedial Action Workplan (RAW) for voluntary soil remediation at Sparkle Cleaners, Eastmont Town Center, 7000 Bancroft Avenue, Suite 11, Oakland, California. The RAW describes procedures for removal and disposal of floor slab concrete and underlying soil that contains tetrachloroethene (PCE) in excess of the target soil cleanup level. The objective of the verification sampling is to confirm that the target soil cleanup concentration, as described in the RAW, has been met. The objective of the waste characterization sampling is to generate analytical data to accurately characterize waste, generated during remediation activities, for offsite disposal and/or recycling.

PERFORMANCE STANDARDS AND GUIDANCE

Sampling and Analysis will be performed in accordance with applicable guidance and requirements set forth pursuant to the Comprehensive Environmental Response Compensation Liability Act (CERCLA) as amended by the Superfund Amendment and Reauthorization Act (SARA); the National Contingency Plan (NCP); and local, State and Federal practices in effect at the time of performance of the work.

DESIGN AND PLACEMENT OF THE SAMPLING GRID FOR VERIFICATION SAMPLING

Systematic verification will be performed within the interior excavation area to distribute sample locations uniformly over the soil excavation area. Systematic sampling will be implemented by superimposing a sample grid over the removal area. The excavation grid will be composed of cells measuring approximately 6 feet by 6 feet in plan view. The excavation area encompasses approximately 165 square feet and therefore five verification samples are anticipated to be collected from the excavation bottom. In addition, discrete perimeter sidewall soil matrix samples will be collected from the excavation as follows (refer to Plate 3 for sidewall numbers); two samples from Sidewall 1, two samples from Sidewall 2, three samples from Sidewall 3, one sample from Sidewall 4 and two samples from Sidewall 5. The sidewall samples will be located at equidistant intervals. If expansion of the initial excavation is

required, additional sidewall samples will be collected at the rate of one sample for every 5 linear feet of additional sidewall.

SAMPLING PROCEDURES

Soil Verification Sampling

Following soil removal activities, the grid cell locations will be identified using a graduated tape measure and a temporary benchmark as the datum to reference the grid. Grid node locations will be identified by fluorescent paint marks placed on the edge of the concrete slab. Each grid cell will be identified with a sequential alphanumeric numbering system (A-1, A-2, B-1...).

One verification soil sample will be collected from each cell. All cells that lie completely within the removal area will be sampled. Samples will also be collected from cells that partially overlay the removal area (i.e., cells along borders). Sample locations and the number of samples comprising a grid cell composite sample may be adjusted in the field if necessary.

The following is a summary of equipment that may be used during verification soil sampling activities:

- Hand trowel;
- Hand-held impact sampler;
- Hand-held EnCore t-bar sampling tool, if needed;
- Tape line (in feet and inches);
- 5-gram disposable EnCore sample containers, if needed;
- 8-ounce precleaned, lab-supplied, glass sample jars, if needed;
- Precleaned stainless-steel soil sample sleeve;
- Re-sealable plastic bags;
- Personal protective equipment;
- Ice, insulated cooler and appropriate packing supplies;
- Buckets, brushes and detergents for equipment decontamination;
- Sample labels;
- Chain-of-custody forms; and

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• Sample collection log, sub-area field map, water-resistant ink pen, and daily field report forms.

Sampling will be conducted according to the procedures described below.

Soil samples submitted for laboratory chemical analysis will be collected in accordance with U.S. Environmental Protection Agency (EPA) Method 5035. Samples will be collected directly from the bottom and sidewalls of the excavation. For each sampling point, a precleaned hand trowel will be used to clear a freshly exposed surface area within the cell from which the sample will be collected. Three 5-gram individual EnCore[®] samplers will be filled at each sample location by pushing the samplers into the freshly exposed area of soil. Each EnCore[®] sampler will be prepared for delivery to the analytical laboratory by cleaning dirt from the exterior of the sampler and securing the sampler cap. Each sampler will be labeled with a sample identification number, placed in a resealable plastic bag and immediately placed in a chilled, thermally insulated cooler (containing bagged ice).

