August 2, 2013



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By Alameda County Environmental Health at 2:18 pm, Aug 07, 2013

Mr. Jerry Wickham, P.G. Alameda County Health Care Services Agency Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

#### Subject: Soil Gas, Sub-Slab Vapor, and Indoor Air Investigation Report Former Francis Plating Site, 751-785 7<sup>th</sup> Street, Oakland, California

Dear Mr. Wickham:

Enclosed please find the Soil Gas, Sub-Slab, and Indoor Air Investigation Report (Report) for the Former Francis Plating Site. The Report presents details regarding investigation activities and laboratory results, and provides conclusions and recommendations based on the results of the investigation. Based on soil gas data and empirical indoor air data, soil vapor and indoor air concentrations do not exceed ESLs. SGI recommends preparing a simple risk management plan to ensure that the current cap on the Site remains in place and that any breach of the cap or exposure to residual contaminants in the soil are performed in a manner that does not expose users of the Site or construction workers to unacceptable health risks.

With respect to earlier discussions of division of the large parcel, the administrative aspects of the parcel split, (shown on Figures 2, 3, 4, 5, and 7 of the Report), is almost complete. After your review of the report we would appreciate the opportunity to discuss process and option details as they pertain to gaining an NFA on the eastern parcel and enabling focused attention on the western parcel (the parcel with the former "Frog Pond").

#### Perjury Statement:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions or comments regarding the Report, please feel free to call me on my direct line at (925) 951-6386.

Sincerely, **The Source Group, Inc.** 

Mathue?

Matthew C. Sutton, P.E. Project Manager

Cc: Tom McCoy, The Brush Street Group, LLC

Enclosure

### SOIL GAS, SUB-SLAB VAPOR, AND INDOOR AIR INVESTIGATION REPORT

Former Francis Plating Site 751-785 7th Street, Oakland, California

01-FP-001

Prepared For:

The Brush Street Group LLC 1155 Third Street, Suite 230 Oakland, California 94607

Prepared By:



3478 Buskirk Ave, Suite 100 Pleasant Hill, California 94523



August 2, 2013

Prepared By:

Mary Cunningham Project Engineer

Reviewed By:

Matthew C. Sutton, P.E. Project Manager

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### 1.0 INTRODUCTION

The Source Group, Inc. (SGI), on behalf of The Brush Street Group, LLC (Brush Street Group), is submitting this Soil Gas, Sub-Slab Vapor, and Indoor Air Investigation Report (Report) for the Former Francis Plating Site located at 751-785 7th Street, Oakland, California (Site) (Figures 1 and 2). SGI performed the investigation in accordance with the *Revised Work Plan for Soil Gas and Sub-Slab Vapor Investigations* prepared by BASELINE Environmental Consulting (BASELINE, 2012c). The objective of the investigation was to further characterize soil gas and sub-slab vapor concentrations at the Site as well as evaluate potential health risks for users of onsite and adjacent commercial buildings.

Previous soil gas investigations at the Site include a 2009 subsurface investigation performed by P&D Environmental (P&D, 2009) and a soil gas and sub-slab vapor survey performed by in 2011 and 2012 (BASELINE, 2012a). These investigations indicated the presence of volatile organic compound (VOC) concentrations in the shallow soil gas at the Site.

In order to further characterize the soil gas and sub-slab vapor conditions at the Site, SGI oversaw the installation of three dual-nested soil gas probes along the southern property line and two sub-slab vapor probes within the former plating shop. Samples were collected from these points and from an existing sub-slab vapor probe between May 1 and 8, 2013. The results from these samples are provided in Tables 1 and 2, and are discussed further in Section 3.5.

Due to inconclusive results from the sub-slab vapor samples, SGI completed additional sub-slab and indoor air sampling on June 12, 2013. The results of these samples are provided in Tables 3 and 4, and are discussed further in Section 4.2.

#### 2.0 SITE BACKGROUND

The Site was operated as a plating facility from approximately 1957 to 1998. In 1998, the property was found to be abandoned along with chemicals and equipment on Site. As part of an emergency response action, the U.S. Environmental Protection Agency (U.S. EPA) removed abandoned chemicals and equipment, and excavated shallow soil in areas without asphalt or concrete coverings. In 2003, the current owner, Brush Street Group, LLC, acquired the property.

The Site is currently occupied by the Kinetic Arts Center, a circus and fitness facility. This facility operates within the existing building in the northeastern corner of the property. The remaining property is covered by concrete or asphalt, with the exception of an exposed strip of soil along the western property line and small landscaped areas along Brush Street.

Numerous Site investigations have been conducted at the Site. A Conceptual Site Model (CSM) prepared by BASELINE in 2012 was presented in the *Conceptual Site Model and Work Plan: Sub-Slab Vapor Investigation* (BASELINE, 2012b). The CSM discusses in further detail the previous investigations conducted at the Site.

