SoundEarth Strategies, Inc.
2811 Fairview Avenue East, Suite 2000
Seattle, Washington 98102

July 28, 2011

Mr. John D. Perine Jr.
Perine Property LLC
2995 Woodside Road, Suite 400
Woodside, California 94062

SUBJECT: AIR QUALITY EVALUATION
Perine Property
820 South Adams Street
Seattle, Washington
Project Number: 0783-001

Dear Mr. Perine:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Indoor Air Quality Evaluation letter report to document the results of the air sampling event conducted at the property located at 812 and 820 South Adams Street in Seattle, Washington (the Property). The air sampling event conducted by SoundEarth was performed in accordance with SoundEarth's Scope of Work and Cost Estimate for Evaluating Indoor Air and Groundwater Quality, dated May 19, 2011, and with the Washington State Department of Ecology (Ecology) draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action,* dated October 2009 (2009 Vapor Intrusion Guidance).

The purpose of the indoor air quality evaluation was to assess the risk for impacts to human health from the potential intrusion of chlorinated solvent vapors originating in the soil and groundwater beneath the Property. The results of previous investigations conducted at the Property by SoundEarth in 2011 confirmed the presence of chlorinated solvents in soil and groundwater beneath the Property at concentrations that exceed applicable Washington State Model Toxics Control Act (MTCA) Method A cleanup levels. As documented in the prior investigations conducted by SoundEarth and others, the release originated at the former Northwest Plating facility, which is located on the north-adjoining property. This letter report includes a summary of the scope of work, Property description, a discussion of previous subsurface investigations, Property geology and hydrogeology, pre-air sampling activities, indoor air sampling activities, the results, and conclusions.

SCOPE OF WORK FOR AIR SAMPLING

SoundEarth collected air samples at the Property on June 14, 2011. The scope of work associated with the air sampling event included the following:

- Preparing a health and safety plan in accordance with MTCA and Part 1910.120 of Title 29 of the Code of Federal Regulations prior to initiating field activities.
- Assessing the interior features of the buildings at the Property and the proximity of volatile materials to the proposed air sampling locations.

- Collecting two indoor air samples and a single ambient air sample over a period of 8 hours and submitting air samples to Columbia Analytical Services for analysis of selected chlorinated volatile organic compounds.
- Preparing this Air Quality Evaluation report.

PROPERTY DESCRIPTION

The Property is located on a trapezoid-shaped tax parcel that encompasses approximately 0.85 acres of land. The Property contains a 1957-vintage warehouse building and an addition that was constructed in 1996. According to the Phase I Environmental Site Assessment (Phase I) report for the Property, prepared by SoundEarth and dated January 27, 2011, the Property has been used as a winery, a beverage distribution company, a warehouse and machining shop, artist studios, and an emergency response refurbishing operation. In addition, several residences with suspected heating oil use and storage were historically located on the Property. A 1,000-gallon underground storage tank (UST) was reportedly installed at the Property in 1957. Upon inspection during the Phase I, the UST was discovered to be nearly filled with water and several inches of suspected weathered gasoline. The UST was not in operation but had not been decommissioned at the time of the inspection. The Phase I investigation did not reveal any evidence that chlorinated solvents have been used at the Property.

The Property is located at an approximate elevation of 20 to 25 feet above mean sea level. The closest surface water body is the Duwamish Waterway, which is located approximately 1.25 miles to the west of the Property. Development in the vicinity of the Property is a mix of government service, industrial, commercial, and major transportation infrastructure (Interstate 5).

PREVIOUS SUBSURFACE INVESTIGATIONS

The results of the Phase II subsurface investigation conducted at the Property by SoundEarth in March 2011 indicated that soil samples collected from borings P04 and P07, located beneath the north-central portion of the Property, contained concentrations of tetrachloroethylene (PCE) and/or trichloroethylene (TCE) that exceed the applicable Washington State Model Toxics Control Act (MTCA) Method A cleanup levels. The concentrations of PCE and TCE detected in soil beneath the Property decrease with distance from Northwest Plating, a former electroplating facility that adjoins the Property on the north. The Northwest Plating property has been contaminated by releases of solvents and metals from a former plating facility that operated on that property. As such, the soil contamination encountered beneath the Property appears to be the result of impacts that have migrated from the north-adjoining property. Several borings were also advanced in the vicinity of the UST and other locations on the Property and no evidence of a release associated with the UST or other historical uses of the Property was observed. A detailed discussion of the Phase II subsurface investigation, as well as the historical sampling results from prior investigations conducted at the adjoining Northwest Plating facility, is presented in the *Phase II Subsurface Investigation Perine Property 820 South Adams Street, Seattle, Washington,* prepared by SoundEarth and dated June 7, 2011.

