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**SOIL VAPOR
AND SOIL SAMPLING REPORT**

Crow Canyon Dry Cleaners
7272 San Ramon Road
Dublin, California

Date:

June 10, 2008

Prepared for:

Roessler Investment Group

Prepared by:

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JUN 27 2008

ENVIRONMENTAL HEALTH SERVICES

Prepared for:


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SOIL VAPOR SAMPLING REPORT

Dry Cleaner
7272 San Ramon Road
Dublin, California

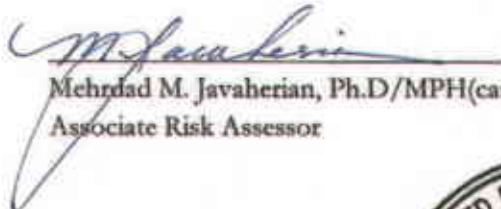
Project: CA1889-1
Date: June 10, 2008

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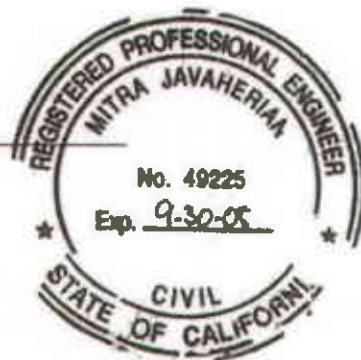


Table of Contents

1.0	INTRODUCTION	2
1.1	Background	2
1.2	Previous Investigations.....	2
2.0	VAPOR INTRUSION INVESTIGATION.....	5
2.1	Pre-Field Work	5
2.2	Soil and Soil Vapor Sampling.....	5
2.2.1	Purpose.....	5
2.2.2	Extent of Soil Vapor and Soil Sampling.....	6
2.2.3	Soil Vapor & Soil Sampling Methodology.....	7
3.0	RESULTS.....	8
3.1	Soil Vapor and Soil Sampling.....	8
3.2	Relationship to Environmental Screening Limits	10
3.2.1	Soil Vapor Samples.....	10
3.2.2	Soil Samples	10
4.0	CONCLUSIONS AND RECOMMENDATIONS.....	11
5.0	LIMITATIONS.....	12

Appendices

Figures:

- Figure 1 – Property Location Map
- Figure 2 – PCE Concentrations in Soil Vapor

Tables:

- Table 1 – Soil Vapor Sample Results
- Table 2 – Soil Sample Results

Laboratory Data Reports

1.0 INTRODUCTION

This report summarizes a soil vapor intrusion investigation focused on collection and analysis of soil and soil vapor samples collected at and in the immediate vicinity of the Crow Canyon Dry Cleaners ("Property") located at 7272 San Ramon Road, Dublin, California (*refer to Figure 1 – Topographic Map*). This investigation was performed in accordance with the Vapor Intrusion Investigation Workplan prepared by AEI Consultants on June 15, 2007, which was subsequently amended by comments and approved via a July 25, 2007 letter from the Alameda County Health Care Services Agency (ACHCSA).

This investigation was required due to an historical release of tetrachloroethylene (PCE) in soil vapor, soil, groundwater and indoor air at and/or in the immediate vicinity of the Property. Particular concern has been raised by the ACHCSA regarding the potential for vapor intrusion to indoor air at the Montessori preschool located immediately adjacent to the Property.

1.1 Background

The following background information has been obtained from the Vapor Intrusion Investigation Work Plan prepared by AEI Consultants, dated June 15, 2007.

The Property is located on the west side of San Ramon Road in a retail strip center. Located within a mixed residential/commercial area, it has been in use as a dry-cleaning facility since 1985. The operations used PCE as a cleaning solvent since initiation of dry-cleaning activities, but have reportedly since been transitioned to use of a non-solvent based reagent; the date of this transition is reportedly March 2000.

The dry-cleaning machine is located in the back of the building (*see figure 2*), but the historical location of the machine and storage areas are unknown. Based on the duration of dry-cleaning operations on the Property, AEI performed a series of subsurface investigations from 2005 through 2007, targeting the potential release of hazardous materials, including PCE, associated with historical site operations. The results of historical investigations at the Property are summarized below.

1.2 Previous Investigations

Following the results of a Phase I Environmental Site Assessment (ESA) in December 2004, AEI performed a preliminary subsurface investigation at the Property in January 2005. A total of three soil borings (SB-1 to SB-3) were advanced to a depth of 12 feet below ground surface (bgs). Three shallow soil samples and three groundwater samples were analyzed for halogenated volatile organic compounds (HVOCs). PCE was detected in all of the soil and groundwater samples, at up to 0.071 milligrams per kilogram (mg/kg) in soil and 22 micrograms per liter ($\mu\text{g}/\text{L}$) in groundwater. In addition, trichloroethylene (TCE) was detected in the groundwater at up to 3.0 $\mu\text{g}/\text{L}$. Based on the results of the sampling, the ACHCSA requested that the release of HVOCs be investigated further.

In February 2006, AEI performed a second site investigation consisting of soil, groundwater, and soil vapor sampling at the Property. A total of seven soil borings (SB-4 to SB-10) were advanced throughout the Property. Soil, groundwater, and soil vapor samples were collected and analyzed for HVOCs. Groundwater samples were collected from two aquifers: the uppermost A-Zone and the deeper aquifer (B-Zone). PCE was detected in one soil sample at a concentration of 0.013 mg/kg. PCE was detected in groundwater samples collected from the A- and B-Zones, up to concentrations of 23 µg/L and 4.9 µg/L, respectively. PCE was detected in all three soil vapor samples at concentrations as high as 16,000 µg/m³. Based on the results of this investigation, the ACHCSA requested additional investigation of the HVOC release and to evaluate the potential for vapor intrusion at the adjacent Montessorri preschool.