#### 3.0 INITIAL SOIL GAS AND SUB-SLAB VAPOR INVESTIGATION ACTIVITIES

The initial soil gas and sub-slab vapor investigation activities at the Site were conducted in accordance with the *Revised Work Plan for Soil Gas and Sub-Slab Vapor Investigation* dated September 21, 2012. The Work Plan was approved by Alameda County Environmental Health (ACEH) in a letter dated November 8, 2012 (Appendix A). The work was completed to further characterize soil gas and sub-slab conditions at the Site and to determine the potential health risk for users of both on Site and adjacent commercial buildings.

#### 3.1 **Pre-Field Activities**

Prior to investigative activities at the Site, applications to install soil gas probes and sub-slab vapor points were prepared and submitted along with appropriate fees to the Alameda Count Public Works Agency (ACPWA). Copies of well permits are included in Appendix B. Access to the building on Site was coordinated with Brush Street Group and the current tenant.

The following pre-field activities were performed prior to each mobilization. Site visits were performed to mark the locations of the proposed borings at the Site. Following the Site visits, Underground Services Alert (USA) was notified of the drilling activities as required. Results of the utility locating by USA were reviewed and the final locations of the soil gas and sub-slab soil vapor points were selected.

### 3.2 Soil Gas and Sub-Slab Vapor Point Installation

The first phase of the investigation activities included the installation of three soil gas wells and two sub-slab vapor points at the Site. SGI contracted Vironex, Inc. (Vironex) to advance borings and install all points. These installations were completed on April 19, 2013.

### 3.2.1 Soil Gas Probe Installation

On April 19, 2013, SGI personnel directed Vironex to advance three shallow soil borings for the installation of permanent dual-nested soil gas points in each boring. Permanent soil gas probes were chosen so that changes in soil gas concentrations could be evaluated over time. In order to evaluate soil gas concentration variances with depth and soil type, two probes were installed at each location. One probe was installed within the Merritt sand, which had historically been found to be 3 to 5 feet below ground surface (bgs); the other was installed in the fill material above the Merritt Sand. Due to the low permeability of the Merritt Sand, the lower probe was installed in a larger than traditional sand pack, ideally 3 feet, where possible. The upper probes in the fill material were set in a traditional one foot sand pack. In order to create a seal between the two depths, the lower sand packs were covered by 6 inches of dry granular bentonite followed by hydrated bentonite that straddled the interface between the two materials. The upper sand packs were covered by 6 inches of dry bentonite and backfilled with grout.

The probes installed consisted of one inch stainless steel probe tips attached to 1/4-inch Teflon<sup>TM</sup> tubing. The tubing was extended approximately 6 inches beyond the top of the well, and a brass fitting was attached to the end of each to allow for connection to the sampling apparatus. The wells were each completed with a 6-inch well box.

Prior to advancing each boring, the concrete surface was cored by Vironex, and the borings were advanced using a hand auger. Soil was logged to determine the depth to the fill-Merritt Sand interface and to determine the probe depths at each point. Logs and well construction details for each of the three soil gas borings are provided in Appendix C.

SG-07 was installed in the southwest corner of the property (Figure 2). The soil in the initial borehole for SGI-07 became saturated at approximately 4.5 feet bgs, so the borehole was backfilled and the location was moved to the east approximately 10 feet. At the second location, the fill-Merritt Sand interface was found at 3 feet 7 inches; saturated soil was once again found at 4.5 feet bgs. The well was constructed despite the moisture in the borehole. Dry bentonite was added to the hole to absorb moisture, and the lower probe was installed at 4 feet bgs in an approximately one foot sand pack. The upper probe was placed at 2.5 feet bgs in a one foot sand pack.

SG-08 was installed along the southern property line near the southwest corner of the building (Figure 2). The fill-Merritt Sand interface was discovered at 3.75 feet bgs, and the borehole was advanced by hand an additional 4 feet to 7.75 feet bgs. The lower probe was installed at 6 feet 2 inches within a 3 foot sand pack. The upper probe was installed at 3 feet bgs within a 1 foot sand pack.

SG-09 was installed south of the front door of the building (Figure 2). The fill-Merritt Sand interface was located at 3 feet bgs, and a sandy clay was discovered at 4 feet 7 inches bgs. This clay, which was not anticipated based on previous Site investigations, continued to the total borehole depth of 6 feet 1 inch. The lower vapor probe was placed at 4 feet 7 inches bgs within a 2 foot sand pack. The upper probe was placed at 2.5 feet bgs within a 10 inch sand pack.

The three soil gas wells were allowed to equilibrate beyond the minimum DTSC recommended 48 hours prior to sampling (DTSC, 2011).