Northwest Plating operated on the north-adjoining property from the 1950s through the 1990s. Records reviewed at Ecology indicate that chlorinated solvents and metals were detected at concentrations above the applicable MTCA Method A or B cleanup levels in groundwater collected from four monitoring wells located on or adjacent to the Northwest Plating parcel. Ecology documents indicate that the building's concrete floors were cracked, a possible source of direct contamination of soil. Additional potential sources of the contamination include two closed-in-place USTs located on the Northwest

Plating parcel. No information was available regarding the methods or results from the UST closures.The Northwest Plating parcel is located in a crossgradient hydrologic position relative to the Property.

GEOLOGY AND HYDROGEOLOGY

The Property is located at the foot of a large glacially formed hill within the larger Duwamish River floodplain and estuary. General soil conditions at the Property consist of fill material composed of fine to medium sand with trace silt from the near surface to depths of up to 15 feet below ground surface (bgs). Groundwater was encountered during SoundEarth's Phase II investigation at a depth of approximately 13 feet bgs. The groundwater flow direction at the Property could not be established due to the absence of monitoring wells at the Property at time of Phase II subsurface investigation; however, based on groundwater elevations measured in March 1989 at monitoring wells installed at the former Northwest Plating facility located on the north-adjoining property, the groundwater flow direction in the vicinity of the Property is to the northwest.

PRE-INDOOR AIR SAMPLING ACTIVITIES

Prior to collecting air samples at the Property, SoundEarth inspected the construction and operations at 812 and 820 South Adams Street buildings to assess what impact, if any, they may have for interpretation of indoor air results. SoundEarth's observations included a review of current operations, the location of semi-confined spaces, points of egress, the presence of cracks in the subslab, the locations of windows, the ceiling height, the proximity of volatile materials to the proposed air sampling locations, and the flow of air within the Property buildings. The findings from SoundEarth's inspection are presented below.

820 South Adams Street Building

The 820 South Adams Street building is a 1957-vintage, concrete slab-on-grade, two-story, masonry-framed structure with a wood roof. The building is heated by natural gas-fired space heaters, and it is not insulated. Perine-Danforth Company occupies the building for the production and storage of fasteners. Egress for the building is through rollup-bay doors located on the east and south side of the building and pedestrian doors located near the southeast corner of the building. The rollup-bay doors are typically open during working hours. Windows in the warehouse area of the building are sealed closed. The building is not equipped with an HVAC system or other air circulation systems. Offices are located on the south side of the building, and work spaces are located on the east side of the building (Figure 1).

The subslab at the north side of the building, in the vicinity of air sample Summa 1-20110614, was unsealed and showed signs of cracking, and unsealed seams adjoined the concrete slabs (Figure 2). The exterior of the building includes an asphalt-paved area to the west of the Property adjoining the railroad right-of-way. An asphalt-paved parking and storage area is located on the exterior east side of the building in the 9th Avenue South right-of-way. Cutting oil is stored in two 55-gallon drums in the north portion of the building within 45 feet east of air sampling location Summa 1-20110614. According to the Material Safety Data Sheet, the cutting oil contains distillates, petroleum hydrocarbons, and hydrotreated heavy naphthenic triethanolamine. Housekeeping within the building was good and no evidence of the use or storage of chlorinated solvents was observed.

812 South Adams Street Building

The 812 South Adams Street building is a 1966 slab-on-grade, prefabricated steel and reinforced concrete-framed structure with a metal roof. The building is heated by natural gas-fired space heaters, and it is insulated. The building is occupied by the Emergency Response Training Institute, a refurbisher of emergency response equipment, a lighting specialist, a commercial painter, and two artist studios. Egress for the building is through a rollup-bay door located on the south side of the building and pedestrian doors located near the northwest and southwest corners of the building. There are several windows in the building, but they do not appear to open. The rollup-bay door is typically closed. There is no HVAC system in the building or other air circulation systems. An office is located on the south side of the building (Figure 1).