AEI performed additional site investigations on December 27, 2006 and January 15, 2007. Five soil borings were advanced throughout the Property. Two borings (SB-14 and SB-15) were advanced near the front of the property, downgradient from the dry-cleaning facility. Two borings (SB-11 and SB-12) were advanced at the rear of the dry-cleaning facility. One boring (SB-13) was advanced adjacent to the sewer line trace inside the Montessorri preschool. The soil borings were advanced to depths ranging from approximately 5 to 30 feet bgs. HVOCs were not detected in the soil samples; however, PCE and trichloroethylene (TCE) were detected in groundwater at relatively low concentrations. In addition, PCE was detected in all four of the soil vapor samples analyzed, at concentrations ranging from 270 µg/m³ to 380,000 µg/m³ (SB-11-V-D). TCE, a potential degradation breakdown product of PCE, was detected in three of the soil vapor samples at concentrations ranging from 4.4 µg/m³ to 3,200 µg/m³ (SB-11-V-D). The boring (SB-13-V-D) located along the sewer line trace within the footprint of the Montessorri preschool contained PCE at a concentration of 6,800 µg/m³. Based on the results of this investigation, the ACHCSA requested additional soil vapor investigation and indoor air sampling to evaluate potential risk to buildings occupants resulting from vapor intrusion. They further requested a complete investigation of the utility lines and their potential to act as preferential pathways for vapor migration, and an evaluation of the feasibility of potential remedial alternatives for the removal of PCE contamination.

In response to ACHCSA's request, AEI prepared a vapor intrusion investigation workplan in June 2007. The workplan was approved by the ACHCSA with limited amendments to the scope, which included extensive soil vapor and limited soil sampling at and in the immediate vicinity of the Property; this portion of the scope of work was eventually carried out by Ceres Associates in April 2008 and is the subject to this report.

In October 2007, AEI collected two indoor air and one outdoor air samples at the Montessorri preschool as part of the scope of work outlined in the above-referenced workplan. The indoor air sampling results indicated the presence of PCE at concentrations of 1.1 and 1.3 µg/m³, both exceeding the indoor air residential screening level of 0.41 µg/m³ adopted by the Regional Water Quality Control Board (RWQCB) and the Department of Toxic Substances Control (DTSC). The outdoor air sample contained PCE at 0.34 µg/m³.

In response to ACHCSA's concerns over laboratory analytical methods used in the previous indoor air sampling, on December 13, 2007, ERM reinvestigated indoor air and outdoor air quality at the Montessori preschool. All three indoor air samples contained PCE ranging from 1.2 to 1.3 $\mu\text{g}/\text{m}^3$, while the outdoor air sample contained PCE at 0.70 $\mu\text{g}/\text{m}^3$. No other VOCs were detected in the indoor or outdoor air samples, confirming the results of the previous indoor/outdoor air sampling.

On January 18, 2008, ERM prepared a workplan for interim soil vapor remediation and a proposed implementation schedule in response to ACHCSA's previous request. The workplan outlined a conceptual approach to implementation of an active sub-slab depressurization (SSD) system to extract vapors from within utility line backfill materials running across the Montessori preschool property.

As previously indicated, this report documents completion by Ceres Associates of the remaining scope of work outlined by AEI in their approved workplan of June 15, 2007. Concurrently, Ceres Associates is preparing and submitting under separate cover a revised vapor remediation workplan to address the referenced PCE contamination and protect indoor air quality.

2.0 VAPOR INTRUSION INVESTIGATION

In accordance with the approved workplan and related comments, Ceres Associates performed a soil vapor investigation and related sampling on April 7th and 8th, 2008. Specifically, a total of 20 soil borings (SB-16 through SB-37; not including SB26 and SB35 as explained below) were advanced on the Property using a gasoline-powered rotary hammer (*refer to Figure 2 – PCE Concentrations in Soil Vapor*). Soil vapor samples were collected from all 20 locations and soil samples were collected from two locations (SB-19 and SB-23); per the workplan, the targeted depth of sampling for both media was 5 feet bgs. The purpose of the sampling was to attempt to further assess the limits of VOC vapors in soil pore space caused by the use of PCE at the dry cleaners on the Property.

2.1 Pre-Field Work

Prior to drilling, individual sampling locations on the Property were cleared using USA notification processes as well as a private utility locating service, and onsite assistance from the Property owner. Underground pipelines and conduits, which were identified within the boring area were marked on the surface.

A Health and Safety Plan, prepared by Ceres Associates, was used to facilitate a pre-drilling safety meeting prior to conducting work. Signatures of attendees were collected at the meeting indicating our understanding of the risks and hazards involved in the assessment. A copy of this document was kept on site during the drilling process.

2.2 Soil and Soil Vapor Sampling

2.2.1 Purpose

As outlined in the approved workplan, PCE has been discovered in subsurface soil pore space in various locations at the Property PCE has historically been used in the dry cleaning process. The highest concentrations of PCE in soil vapor that have been reported at the Property have been found near the back door of the onsite dry cleaners. The extent of the release of PCE in the vapor phase was not fully defined during the previous assessments. Regulatory concerns remained that vapor could travel along the sanitary sewer line and other utility line corridors. A sanitary sewer line trends beneath the adjacent preschool. The goal of the additional sampling was to find if significant concentrations of PCE vapor exist beneath the Montessori Preschool, and to define the extent of vapor phase contaminants.

Additionally, soil samples were collected from SB-19 and SB-23 to assess potential soil contamination inside and adjacent to the Montessori preschool (*see Figure 2*).

2.2.2 Extent of Soil Vapor and Soil Sampling

Ceres Associates observed the collection of soil vapor samples from between three and five feet bgs from each sampling location. The target depth was five feet, however at some locations soil conditions would not permit sampling from that depth, and a shallower depth was chosen. Additionally, a sub-slab sample was collected at approximately 0.5 feet beneath the surface and immediately beneath the concrete slab from the three sampling locations located inside the Montessori Preschool (SB-16, SB-17, and SB-19); the sub-slab samples corresponded to a specific request by the ACHCSA in response to AEI's workplan. If a soil vapor sample could not be obtained at five feet bgs, then the vapor probe was pulled up (no shallower than three feet) until a sample could be obtained. Borings were advanced to the following depths and samples were collected at the following depths:

Boring	Total Depth (feet)	Soil Vapor Sample Depth (feet)	Soil Sample Depth (feet)
SB-16	5	0.5 & 5	--
SB-17	5	0.5 & 5	--
SB-18	5	5	--
SB-19	5	0.5 & 5	5
SB-20	5	4	--
SB-21	5	5	--
SB-22	5	3	--
SB-23	5	5	5
SB-24	5	3.5	--
SB-25	5	5	--
SB-27	5	4	--
SB-28	5	3	--
SB-29	5	5	--
SB-30	5	3	--
SB-31	5	4	--
SB-32	5	3	--
SB-33	5	3	--
SB-34	5	4	--
SB-36	5	5	--
SB-37	5	4	--

The soil vapor samples were analyzed for VOCs using US EPA Method 8260b by TEG in a State-certified onsite mobile laboratory.