### 3.2.2 Sub-Slab Vapor Probe Installation

Subsequent to installing the soil gas points, Vironex. installed two sub-slab soil vapor probes within the building. One vapor probe, Sub-Slab 2, was installed near the center of the building's foundation over the former containment vault. The other, Sub-Slab 3, was installed near the west wing of the building. The locations of these points are depicted in Figure 2.

Installation of the sub-slab probes was performed by using of rotary hammer to drill a 1.25 inch hole approximately 1/8 inch deep, followed by a 1-inch hole through the remainder of the 6-inch concrete slab. The holes were then advanced an additional 3 inches below the slab into fill material. A vapor probe kit, including a 3-inch stainless steel permeable probe and 1/4-inch

stainless steel tubing, was installed at each location. The top of the probe tip was installed slightly below the slab. The annular space around the permeable tip was filled with sand, and then topped with dry bentonite to reach just past the base of the concrete slab. The remaining annular space was filled with bentonite grout. The sub-slab point was then capped with a stainless steel plug that screwed into the probe. A stainless steel ball valve that screwed into the port was provided by Vironex for sample collection purposes.

The points were allowed to equilibrate for well over the two hours recommended by the DTSC Guidance (DTSC, 2011).

### 3.3 Soil Gas and Sub-Slab Vapor Point Sampling

Initial sampling of the installed soil gas wells and sub-slab soil vapor points was performed on May 1 and 8, 2013. Sampling activities were carried out according to the Work Plan.

#### 3.3.1 Soil Gas Well Sampling

The three soil gas wells (SG-07, SG-08, SG-09) were sampled on May 1, 2013. Both the shallow and deep probes were sampled at each of the three wells. Soil gas samples were collected from each location using a 1-liter SUMMA<sup>™</sup> canister provided by Torrent Laboratory, Inc. (Torrent). The canisters came with manifolds equipped with flow regulators that limited the flow to less than 200 milliliters per minute (mL/min). The manifolds connected directly to the SUMMA<sup>™</sup> canisters, sample points, and purge canister via Teflon<sup>™</sup> tubing.

Leak detection during sampling was conducted using a helium tracer shroud. The helium tracer was used as a quality control measure during sampling. During sampling, a concentration of 20 percent helium was maintained around the sampling train and above the sample probe by positioning a shroud over the soil gas probe. Helium concentrations were monitored using a helium detector and adjusted as needed throughout sampling. As part of the laboratory analysis for each sample, helium was included in the list of constituents analyzed.

Prior to sampling, soil vapor sampling probes were purged to ensure that stagnant or ambient air was removed from the sampling system and to ensure that samples collected were representative of subsurface conditions. Approximately three volumes of the sampling system were purged through the manifold into a purge canister by opening the manifold valve to the purge canister and then opening the canister valve. After the purging was complete, samples were collected in the 1-liter SUMMA<sup>™</sup> canisters by opening the valve on the 1-liter SUMMA<sup>™</sup> sample canister. During sampling, helium concentrations and SUMMA<sup>™</sup> canister vacuum were monitored and recorded on field measurement logs.

Following collection of each sample, the canister valve was closed and the sample container was prepared for delivery to the laboratory for analyses. The sample containers were labeled with sample point identification, date, and time of collection. The samples were relinquished under chain-of-custody documentation to Torrent for analysis by EPA method TO-15 for VOCs and by ASTM D1946 for helium.

#### 3.3.2 Sub-Slab Vapor Sampling

The three sub-slab vapor points in the building were sampled on May 8, 2013, including the two points installed by SGI (Sub-Slab 2 and Sub-Slab 3) and an existing point (Sub-Slab 1) located in the southeast corner of the building. Sub-slab samples from each point were collected using a 1-liter SUMMA<sup>™</sup> canister provided by Torrent. The canisters came with manifolds equipped with flow regulators that limited the flow to less than 200 milliliters per minute (mL/min).

Sub-Slab 1 was directly connected to the sampling manifold using a length of Teflon<sup>TM</sup> tubing with attached brass fittings. A stainless steel ball valve was screwed into the sample ports of Sub-Slab 2 and Sub-Slab 3 with Teflon<sup>TM</sup> tubing connecting the valve to the sampling manifold. The manifolds connected directly to the 1-liter SUMMA<sup>TM</sup> sampling canisters and purge canister via Teflon<sup>TM</sup> tubing.

Purging and helium leak detection procedures for sub-slab sampling were the same as for the soil gas sampling, as described in Section 3.3.1. Following collection of each sample, the canister valve was closed and the sample container was prepared for delivery to the laboratory for analyses. The sample containers were labeled with sample point identification, date, and time of collection. The samples were relinquished under chain-of-custody documentation to Torrent for analysis by EPA method TO-15 for VOCs and by ASTM D1946 for helium.