Various resins, strippers, epoxies, sealants, paints, and a fire truck are stored in the building. The artist studios, designated for the purposes of this report as Artist Studios 1 and 2, are located on north side of the building and are separated from the remainder of the building by a wooden partition wall (Figure 1). Artist Studio 1 contained turpentine, mineral spirits, and acrylic paints. The Artist studio 1 contained cardboard debris and an eight-ounce can of spray paint. The subslab at the Artist Studio 1, at the location of air sample Summa 2-20110614, was unsealed but showed no obvious signs of cracking (Figure 2). Unsealed seams adjoined the concrete. Housekeeping within the building was good and no evidence of the use or storage of chlorinated solvents was observed.

INDOOR AIR SAMPLING

A total of three “time-integrated” air samples were collected over a period of 8 hours from the Property, including two indoor air samples and one outdoor (ambient) air sample. Equipment for each air sample consisted of a 6-liter Summa canister and a flow controller placed in line with the canister. The flow controller controls the air flow rate into the canister. Air sampling locations are show on Figure 2. The procedure for setting up and collecting each air sample was as follows:

- Verifing that the Summa canister valve is fully closed (the green knob should be turned completely clockwise).
- Using a 9/16” wrench to remove the brass cap from the valve on the top of the Summa canister.
- Attaching the flow controller directly to the valve on the top of the Summa canister. Tightening down with your fingers first, then tightening gently with a 9/16” wrench.
- Turning the green knob counterclockwise to open the canister valve, until there is no resistance. Then turning back clockwise slightly until resistance is detected.
- Closing the Summa canister valve at the end of the sampling period (approximately 8 hours), by turning the green knob clockwise, while being careful to not over-tighten.
- Removing the flow controller assembly and wrap in bubble wrap for shipment.
- Replacing the brass cap on the Summa canister valve. Tightening it with a 9/16” wrench.
- Labeling the sample with the tag provided and then attaching the tag to the Summa canister.

- Completing a chain of custody (COC) form. Noting the canister ID number on the COC and noting the flow controller identification number with the corresponding canister.
- Placing the COC form, the bubble-wrapped flow controller, and the canister back into the shipping container and returning the container to Columbia Analytical Services.

The Summa canisters were placed at the following sample locations:

- Summa 1-20110614 was placed within the tenant space at 820 South Adams Street along the north wall of the building, attached to a rack located approximately 3 feet above the floor.
- Summa 2-20110614 was placed within the tenant space of 812 South Adams Street at the northeast corner of the space on a stool approximately 3 feet above the floor.
- Summa OD-20110614 was placed outside the building, approximately 15 feet east of the northeast corner of the building, attached to a railing approximately 3 feet above the ground.

The three Summa canisters were submitted to Columbia Analytical Services for analysis of PCE; TCE; cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); and vinyl chloride by U.S. Environmental Protection Agency Method TO15 SIM. Sampling was conduced in accordance with the Ecology's 2009 Vapor Intrusion Guidance.

RESULTS

Analytical results for air samples are presented on Figure 2 and in Table 1. The laboratory analytical report is provided as Attachment A. A summary of the analytical results for the air samples is provided below:

- PCE and TCE were detected in the indoor air sample Summa 1-20110614 at concentrations of 0.21 and 0.42 micrograms per cubic meter ($\mu g/m^3$), respectively. Concentrations of cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride were not detected above the laboratory reporting limit.
- PCE and TCE were detected indoor air sample Summa 2-20110614 at concentrations of 1.3 and 0.57 $\mu g/m^3$, respectively. Concentrations of cis-1,2-DCE; trans-1,2-DCE; and vinyl chloride were not detected above the laboratory reporting limit.
- Concentrations of PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and vinyl chloride were not detected above the laboratory reporting limit in the outdoor air sample Summa OD-20110614.