2.2.3 Soil Vapor & Soil Sampling Methodology

Soil Vapor Sampling

Soil vapor samples were collected by TEG personnel under the observation of Ceres Associates. Twenty-two sampling locations were chosen. At each sampling location a vapor probe was advanced to approximately five feet below ground surface using a gasoline-powered rotary hammer with drill bit.

To obtain the samples temporary soil vapor sampling probes were installed in each sampling location. The vapor probe consists of hollow 3/4-inch stainless steel rods with an internally threaded bottom sub and sacrificial tip. At the desired depth, the rods were pulled back, dropping the sacrificial tip. The top of the borehole was sealed with a temporary seal of hydrated bentonite and an appropriate leak detection compound was utilized. A 1/4-inch disposable poly sampling line was then inserted inside the rods and screwed into the end sub. Air was then flushed from the rods prior to sample collection. Samples were collected into new disposable sampling syringes. Immediately upon collection, the samples were analyzed by TEG in an onsite mobile laboratory using EPA Method 8260.

If no flow conditions were encountered during vapor sampling or if the vacuum necessary to induce flow was too high, that sampling depth was abandoned and a vapor sample was attempted at a shallower depth (no shallower than 3 feet bgs).

Upon completion of sampling activities, the probes and sampling materials were removed from the boreholes, each borehole was grouted from the terminus to ground surface, and the surface was then patched.

Soil Sampling

Soil samples were collected from borings SB-19 and SB-23. After the soil vapor sampling probes were removed from the boreholes, a five-foot long stainless steel sample sleeve (with acetate sample tube) was driven into the borehole and a soil sample was collected at a depth of five feet. The soil samples were placed in glass containers, labeled, placed in a Ziplock® bag, and stored in a chest cooled with crushed ice. The samples were delivered to a State-certified laboratory using chain-of-custody protocol. The soil samples were analyzed using EPA Method 8260.

Deviations from Workplan

A few obstacles were encountered during the soil vapor and soil sampling field activities, so minor modifications to the AEI workplan were made. Specifically, TEG's drilling equipment had certain limitations that would not allow drilling in the precise locations outlined in the work plan, so three

of the borings (SB-34, SB-20, and SB-21) had to be moved a few feet to the east into the nearby landscaped area.

In addition, it was originally planned that five soil borings would be advanced inside the Montessori Preschool. However, due to the time and care required to conduct sampling inside, only three borings were advanced inside (SB-16, SB-17, and SB-19) in order to keep the project on schedule and within budget. These three borings were chosen because they run along the sewer line that trends diagonally beneath the Montessori preschool, and it was predicted in the text of the work plan that contamination may be travelling along the sewer line. Borings SB-26 and SB-35 were not advanced as initially intended. Hence, a total of 20 borings were advanced and sampled for soil vapor.

The work plan indicated that soil samples should be collected from SB-19 and SB-23 at five feet bgs and at the capillary fringe. However, due to limitations of the soil sampling equipment soil samples could not be collected any deeper than five feet. Therefore, soil samples were only collected at five feet bgs at these two locations.

3.0 RESULTS

3.1 Soil Vapor and Soil Sampling Results

Concentrations of VOCs in soil and soil vapor samples are presented on Tables 1 - 2 (*see below: Table 1: Soil Vapor Sampling Results & Table 2: Soil Sampling Results*). The distribution of current and past detections of PCE in soil vapor at and in the vicinity of the Property is further depicted on *Figure 2*.

According to results of analyses by the analytical laboratory, concentrations of PCE ranged from below detection limits in several vapor samples to 17,000 $\mu\text{g}/\text{m}^3$ in the soil vapor sample collected from SB-23-05. The sub-slab samples taken from the borings inside the Montessori Preschool were found to have concentrations of PCE in soil vapor ranging from below the method detection limits in SB-17-0.5 to 560 $\mu\text{g}/\text{m}^3$ in SB-16-0.5 and 2,300 $\mu\text{g}/\text{m}^3$ in SB-19-0.5.

Also worth noting benzene was reported in two of the samples collected from SB-18-05 at concentrations of 230 and 160 $\mu\text{g}/\text{m}^3$. Toluene was reported in two of the samples collected from SB-18-05 at concentrations of 420 and 310 $\mu\text{g}/\text{m}^3$. Ethylbenzene was found at 180 $\mu\text{g}/\text{m}^3$ in SB-29-05; m, p-xylene at 300 $\mu\text{g}/\text{m}^3$ in SB-25-05 and at 680 $\mu\text{g}/\text{m}^3$ in SB-29-05; and o-xylene at 130 $\mu\text{g}/\text{m}^3$ in SB-25-05 and at 360 $\mu\text{g}/\text{m}^3$ in SB-29-05. No other VOCs were detected at above laboratory detection limits in the soil vapor samples.

The laboratory reported that VOCs were not detected above the method reporting limits in the two soil samples (SB-19-05 and SB-23-05) collected and analyzed during this assessment.