Samples will be delivered, under chain-of-custody protocol, to a state-certified laboratory. The soil samples will be either processed and preserved by the analytical laboratory in accordance with U.S. EPA Method 5035 for subsequent analysis or analyzed by the analytical laboratory within 48 hours of sample collection. The samples will be analyzed for VOCs using U.S. EPA Method 8260B.

Remediation Derived Waste Characterization Sampling

Concrete generated during remediation activities will be temporarily stored on site pending characterization for offsite disposal and/or recycling. Soil generated during remediation will be temporarily stored in lined, locking, roll-off bins pending characterization for offsite disposal and/or recycling. Decontaminate rinsate generated during remediation activities will be stored in a polyethylene (poly) tank or Department of Transportation (DOT)-approved poly drums pending characterization for offsite disposal and/or recycling.

Upon completion of remediation activities, at least one, four-point, field composited sample will be collected from each bin containing soil. The four-part composite soil sample will be used to collect representative sub-samples in accordance with U.S. EPA Method 5035. The sub-samples will be collected in EnCore[®] samplers. A minimum of one composite soil sample will be collected for each 20 CY of excavated soil. Representative concrete samples will be collected and composited for characterization purposes in pre-cleaned, laboratory supplied glass jars sealed with Teflon lined lids.

Decontamination water will be characterized by lowering a new disposable plastic bailer into the tank or drums to collect a representative rinsate sample. The rinsate sample will be transferred directly from the bailer into the appropriate laboratory supplied sample bottles. The sample bottles will be filled slowly to minimize sample volatilization and to ensure that the sample is free of trapped air. Each sample container will be labeled for identification and placed in a re-sealable plastic bag and immediately placed in a chilled, thermally insulated cooler (containing bagged or Blue ice) for delivery, under chain-of-custody protocol, to a state-certified laboratory. The soil characterization samples will be processed and preserved using U.S. EPA Method 5035 and then analyzed for VOCs by U.S. EPA Method 8260B.

DECONTAMINATION AND SAMPLE HANDLING PROCEDURES

The sample collection equipment will be cleaned with a mild phosphate-free detergent solution and double rinsed with deionized water between sample locations. Decontamination fluids will be stored in a poly tank or DOT-approved poly drums pending characterization and disposal. Solid waste materials (i.e., gloves, paper towels, etc.) will be stored in drums or bins pending disposal.

Sample containers will be labeled and placed in a thermally-insulated cooler that is chilled to a temperature of approximately four degrees Centigrade for transport to the project analytical laboratory under chain-of-custody protocol.

The verification samples will be identified using an identification system which will consist of: (1) the cell identification; (2) the letters "B" or "S" to indicate excavation bottom or sidewall sample; and (3) the date the sample was collected. Solid waste characterization samples will be identified using an identification system that will consist of: (1) the bin identification number from which the samples were collected; and (2) the letters "RDWS" or "RDWC" to indicate remediation derived waste soil or concrete. Decontamination rinsate characterization samples will be identified using an identification system that will consist of: (1) the letters "RDWW" to indicate remediation derived wastewater; and (2) the date the sample was collected. Samples will be identified with a label affixed to the sample container. The following information will be specified on each label:

- Project name;
- Project number;
- Date and time of sample collection; and
- Sample identification number;

Individual sample containers will be placed in sealed plastic bags to prevent intrusion of moisture into sample containers and damage to sample labels. The coolers will be chilled using ice packaged in doubled plastic bags or "blue-ice" packs. Coolers will be transported to the laboratory either by laboratory couriers or field sampling personnel.

Samples will be accompanied by 3-copy, pressure sensitive chain-of-custody documents. The form will accompany every sample shipment to the analytical laboratory to document sample possession from the time of collection. The form will contain the following information:

- Sample identification number;
- Signature of collector;
- Date and time of collection;
- Site name and project number;
- Sample matrix;
- Sample container description;
- Analyses requested;
- Special analytical procedures requested;
- Remarks (expected interferences, hazards, unusual events at the time of sampling, if applicable);
- Preservatives added (if any);
- Any special sample preparation (if applicable);
- Destination of samples (laboratory name);
- Signature of persons involved in chain of possession (relinquished by and received by); and
- Date and time of sample receipt at laboratory.