CONCLUSIONS

The concentration of TCE in indoor air sample Summa 1-20110614 and the concentrations of PCE and TCE in indoor air sample Summa 2-20110614 exceed the applicable MTCA Method B residential cleanup levels but are less than the draft MTCA Method C cleanup levels for industrial facilities (Table 1). However, Ecology regulations and practices for indoor air assessment will likely not permit the use of industrial cleanup levels at the Property given the current uses, zoning, and surrounding land uses. Instead, commercial cleanup levels are likely to be applicable. As of the date of this report, Ecology has not published definitive commercial cleanup levels for PCE and TCE. According to Ecology's 2009 Vapor Intrusion Guidance, "*where the building of concern is being used commercially (but not located on an industrial property), and the most highly exposed receptors are workers, the Method B exposure assumptions* [for unrestricted use]*….are likely to be overly conservative."* Therefore, SoundEarth believes that values for the commercial cleanup level for PCE and TCE would likely fall between Method B residential and Method C industrial cleanup levels.

Respectfully,

SoundEarth Strategies, Inc.

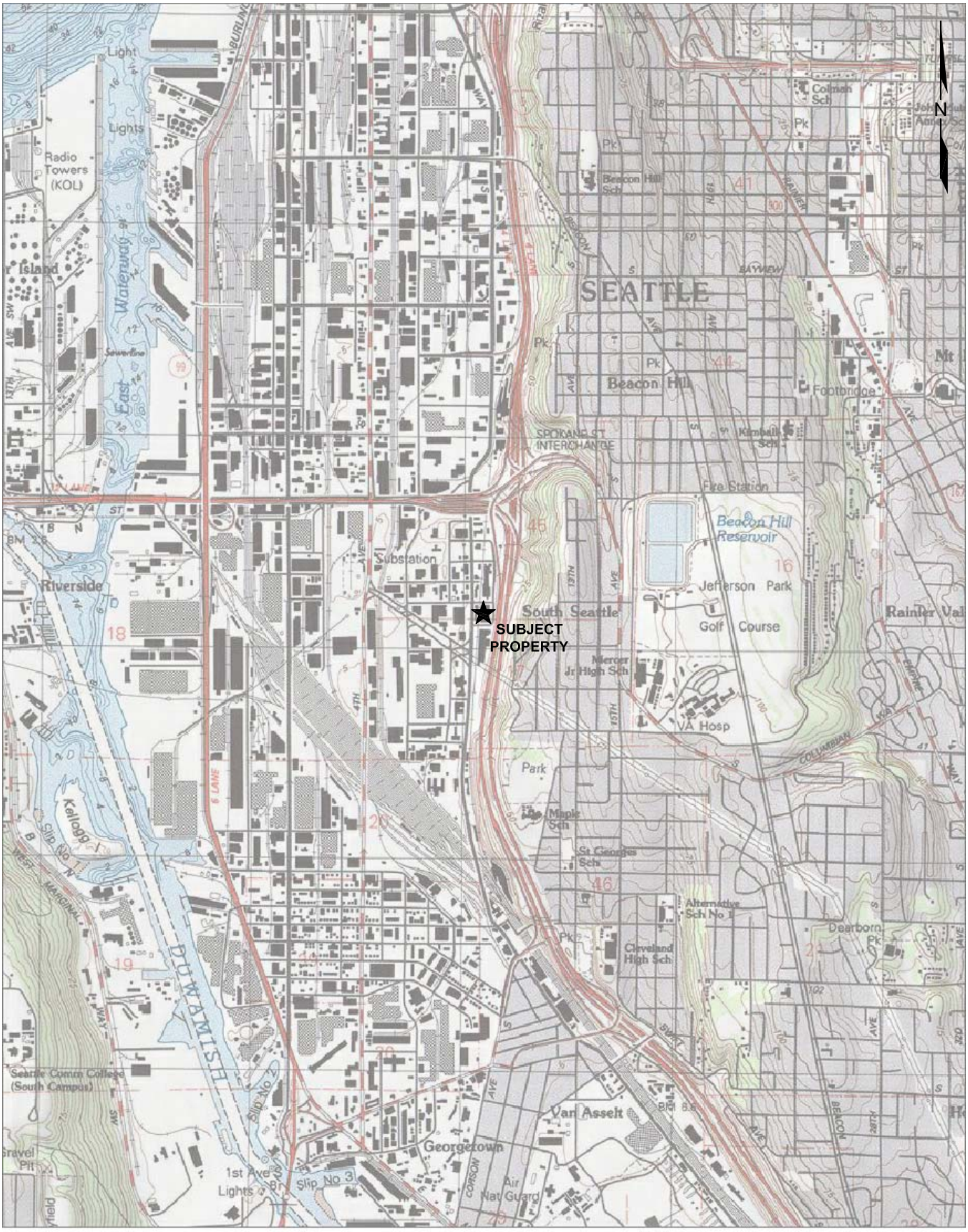
Thomas Cammarata, LG, LHG
Senior Geochemist