Table 1
Results of Soil Vapor Sampling
 Micrograms per cubic meters ($\mu\text{g}/\text{m}^3$)

Soil Vapor Sample	Tetrachloroethylene (PCE)	Benzene	Toluene	Ethylbenzene	m, p-Xylenes	o-Xylenes
SB-16-0.5 (sub-slab)	570	<100	<200	<100	<200	<100
SB-16-05	610	<100	<200	<100	<200	<100
SB-17-0.5 (sub-slab)	<100	<100	<200	<100	<200	<100
SB-17-05	190	<100	<200	<100	<200	<100
SB-18-05, purge volume 1	120	230	420	<100	<200	<100
SB-18-05, purge volume 3	140	160	310	<100	<200	<100
SB-18-05, purge volume 7	150	<100	<200	<100	<200	<100
SB-19-0.5 (sub-slab)	2,300	<100	<200	<100	<200	<100
SB-19-05	1,600	<100	<200	<100	<200	<100
SB-20-04	<100	<100	<200	<100	<200	<100
SB-21-05	7,500	<100	<200	<100	<200	<100
SB-22-03	1,100	<100	<200	<100	<200	<100
SB-23-05	17000	<100	<200	<100	<200	<100
SB-24-3.5	110	<100	<200	<100	<200	<100
SB-25-05	250	<100	<200	<100	300	130
SB-27-04	120	<100	<200	<100	<200	<100
SB-28-03	<100	<100	<200	<100	<200	<100
SB-29-05	470	<100	<200	180	680	360
SB-30-03	<100	<100	<200	<100	<200	<100
SB-31-04	<100	<100	<200	<100	<200	<100
SB-32-03	200	<100	<200	<100	<200	<100
SB-33-03	<100	<100	<200	<100	<200	<100
SB-34-04	<100	<100	<200	<100	<200	<100
SB-36-05	<100	<100	<200	<100	<200	<100
SB-37-04	1,900	<100	<200	<100	<200	<100
Residential ESLs	410	84	210,000	63,000	21,000*	21,000*

ESLs = Soil vapor environmental screening levels for protection of indoor air quality adopted by the Regional Water Quality Control Board, San Francisco Bay Region

Other compounds were not detected above the method detection limits

Bolded values reflect detections above laboratory detection limits

Boxed values are in excess of residential ESLs

* denotes residential ESL for total xylenes

Table 2
Results of Soil Sampling
 Milligrams per kilogram (mg/kg)

Soil Sample	Tetrachloroethylene (PCE)	Ethylbenzene	m, p-Xylene	o-Xylene
SB-19-5	<0.005	<0.005	<0.005	<0.005
SB-23-5	<0.005	<0.005	<0.005	<0.005

3.2 Relationship to Environmental Screening Limits

Consistent with previous screening evaluations performed at the Property, chemical concentrations encountered in soil and soil vapor samples during this investigation were compared to residential environmental screening levels (ESLs) adopted by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for protection of indoor air quality. This screening evaluation is summarized below and outlined in *Tables 1 and 2 and on Figure 2*.

3.2.1 Soil Vapor Samples

PCE was found in 13 of the 20 soil boring locations (*see Figure 2 and Table 1*). Further, the reported concentrations of PCE exceeded the residential ESL of $410 \mu\text{g}/\text{m}^3$ in nine of the 27 samples that were analyzed during this investigation.

Two soil vapor samples were reported with concentrations of benzene, ranging from 160 to $230 \mu\text{g}/\text{m}^3$ and exceeding the residential ESL of $84 \mu\text{g}/\text{m}^3$; both samples were collected from SB-18 at different purge volumes. It should be noted that a third vapor sample was collected with a higher purge volume and benzene was reported as not detected above the laboratory reporting limit.

The concentrations of ethylbenzene, m, p-xylene, and o-xylene found in SB-25-05 and SB-29-05 did not exceed their respective residential ESLs.

3.2.2 Soil Samples

Concentrations of VOCs in soil samples were below laboratory detection limits, and therefore, did not exceed their respective residential ESLs for soil (*see Table 2*).

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the available data, the presence of PCE in the subsurface is consistent with the past use of this chemical as a dry-cleaning compound at the Property. The highest PCE concentrations detected at the site correspond to the northwestern corner of the property, where PCE storage and usage occurred historically. Other VOCs typically accompanying PCE impacts have been limited to sporadic detections of TCE, a degradation product of PCE. Limited presence of benzene and petroleum hydrocarbon compounds have also been encountered at the site.

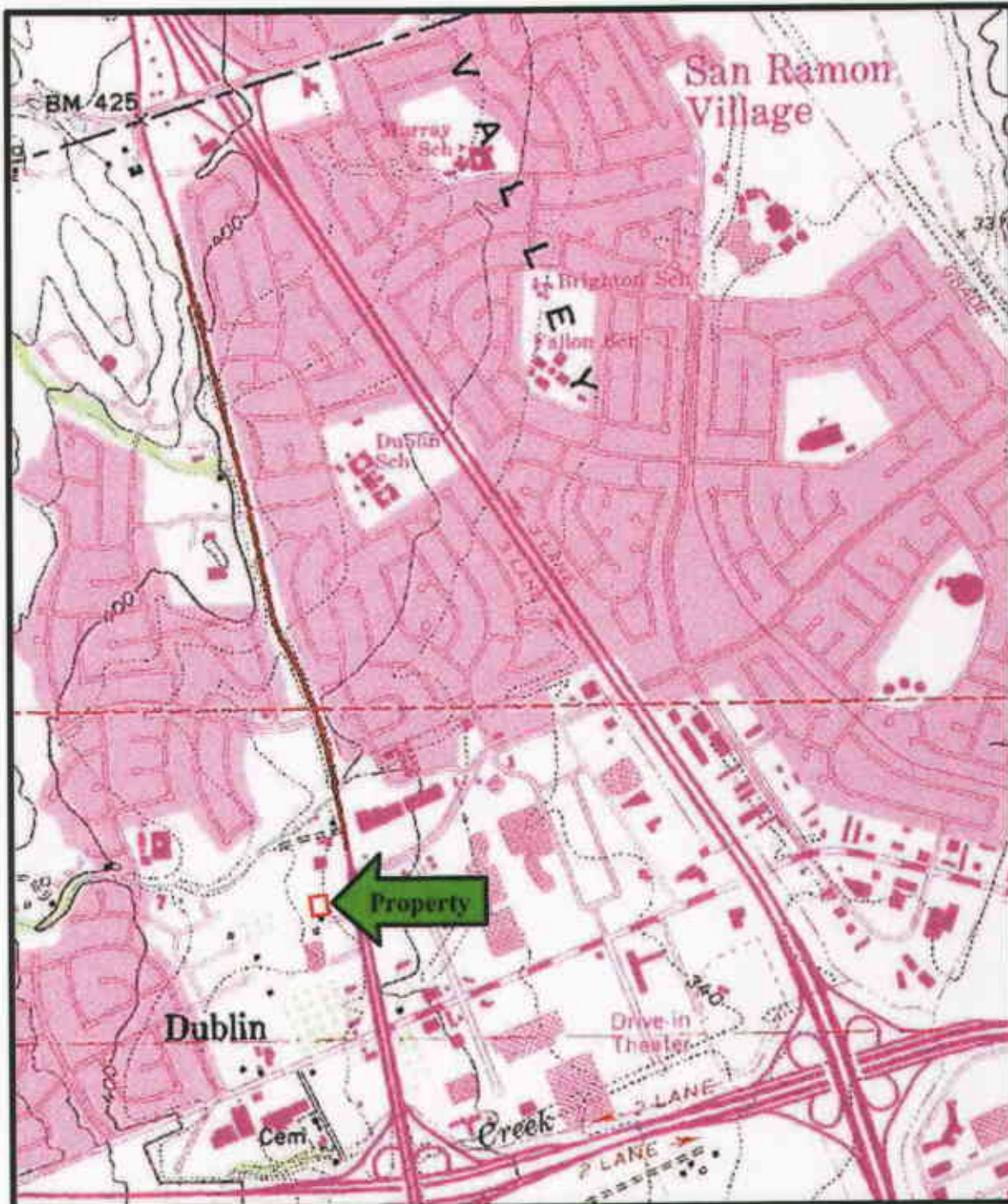
PCE has impacted soil and groundwater, resulting in the presence of VOC vapors in the soil pore space at above residential environmental screening levels for protection of indoor air quality. Due to the proximity of the Property to the adjacent Montessori preschool, PCE-impacted soil vapor appears to have migrated beneath the preschool; this migration may be enhanced through preferential migration along higher-permeability backfill materials associated with utility lines running from the vicinity of the potential release area across the footprint of the Montessori preschool. Lastly, two rounds of indoor air sampling suggests that VOC vapors have migrated into indoor air in the preschool at levels in excess of the residential ESL. Worth noting is that PCE has also been encountered in outdoor ambient air, although at levels less than indoor air, suggesting that subsurface contribution to indoor air may have occurred.