The two top sheets of the chain-of-custody form will be placed in a watertight plastic bag that will be placed in the cooler for transport.

When transferring samples, the individuals relinquishing and receiving the samples will sign, date, and record the time on the chain-of-custody form. A separate chain-of-custody form will accompany each sample shipment. The method of shipment and courier name(s) will be entered on the chain-of-custody form.

Daily field activities will be recorded on daily field report forms which indicate the date and time of field observations made by field personnel. Field forms will be signed by field personnel.

Original data recorded in field logs, chain-of-custody forms, and on other forms will be written in water-resistant ink. None of these documents will be destroyed or discarded, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document assigned to one individual, that individual will make corrections by drawing a line through the error, entering the correct information, and initialing and dating the change. The erroneous information should not be obliterated. If possible, any subsequent error(s) discovered on a document will be corrected by the person who made the entry.

LABORATORY PROCEDURES

Samples will be analyzed by a laboratory that is certified by the California Department of Health Services for performing the analyses specified in the RAW. Sample handling procedures used by the laboratory may vary from the procedures specified herein as long as they fulfill the objective of maintaining sample integrity and traceability.

Chain-of-Custody Procedures

The sample custodian at the laboratory accepts custody of delivered samples and verifies the following information:

- 1. All samples are present;
- 2. All samples are in good condition;
- 3. All samples are accompanied by a properly completed chain-of-custody form;
- 4. The sample identification is complete and corresponds to the chain-of-custody form; and
- 5. The condition of custody seals, if used, and temperature of the chest interior.

If sample integrity is questionable, the sample custodian will immediately notify the laboratory's project administrator, who in turn will notify the PES project manager. The sample custodian will document the sample condition on the sample custody log and sign the chain-of-custody form.

Logging of Laboratory Samples

After chain-of-custody procedures are complete and acceptable, the sample custodian will assign laboratory identification numbers to the samples. Laboratory sample identification numbers may be written on the chain-of-custody form for tracing purposes. The custodian will transfer the samples to the proper analyst(s) or store the samples in an appropriate secure area.

Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Data sheets and laboratory records are retained by the laboratory as part of the permanent documentation for at least three years.

Sample Preparation and Analysis

Samples collected for verification and characterization will be prepared for analysis by the laboratory in accordance with U.S. EPA-approved methods. The program for the analysis of soil, concrete, and water for VOCs by U.S. EPA Method 8260B will be conducted following the procedures outlined in U.S. EPA's Methods for Evaluating Solid Waste (SW-846) (U.S. EPA, 1986).

Sample Storage

Samples and extracts are retained by the analytical laboratory for up to 30 days after the data are reported by the laboratory. Unless notified by the program managers, excess or unused samples will be disposed by the laboratory in a manner consistent with appropriate government regulations.

Corrective Measures Criteria

The site-specific target cleanup goal for Sparkle Cleaners has been proposed as 240 μ g/kg PCE in soil.

PES Environmental, Inc.

APPENDIX D

CONCRETE FLOOR SLAB INSTALLATION SPECIFICATIONS

APPENDIX D

Concrete Floor Slab Installation Specifications Voluntary Soil Remediation Sparkle Cleaners, Eastmont Town Center 7000 Bancroft Avenue Oakland, California

Concrete shall be 5-sack mix with a 28-day strength of 3,500 pounds per square inch that complies with ASTM C94.

The maximum aggregate size shall be 1/3 of the slab depth, or 4 of the clear spacing between bars, whichever is greatest.

Contractor shall examine subgrades and installation conditions prior to starting the work.

Contractor shall replace granular base material, if present, at same thickness as material removed. Granular base material shall be compacted to a minimum of 95 percent relative dry density.