Ryan K. Bixby, LG
Environmental Division President

Attachments: Figure 1, Property Location Map
Figure 2, Air Sampling Location Map
Table 1, Summary of Air Analytical Results
Attachment A, Laboratory Analytical Report
Columbia Analytical Services #P1102286

JAC/TJC:hsc

FIGURES



SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

DATE:	01/07/11
DRAWN BY:	NAC
CHECKED BY:	RKB
CAD FILE:	0783-001_Fig1_VIC

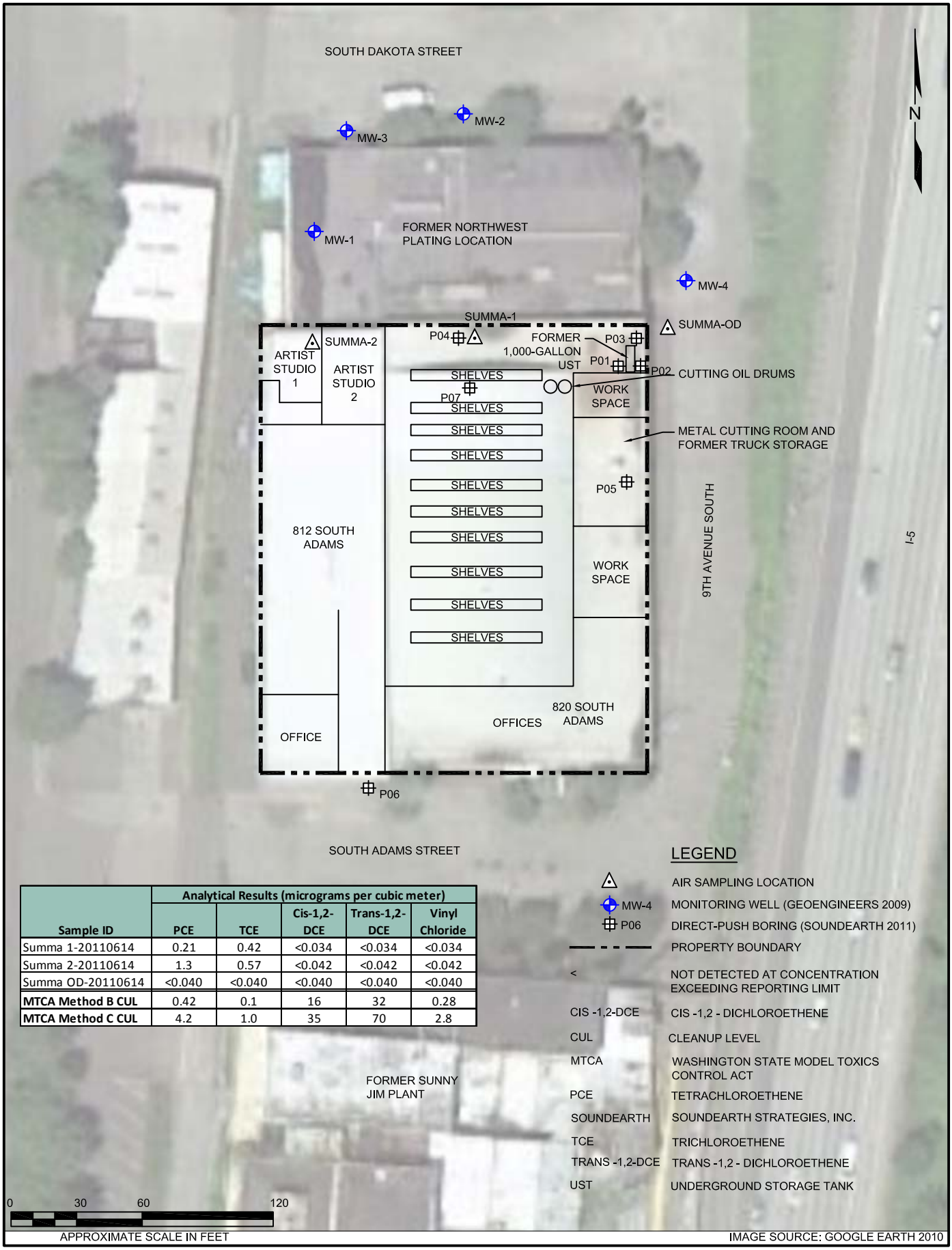
PROJECT NAME:	PERINE PROPERTY
PROJECT NUMBER:	0783-001
STREET ADDRESS:	820 SOUTH ADAMS STREET
CITY, STATE:	SEATTLE, WASHINGTON