Due to the observed levels of PCE in soil vapor and indoor air and the potential for continued migration of vapors from the Property onto the Montessori preschool and into indoor air, Ceres Associates recommends implementation of corrective action measures in concert with the recommendations of the ACHCSA. Corrective measures include active remediation of soil vapor and initiation of monitoring activities to evaluate the referenced vapor migration and exposure pathways. To this end, preparation of a workplan for to conduct a soil vapor extraction pilot test is currently underway and will be submitted under separate cover.

5.0 LIMITATIONS

This Environmental Site Assessment (ESA) was conducted according to accepted industry standards and guidelines for similar assessments conducted in this geographic region at this time. The purpose of this assessment was to compare laboratory results from collected samples with published regulatory guidelines; these comparisons are what guide the discussion and recommendations. This report is not an assessment of geologic or hydrogeologic conditions at the site and should not be construed as such.

This assessment cannot fully eliminate the possibility of the Property having environmental impairments. In today's technology, no amount of assessment can certify that the Property is completely free of environmental concern. It is possible undocumented or concealed conditions of the Property could exist beyond what was found during this soil and grab groundwater investigation.



MAP TAKEN FROM:
 UNITED STATES GEOLOGICAL SURVEY
 7.5 MINUTE TOPOGRAPHIC SERIES
 DUBLIN, CALIFORNIA QUADRANGLE



0 1/4 mile

ceres
 ASSOCIATES
 Project CA1889-1

Crow Canyon Drycleaners
 7272 San Ramon Road
 Dublin, California

**PROPERTY
 LOCATION MAP**

**FIGURE
 1**

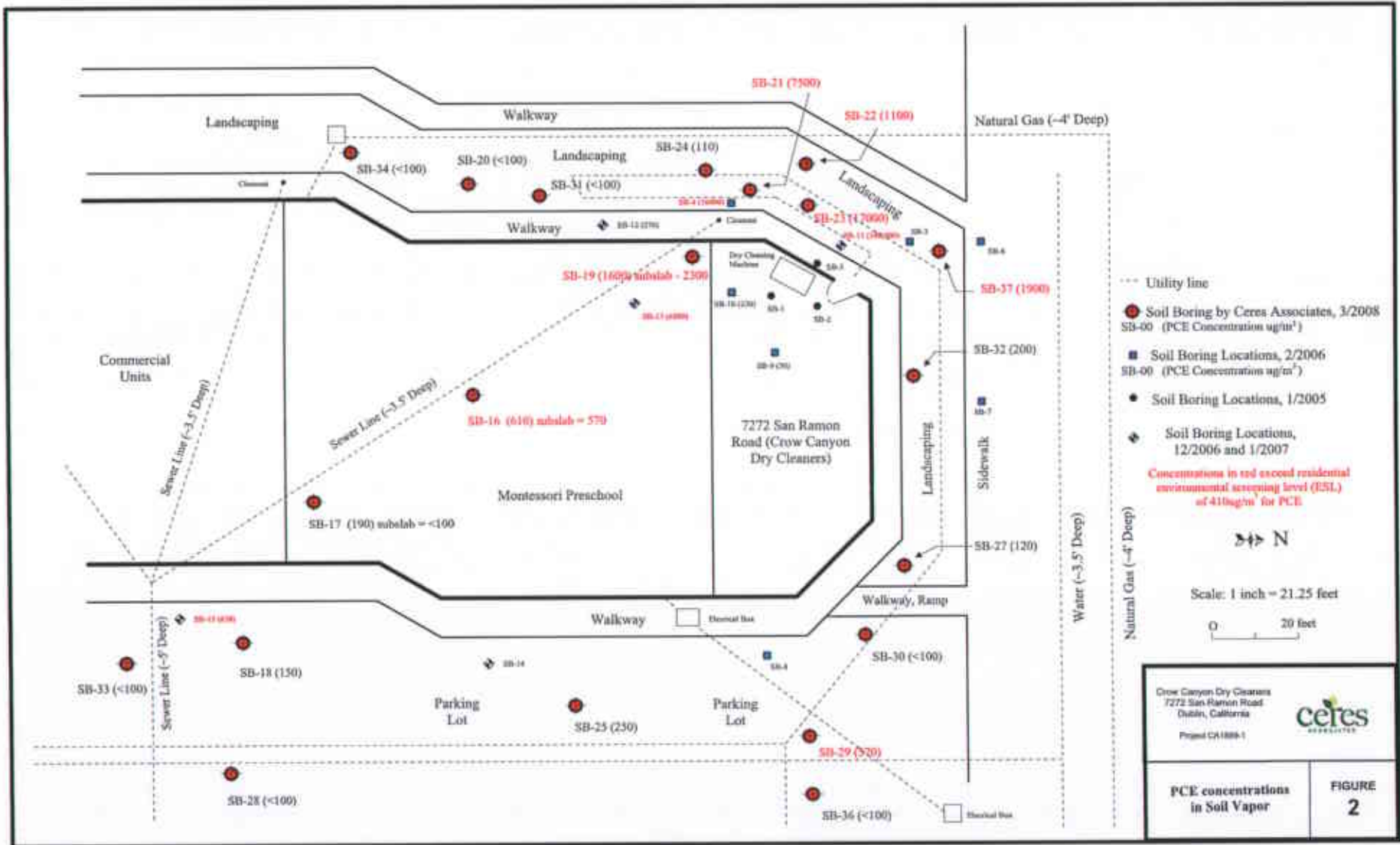


Table 1
Results of Soil Vapor Sampling
 Micrograms per cubic meters ($\mu\text{g}/\text{m}^3$)

Soil Vapor Sample	Tetrachloroethylene (PCE)	Benzene	Toluene	Ethylbenzene	m, p-Xylenes	o-Xylenes
SB-16-0.5 (sub-slab)	570	<100	<200	<100	<200	<100
SB-16-05	610	<100	<200	<100	<200	<100
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SB-17-05	190	<100	<200	<100	<200	<100
SB-18-05, purge volume 1	120	230	420	<100	<200	<100
SB-18-05, purge volume 3	140	160	310	<100	<200	<100
SB-18-05, purge volume 7	150	<100	<200	<100	<200	<100
SB-19-0.5 (sub-slab)	2,300	<100	<200	<100	<200	<100
SB-19-05	1,600	<100	<200	<100	<200	<100
SB-20-04	<100	<100	<200	<100	<200	<100
SB-21-05	7,500	<100	<200	<100	<200	<100
SB-22-03	1,100	<100	<200	<100	<200	<100
SB-23-05	17000	<100	<200	<100	<200	<100
SB-24-3.5	110	<100	<200	<100	<200	<100
SB-25-05	250	<100	<200	<100	300	130
SB-27-04	120	<100	<200	<100	<200	<100
SB-28-03	<100	<100	<200	<100	<200	<100
SB-29-05	470	<100	<200	180	680	360
SB-30-03	<100	<100	<200	<100	<200	<100
SB-31-04	<100	<100	<200	<100	<200	<100
SB-32-03	200	<100	<200	<100	<200	<100
SB-33-03	<100	<100	<200	<100	<200	<100
SB-34-04	<100	<100	<200	<100	<200	<100
SB-36-05	<100	<100	<200	<100	<200	<100
SB-37-04	1,900	<100	<200	<100	<200	<100