Contractor shall verify that lines, levels, and locations of formed concrete work comply with as-built construction drawings, if available, prior to pouring the concrete.

After cutting the floor slab, drill into the existing concrete and place No. 4 or 5 dowels at a spacing that matches existing spacing or 12 inches center to center if no rebar is present in the existing concrete slab. Tie in dowels with reinforcing steel per ASTM A615, Grade 60 and then pour slab.

During concrete placement, contractor shall comply with American Concrete Institute guidelines for measuring, mixing, transporting, and placing concrete.

Contractor shall place concrete continuously between construction joints and consolidate layers while still plastic to prevent cold joints.

Contractor shall consolidate the wet concrete using mechanical vibrating equipment or with hand rodding and tamping.

PES Environmental, Inc.

APPENDIX E

QUARTERLY GROUNDWATER MONITORING PROCEDURES AND METHODOLOGIES

APPENDIX E

Quarterly Groundwater Monitoring Procedures and Methodologies Voluntary Soil Remediation Sparkle Cleaners, Eastmont Town Center 7000 Bancroft Avenue Oakland, California

INTRODUCTION

The proposed quarterly groundwater program is an element of the Remedial Action Workplan (RAW) for voluntary soil remediation at Sparkle Cleaners, located at Eastmont Town Center, 7000 Bancroft Avenue, Suite 11, Oakland, California. The RAW describes procedures for removal and disposal of floor slab concrete and underlying soil that contains PCE. Groundwater monitoring well installation and quarterly sampling for one year is proposed for the subject property following the completion of the soil remediation activities. As described in the RAW, the purpose of the groundwater monitoring will be to document the initial concentrations of VOCs in groundwater at the Site, monitor groundwater flow direction(s), gradient, and seasonal fluctuations, and, monitor the groundwater chemical response to the removal of the source of Site contamination. The following sections describe the procedures and methodologies to be utilized during groundwater monitoring events.

GROUNDWATER SAMPLING PROCEDURES AND METHODOLOGIES

Depth to Groundwater Measurements

Depth-to-groundwater measurements will be obtained at monitoring wells MW-1 through MW-4 using an electronic water-level indicator and recorded to the nearest 0.01-foot. The portion of the water-level indicator that is submerged in the wells will be cleaned with a solution of Liqui-nox and deionized water and then double rinsed with deionized water between well measurements. Decontamination fluids will be placed in 55-gallon Department of Transportation (DOT)-approved polyethylene (poly) drums and will be temporarily stored onsite pending offsite disposal and/or recycling. Depth-to-groundwater data will be converted to groundwater elevations referenced to mean sea level using National Geodetic Vertical Datum 29 (NGVD).

Groundwater Sampling

After water-level measurements are completed, the wells will be purged by pumping and/or bailing by hand. The wells will be purged until a minimum of three well volumes of water have been removed and water chemistry parameters (pH, temperature, conductivity and turbidity) stabilize, or until the wells are dewatered. During purging the wells will be

monitored for pH, temperature, and conductivity using a water quality parameter meter. Purge water will be placed in DOT-approved poly drums and temporarily stored onsite pending offsite disposal and/or recycling. Groundwater sampling forms will be prepared by field personnel conducting sampling activities and included in the monitoring reports.

Following purging and subsequent recharging of the wells to at least 80 percent of their prepurge volumes, groundwater samples will be collected from each well using a new disposable plastic bailer. The samples will be transferred to the appropriate laboratory sample containers using a bottom draining bailer stopcock. The sample containers will be filled slowly to reduce the potential for sample volatilization. The sample containers will then be labeled with project site information, sample number, sampling date and time, and placed in a thermally-insulated container with ice for transport to the project laboratory.

Groundwater samples will be transported under chain-of-custody protocol to a California-state certified analytical laboratory. The groundwater samples will be analyzed for VOCs by U.S. EPA Method 8260B. Copies of the laboratory report and chain-of-custody documentation will be provided in the quarterly monitoring reports.