FIGURE 1
PROPERTY LOCATION MAP

P:\0783 PERINE PROPERTY LLC\0783-001-02 PH II SS\TECHNICAL\CAD\FIGURE 1\0783-001 FIG1 VIC.DWG

4/26/2011

SOUNDENVIRONMENTAL.COM



Sample ID	Analytical Results (micrograms per cubic meter)				
	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	Vinyl Chloride
Summa 1-20110614	0.21	0.42	<0.034	<0.034	<0.034
Summa 2-20110614	1.3	0.57	<0.042	<0.042	<0.042
Summa OD-20110614	<0.040	<0.040	<0.040	<0.040	<0.040
MTCA Method B CUL	0.42	0.1	16	32	0.28
MTCA Method C CUL	4.2	1.0	35	70	2.8

LEGEND

	AIR SAMPLING LOCATION
MW-4	MONITORING WELL (GEOENGINEERS 2009)
P06	DIRECT-PUSH BORING (SOUNDEARTH 2011)
	PROPERTY BOUNDARY
<	NOT DETECTED AT CONCENTRATION EXCEEDING REPORTING LIMIT
CIS -1,2-DCE	CIS -1,2 - DICHLOROETHENE
CUL	CLEANUP LEVEL
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
PCE	TETRACHLOROETHENE
SOUNDEARTH	SOUNDEARTH STRATEGIES, INC.
TCE	TRICHLOROETHENE
TRANS -1,2-DCE	TRANS -1,2 - DICHLOROETHENE
UST	UNDERGROUND STORAGE TANK

SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

DATE: 06/30/11
DRAWN BY: NAC
CHECKED BY: RKB
CAD FILE: 0783_2011AS_EL

PROJECT NAME: PERINE PROPERTY
PROJECT NUMBER: 0783-001-03
STREET ADDRESS: 820 SOUTH ADAMS STREET
CITY, STATE: SEATTLE, WASHINGTON

FIGURE 2
AIR SAMPLING LOCATION MAP

7/20/2011
P:\0783 PERINE PROPERTY LLC\TECHNICAL\CAD\2011 AIR SAMPLING WORK PLAN\0783_2011AS_EL_F.DWG
SOUNDEARTHINC.COM

TABLE

Table 1
Summary of Air Analytical Results
Perine Property
820 South Adams Street
Seattle, Washington

Sample ID	Date Sampled	Analytical Results (micrograms per cubic meter)				
		PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	Vinyl Chloride
Summa 1-20110614	06/14/11	0.21	0.42	<0.034	<0.034	<0.034
Summa 2-20110614		1.3	0.57	<0.042	<0.042	<0.042
Summa OD-20110614		<0.040	<0.040	<0.040	<0.040	<0.040
MTCA Method B Cleanup Levels for Indoor Air		**0.42[a]**	**0.1[a]**	**16[b]**	**32[b]**	**0.28[a]**
MTCA Method C Cleanup Levels for Indoor Air		**4.2[c]**	**1[c]**	**35[d]**	**70[d]**	**2.8[c]**

NOTES:

Sample analyses performed by Columbia Analytical Services of Simi Valley, California.

RED = indicates the reported concentration exceeds the most stringent CUL.