Residential ESLs	410	84	210,000	63,000	21,000*	21,000*

ESLs = Soil vapor environmental screening levels for protection of indoor air quality adopted by the Regional Water Quality Control Board, San Francisco Bay Region

Other compounds were not detected above the method detection limits

Bolded values reflect detections above laboratory detection limits

Boxed values reflect exceedance of residential ESLs

* denotes residential ESL for total xylenes

Table 2
Results of Soil Sampling
 Milligrams per kilogram (mg/kg)

Soil Sample	Tetrachloroethylene (PCE)	Ethylbenzene	m, p-Xylene	o-Xylene
SB-19-5	<0.005	<0.005	<0.005	<0.005
SB-23-5	<0.005	<0.005	<0.005	<0.005





Sample Receipt Checklist

Client Name: **Ceres Associates**

Date and Time Received: **4/8/2008 4:36:13 PM**

Project Name: **#CA1889-1, Dublin**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0804188** Matrix Soll

Carrier: Michael Hernandez (MAJ Courier)

Chain of Custody (COC) information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 5.4°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TTLIC Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Client contacted:

Date contacted:

Contacted by:

Comments:



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Ceres Associates

132 E St. Ste 310

Davis, CA 95616

Client Project ID: #CA1889-1, Dublin

Client Contact: Katie Simpson

Client P.O.:

Date Sampled: 04/07/08

Date Received: 04/08/08

Date Extracted: 04/08/08

Date Analyzed: 04/09/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0804188

Lab ID	0804188-001A						
Client ID	SB-19-05						
Matrix	Soil						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Pronenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Butyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.004
1,2-Dibromoethane (EDB)	ND	1.0	0.004	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropane	ND	1.0	0.005	cis-1,3-Dichloropropane	ND	1.0	0.005
trans-1,3-Dichloropropane	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,1,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	100	%SS2:	103
%SS3:	99		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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Ceres Associates

132 E St. Ste 310

Davis, CA 95616

Client Project ID: #CA 1889-1, Dublin

Client Contact: Katie Simpson

Client P.O.:

Date Sampled: 04/08/08

Date Received: 04/08/08

Date Extracted: 04/08/08

Date Analyzed 04/09/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW#260B

Work Order: 0804188

Lab ID		0804188-002A					
Client ID		SB-23-05					
Matrix		Soil					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Pronal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Butyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.004
1,2-Dibromoethane (EDB)	ND	1.0	0.004	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	ND	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	ND	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	99	%SS2:	103
%SS3:	99		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0804188