[1]Analyzed by U.S. Environmental Protection Agency Method TO-15 - VOC SIM.

[a]MTCA Method B Indoor Air Cleanup Levels, Table B-1, Indoor Air, Carcinogen, Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

[b]MTCA Method B Indoor Air Cleanup Levels, Table B-1, Indoor Air, Non-Carcinogen, Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

[c]MTCA Method C Indoor Air Cleanup Levels, Table B-1, Indoor Air, Carcinogen, Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

[d]MTCA Method C Indoor Air Cleanup Levels, Table B-1, Indoor Air, Non-Carcinogen, Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

< = not detected at concentration exceeding the laboratory reporting limit

Cis-1,2-DCE = Cis-1,2-dichloroethene

CUL = cleanup level

MTCA = Washington State Model Toxics Control Act

PCE = tetrachloroethene

TCE = trichloroethene

Trans-1,2-DCE = trans-1,2-dichloroethene

ATTACHMENT A
LABORATORY ANALYTICAL REPORT

Columbia Analytical Services #P1102286

LABORATORY REPORT

June 30, 2011

Tom Cammarata
SoundEarth Strategies, Inc.
2811 Fairview Ave East, Suite 2000
Seattle, WA 98102

RE: Perine Property / 0783-001-03

Dear Tom:

Enclosed are the results of the samples submitted to our laboratory on June 16, 2011. For your reference, these analyses have been assigned our service request number P1102286.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3-R1; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-10-1; Minnesota Department of Health, NELAP Certificate No. 219474; Washington State Department of Ecology, ELAP Lab ID: C946. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera
Project Manager

Client: SoundEarth Strategies, Inc. CAS Project No: P1102286
Project: Perine Property / 0783-001-03

CASE NARRATIVE

The samples were received intact under chain of custody on June 16, 2011 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: SoundEarth Strategies, Inc. Service Request: P1102286
Project ID: Perine Property / 0783-001-03

Date Received: 6/16/2011
Time Received: 16:48

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
Summa 1-20110614	P1102286-001	Air	6/14/2011	08:03	AC01740	-1.35	3.50	X
Summa 2-20110614	P1102286-002	Air	6/14/2011	08:17	AC00998	-3.72	3.50	X
Summa OD-20110614	P1102286-003	Air	6/14/2011	08:32	AC01601	-3.20	3.55	X

Columbia Analytical Services
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10 Day-Standard) — circled

CAS Project No. P1102256

CAS Contact: Sue

Company Name & Address (Reporting Information)	SoundEarth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle WA 98102
Project Name	Perine Property
Project Number	0783-001-03
Project Manager	Tom Cammarata
P.O. # / Billing Information	
Phone	206-306-1900
Fax	206-306-1907
Email Address for Result Reporting	tcammarata@SoundEarthinc.com
Sampler (Print & Sign)	Chris Cass

Analysis Method: EPA Method TO15 PCE, TCE, cis1,2DCE, trans1,2-DCE and VC Only

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	EPA Method TO15 PCE, TCE, cis1,2DCE, trans1,2-DCE and VC Only		Comments e.g. Actual Preservative or specific instructions
Summa 1-20110614		6-14-11	0803	004668	FCA00284	-26.0	-2.5	6L	X		Low-Level Scan
Summa 2-20110614		6-14-11	0817	002762	FCA00332	-27.0	-6.5	6L	X		Low-Level Scan
Summa OD-20110614		6-14-11	0832	004307	FCA00140	-27.5	-6.0	6L	X		Low-Level Scan

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) X
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required (Yes) No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Chris Cass	6-15-11	1015	[signature]	06/16/11	0955

Cooler / Blank Temperature ____°C

Columbia Analytical Services™ 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 | 805.526.7161 | www.caslab.com

Sample Acceptance Check Form

Client: SoundEarth Strategies, Inc. Work order: P1102286

Project: Perine Property / 0783-001-03

Sample(s) received on: 6/16/11 Date opened: 6/16/11 by: SSTAPLES

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature _____ °C Blank Temperature _____ °C			
9	Was a **trip blank** received?	☐	☐	☒
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☐
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1102286-001.01	6.0 L Ambient Can					
P1102286-002.01	6.0 L Ambient Can					
P1102286-003.01	6.0 L Ambient Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Summa 1-20110614** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P1102286-001

Test Code: EPA TO-15 SIM Date Collected: 6/14/11
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: 6/16/11
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01740
Initial Pressure (psig): -1.35 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.034	ND	0.013	
156-60-5	trans-1,2-Dichloroethene	ND	0.034	ND	0.0086	
156-59-2	cis-1,2-Dichloroethene	ND	0.034	ND	0.0086	
79-01-6	Trichloroethene	**0.42**	0.034	**0.078**	0.0063	
127-18-4	Tetrachloroethene	**0.21**	0.034	**0.031**	0.0050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Summa 2-20110614** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P1102286-002

Test Code: EPA TO-15 SIM Date Collected: 6/14/11
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: 6/16/11
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00998

Initial Pressure (psig): -3.72 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.042	ND	0.016	
156-60-5	trans-1,2-Dichloroethene	ND	0.042	ND	0.010	
156-59-2	cis-1,2-Dichloroethene	ND	0.042	ND	0.010	
79-01-6	Trichloroethene	**0.57**	0.042	**0.11**	0.0077	
127-18-4	Tetrachloroethene	**1.3**	0.042	**0.19**	0.0061	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Summa OD-20110614** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P1102286-003

Test Code: EPA TO-15 SIM Date Collected: 6/14/11
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: 6/16/11
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01601

Initial Pressure (psig): -3.20 Final Pressure (psig): 3.55

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.040	ND	0.016	
156-60-5	trans-1,2-Dichloroethene	ND	0.040	ND	0.010	
156-59-2	cis-1,2-Dichloroethene	ND	0.040	ND	0.010	
79-01-6	Trichloroethene	ND	0.040	ND	0.0074	
127-18-4	Tetrachloroethene	ND	0.040	ND	0.0059	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Method Blank** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P110621-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: NA
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **SoundEarth Strategies, Inc.**
Client Project ID: **Perine Property / 0783-001-03** CAS Project ID: P1102286

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date(s) Collected: 6/14/11
Analyst: Wida Ang Date(s) Received: 6/16/11
Sampling Media: 6.0 L Summa Canister(s) Date(s) Analyzed: 6/21/11
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P110621-MB	**82**	**102**	**103**	70-130	
Lab Control Sample	P110621-LCS	**82**	**103**	**108**	70-130	
Summa 1-20110614	P1102286-001	**81**	**104**	**106**	70-130	
Summa 2-20110614	P1102286-002	**80**	**105**	**98**	70-130	
Summa 2-20110614	P1102286-002DUP	**79**	**107**	**103**	70-130	
Summa OD-20110614	P1102286-003	**81**	**105**	**108**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Lab Control Sample** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P110621-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: NA
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.12	**3.49**	**85**	57-136	
156-60-5	trans-1,2-Dichloroethene	4.32	**4.36**	**101**	65-127	
156-59-2	cis-1,2-Dichloroethene	4.40	**4.57**	**104**	63-129	
79-01-6	Trichloroethene	4.28	**3.62**	**85**	69-134	
127-18-4	Tetrachloroethene	4.12	**3.71**	**90**	60-137	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **SoundEarth Strategies, Inc.**
Client Sample ID: **Summa 2-20110614** CAS Project ID: P1102286
Client Project ID: **Perine Property / 0783-001-03** CAS Sample ID: P1102286-002DUP

Test Code: EPA TO-15 SIM Date Collected: 6/14/11
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7 Date Received: 6/16/11
Analyst: Wida Ang Date Analyzed: 6/21/11
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00998
Initial Pressure (psig): -3.72 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.66

CAS #	Compound	Sample Result µg/m³	Sample Result ppbV	**Duplicate Sample Result µg/m³**	Duplicate Sample Result ppbV	Average µg/m³	**% RPD**	RPD Limit	**Data Qualifier**
75-01-4	Vinyl Chloride	ND	ND	ND	ND	-	-	25	
156-60-5	trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
156-59-2	cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
79-01-6	Trichloroethene	0.567	0.106	0.552	0.103	0.5595	**3**	25	
127-18-4	Tetrachloroethene	1.30	0.191	1.29	0.190	1.295	**0.8**	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.