EPA Method SW8260B	Extraction SW6030B			BatchID: 34884			Spiked Sample ID: 0804187-002A			Acceptance Criteria (%)			
	Analyte	Sample mg/Kg	Spiked mg/Kg	MS % Rec.	MSD % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	100	95.7	4.45	101	98.7	2.17	60 - 130	30	60 - 130	30	
Benzene	ND	0.050	106	104	2.35	106	106	0	60 - 130	30	60 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	109	106	2.80	111	110	1.28	60 - 130	30	60 - 130	30	
Chlorobenzene	ND	0.050	107	105	2.38	106	107	0.635	60 - 130	30	60 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	115	113	1.90	112	115	2.62	60 - 130	30	60 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	128	125	2.15	126	127	0.461	60 - 130	30	60 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	125	123	1.98	123	124	0.633	60 - 130	30	60 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	108	102	5.10	108	106	2.72	60 - 130	30	60 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	101	99.1	2.22	100	104	3.27	60 - 130	30	60 - 130	30	
Toluene	ND	0.050	106	103	2.65	105	104	0.793	60 - 130	30	60 - 130	30	
Trichloroethene	ND	0.050	97.5	97.3	0.172	96.8	98.2	1.49	60 - 130	30	60 - 130	30	
%SS1:	93	0.050	98	98	0	97	96	0.783	70 - 130	30	70 - 130	30	
%SS2:	97	0.050	100	101	0.800	101	100	0.624	70 - 130	30	70 - 130	30	
%SS3:	92	0.050	105	107	1.93	105	105	0	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 34884 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804188-001A	04/07/08	04/08/08	04/09/08 10:28 AM	0804188-002A	04/08/08	04/08/08	04/09/08 11:12 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicates; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**TRANSGLOBAL
ENVIRONMENTAL
GEOCHEMISTRY**

22 April 2008

Ms. Kim Patz
Ceres Associates
132 E Street, Suite 310
Davis, CA 95616

**SUBJECT: DATA REPORT - Ceres Associates Project #CA1889-1
7272 San Ramon Road, Dublin, California**

TEG Project # 80407D

Ms. Patz:

Please find enclosed a data report for the samples analyzed from the above referenced project for Ceres Associates. The samples were analyzed on site in TEG's mobile laboratory. TEG conducted a total of 27 analyses on 27 soil vapor samples.

-- 27 analyses on soil vapors for volatile organic hydrocarbons by EPA method 8260B.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

1,1 difluoroethane was used as a leak check compound around the probe rods during the soil vapor sampling. No 1,1 difluoroethane was detected in any of the vapor samples reported at or above the DTSC recommended leak check compound reporting limit of 10 µg/L of vapor.

TEG appreciates the opportunity to have provided analytical services to Ceres Associates on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California

Mobile and Laboratory Analytical Services Environmental/ Subconsulting Geochemical R&D Soil Vapor Surveys Air Monitoring

11350 Monter Park Place, Rancho Cordova, CA 95742

Phone: (916) 853-8010 Fax: (916) 853-8020



Ceres Associates Project # CA1889-1
7272 San Ramon Road, Dublin, California

From page 3
SB-16-5-1/2
with different dilution

TEG Project #80407D

EPA Method 8260B VOC Analyses of SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:		Probe Blank	Probe Blank	SB-16	SB-16	SB-17	SB-17	SB-18	SB-18
SAMPLE DEPTH (feet):				0.5	5.0	0.5	5.0	5.0	5.0
PURGE VOLUME:				7	7	7	7	1	3
COLLECTION DATE:		4/07/08	4/08/08	4/07/08	4/07/08	4/07/08	4/07/08	4/07/08	4/07/08
COLLECTION TIME:		12:21	07:47	16:58	17:55	18:57	19:32	12:39	13:01
DILUTION FACTOR (VOCs):		1	1	1	1	1	1	1	1
	RL								
Dichlorodifluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Chloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Methylene Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Chloroform	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	0.10	nd	nd	nd	nd	nd	nd	0.23	0.16
Trichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	0.20	nd	nd	nd	nd	nd	nd	0.42	0.31
1,1,2-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.10	nd	nd	0.57	0.61	nd	0.19	0.12	0.14
Ethylbenzene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
m,p-Xylene	0.20	nd	nd	nd	nd	nd	nd	nd	nd
o-Xylene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10	nd	nd	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		105%	101%	104%	105%	103%	103%	103%	104%
Surrogate Recovery (Toluene-d8)		102%	100%	103%	101%	102%	101%	102%	102%
Surrogate Recovery (1,4-BFB)		101%	93%	98%	97%	98%	97%	99%	99%

'RL' Indicates reporting limit at a dilution factor of 1
'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Jon Edmondson

page 1



Ceres Associates Project # CA1889-1
7272 San Ramon Road, Dublin, California

TEG Project #80407D

EPA Method 8260B VOC Analyses of SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:		SB-18	SB-19	SB-19	SB-20	SB-21	SB-21	SB-22	SB-23
							dup		
SAMPLE DEPTH (feet):		5.0	0.5	5.0	4.0	5.0	5.0	3.0	5.0
PURGE VOLUME:		7	7	7	7	7	7	7	7
COLLECTION DATE:		4/07/08	4/07/08	4/07/08	4/08/08	4/08/08	4/08/08	4/08/08	4/08/08
COLLECTION TIME:		13:21	17:24	18:16	08:54	09:34	10:15	10:35	09:55
DILUTION FACTOR (VOCs):		1	1	1	1	1	1	1	1
	RL								
Dichlorodifluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Chloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Methylene Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Chloroform	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Trichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	0.20	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethane	0.10	0.15	2.3	1.6	nd	7.5	7.1	1.1	17
Ethylbenzene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
m,p-Xylene	0.20	nd	nd	nd	nd	nd	nd	nd	nd
o-Xylene	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10	nd	nd	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		103%	105%	103%	102%	105%	106%	102%	102%
Surrogate Recovery (Toluene-d8)		102%	101%	103%	103%	102%	103%	101%	101%
Surrogate Recovery (1,4-BFB)		100%	98%	96%	96%	98%	100%	99%	97%

'RL' Indicates reporting limit at a dilution factor of 1
'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Jon Edmondson

page 2



Ceres Associates Project # CA1889-1
7272 San Ramon Road, Dublin, California

TEG Project #80407D

EPA Method 8260B VOC Analyses of SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	SB-24	SB-25	SB-27	SB-28	SB-29	SB-29 dup	SB-30	SB-31	
SAMPLE DEPTH (feet):	3.5	5.0	4.0	3.0	5.0	5.0	3.0	4.0	
PURGE VOLUME:	7	7	7	7	7	7	7	7	
COLLECTION DATE:	4/08/08	4/07/08	4/08/08	4/07/08	4/07/08	4/07/08	4/07/08	4/08/08	
COLLECTION TIME:	09:14	14:29	11:36	14:09	14:48	15:26	15:07	08:35	
DILUTION FACTOR (VOCs):	1	1	1	1	1	1	1	1	
	RL								
Dichlorodifluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Vinyl Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	
Chloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Trichlorofluoromethane	0.10	nd	nd	nd	nd	nd	nd	nd	
1,1-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	
1,1,2-Trichloro-trifluoroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Methylene Chloride	0.10	nd	nd	nd	nd	nd	nd	nd	
trans-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	
1,1-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
cis-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	
Chloroform	0.10	nd	nd	nd	nd	nd	nd	nd	
1,1,1-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Carbon Tetrachloride	0.10	nd	nd	nd	nd	nd	nd	nd	
1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Benzene	0.10	nd	nd	nd	nd	nd	nd	nd	
Trichloroethene	0.10	nd	nd	nd	nd	nd	nd	nd	
Toluene	0.20	nd	nd	nd	nd	nd	nd	nd	
1,1,2-Trichloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
Tetrachloroethene	0.10	0.11	0.25	0.12	nd	0.47	0.57	nd	
Ethylbenzene	0.10	nd	nd	nd	nd	0.18	0.10	nd	
1,1,1,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
m,p-Xylene	0.20	nd	0.30	nd	nd	0.68	0.43	nd	
o-Xylene	0.10	nd	0.13	nd	nd	0.36	0.24	nd	
1,1,2,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd	nd	nd	
1,1 Difluoroethane (leak check)	10	nd	nd	nd	nd	nd	nd	nd	
Surrogate Recovery (DBFM)		102%	105%	103%	105%	105%	105%	107%	
Surrogate Recovery (Toluene-d8)		101%	104%	101%	105%	105%	103%	102%	
Surrogate Recovery (1,4-BFB)		97%	103%	98%	103%	102%	103%	99%	

'RL' Indicates reporting limit at a dilution factor of 1
'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Jon Edmondson

page 3



Ceres Associates Project # CA1889-1
7272 San Ramon Road, Dublin, California

TEG Project #80407D

EPA Method 8260B VOC Analyses of SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:		SB-32	SB-33	SB-34	SB-36	SB-37
SAMPLE DEPTH (feet):		3.0	3.0	4.0	5.0	4.0
PURGE VOLUME:		7	7	7	7	7
COLLECTION DATE:		4/08/08	4/07/08	4/08/08	4/07/08	4/08/08
COLLECTION TIME:		11:16	13:50	08:14	15:45	10:56
DILUTION FACTOR (VOCs):		1	1	1	1	1
	RL					
Dichlorodifluoromethane	0.10	nd	nd	nd	nd	nd
Vinyl Chloride	0.10	nd	nd	nd	nd	nd
Chloroethane	0.10	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.10	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.10	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	0.10	nd	nd	nd	nd	nd
Methylene Chloride	0.10	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.10	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.10	nd	nd	nd	nd	nd
Chloroform	0.10	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	0.10	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.10	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.10	nd	nd	nd	nd	nd
Benzene	0.10	nd	nd	nd	nd	nd
Trichloroethene	0.10	nd	nd	nd	nd	nd
Toluene	0.20	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	0.10	nd	nd	nd	nd	nd
Tetrachloroethene	0.10	0.20	nd	nd	nd	1.9
Ethylbenzene	0.10	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd
m,p-Xylene	0.20	nd	nd	nd	nd	nd
o-Xylene	0.10	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.10	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		102%	103%	103%	104%	105%
Surrogate Recovery (Toluene-d8)		101%	102%	101%	102%	103%
Surrogate Recovery (1,4-BFB)		100%	98%	96%	100%	99%

'RL' Indicates reporting limit at a dilution factor of 1
'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Jon Edmondson

page 4



Ceres Associates Project # CA1889-1
7272 San Ramon Road, Dublin, California

TEG Project #80407D

CALIBRATION STANDARDS - Initial Calibration / LCS

Instrument: Agilent 5973N MSD

COMPOUND	INITIAL CALIBRATION		LCS	
	RF	%RSD	RF	%DIFF
Dichlorodifluoromethane*	0.344	8.2%	0.356	3.5%
Vinyl Chloride*	0.366	5.4%	0.390	6.6%
Chloroethane*	0.176	19.6%	0.199	13.1%
Trichlorofluoromethane	0.493	6.3%	0.486	1.4%
1,1-Dichloroethene	0.267	7.5%	0.268	0.4%
1,1,2-Trichloro-trifluoroethane*	0.318	4.3%	0.300	5.7%
Methylene Chloride	0.251	6.4%	0.247	1.6%
trans-1,2-Dichloroethene	0.303	3.2%	0.287	5.3%
1,1-Dichloroethane	0.487	2.7%	0.507	4.1%
cis-1,2-Dichloroethene	0.299	10.8%	0.313	4.7%
Chloroform	0.453	2.2%	0.461	1.8%
1,1,1-Trichloroethane	0.421	7.6%	0.441	4.8%
Carbon Tetrachloride	0.393	11.4%	0.435	10.7%
1,2-Dichloroethane	0.316	6.1%	0.360	13.9%
Benzene	1.124	6.2%	1.183	5.2%
Trichloroethene	0.282	7.5%	0.282	0.0%
Toluene	0.730	7.7%	0.724	0.8%
1,1,2-Trichloroethane	0.149	10.5%	0.154	3.4%
Tetrachloroethene	0.380	9.9%	0.347	8.7%
Ethylbenzene	0.546	13.1%	0.592	8.4%
1,1,1,2-Tetrachloroethane	0.355	8.5%	0.365	2.8%
m,p-Xylene	0.669	7.1%	0.725	8.4%
o-Xylene	0.629	8.3%	0.676	7.5%
1,1,2,2-Tetrachloroethane	0.515	5.3%	0.545	5.8%
Acceptable Limits		20.0%		15.0%
*** Indicates RSD not to exceed 30% & LCS not to exceed 25%				