#### 3.4 Waste Management

Soil cuttings from soil gas borings and sub-slab vapor probes were placed in properly labeled 55-gallon steel drums pending waste characterization.

### 3.5 Results of Initial Investigation Activities

#### 3.5.1 Soil Gas Sample Results

As described in Section 3.3.1, soil gas sampling was conducted on May 1, 2013. Sample results for helium by ASTM D1946 are presented in Table 5, and results for VOCs by USEPA Method TO-15 are presented in Table 1.

Helium, the leak detection compound, was detected in all six of the soil gas samples, indicating ambient air leakage during sampling. To account for this leakage, a dilution factor (DF) was calculated using the concentration of helium in the sample and the average concentration of helium under the shroud during sampling:

DF = [Concentration of Helium in Sample (%)] / [Concentration of Helium in Shroud (%)]

The dilution factors for each sample are calculated in Table 5, and were then used to adjust the laboratory-reported VOC concentrations to account for the ambient air leakage:

Corrected concentrations ( $\mu$ g/m<sup>3</sup>) = Reported concentration ( $\mu$ g/m<sup>3</sup>) x [1 + DF]

DTSC guidance states that an ambient air leak of up to 5 percent is acceptable when a quantitative tracer is used under the sampling shroud (DTSC, 2012). Five of the samples had helium concentrations under 5 percent, and so the corrected concentrations are deemed acceptable. The shallow sample from soil gas well SV-07 (SV-07-2.5) had a helium concentration of 6.3 percent; therefore, the corrected concentration is reported in Table 1 as biased low.

As shown on Table 1, constituents detected above laboratory reporting limits in the soil gas samples included carbon disulfide, benzene, 1,1,1-trichloroethane (1,1,1-TCA), trichloroethylene (TCE), and tetrachloroethylene (PCE). The only constituent that exceeded the Environmental Screening Level (ESL) for residential land use (CRWQCB, 2013) was TCE, which was detected at 2,654  $\mu$ g/m<sup>3</sup> and 2,293  $\mu$ g/m<sup>3</sup> in the fill dirt and Lake Merritt sand probes at SG-07, respectively, and at 547  $\mu$ g/m<sup>3</sup> in the fill dirt probe at SG-09. None of these concentrations exceed the ESL for commercial/industrial land use. Laboratory analytical reports are presented in Appendix E.

#### 3.5.2 Sub-Slab Vapor Sample Results

As described in Section 3.3.2, sub-slab vapor sampling was conducted on May 8, 2013. Sample results for helium by ASTM D1946 are presented in Table 5, and for VOCs by USEPA Method TO-15 in Table 2.

Helium was detected in all three samples, and the laboratory results were corrected using the same method described in Section 3.5.1. Samples from Sub-Slab 1 and Sub-Slab 2 had helium concentrations below 5 percent and were deemed acceptable. The Sub-Slab 3 sample was reported to have a helium concentration of 29 percent. The VOC concentrations in that sample were adjusted as well, but are considered to be biased low.

As shown in Table 2, the samples collected from recently installed Sub-Slab 2 and Sub-Slab 3 vapor probes contained significantly higher VOC concentrations than the sample collected from the existing Sub-Slab 1 vapor probe. In order to estimate indoor air concentrations, the soil gas results were multiplied by an attenuation factor of 0.05 as recommended by the Cal/EPA DTSC (DTSC, 2011). These estimates, also provided in Table 2, indicated that indoor air concentrations of benzene, ethyl benzene, carbon tetrachloride, TCE, and PCE might be above both their residential and industrial indoor air ESLs, and that xylenes might be above the residential indoor air ESL (CRWQCB, 2013). Full laboratory analytical reports are presented in Appendix E.

#### 3.5.3 Results of Initial Investigation

The results of the sub-slab vapor point sampling indicated a potential of indoor air quality impacts at the Site. However, the inconsistency between the VOC concentrations in the three sub-slab points indicated the need for additional sampling. After discussion with the property owner, the conclusion was reached that both Sub-Slab 2 and Sub-Slab 3 required resampling to verify the May results. Additionally, indoor air samples were also collected to obtain empirical data should the sub-slab data be consistent with initial sampling data.

#### 4.0 ADDITIONAL SUB-SLAB VAPOR AND INDOOR AIR INVESTIGATION

Supplemental sampling was performed at the Site based on the initial sub-slab vapor sampling results. The additional samples included resampling of sub-slab vapor points Sub-Slab 2 and Sub-Slab 3, and sampling indoor air in two locations within the building on Site.

#### 4.1 Sub-Slab Vapor Point Resampling and Indoor Air Sampling

The collection of additional sub-slab samples and indoor air samples was completed on June 12, 2013.

#### 4.1.1 Sub-Slab Vapor Point Resampling

Samples were collected from sub-slab vapor points Sub-Slab 2 and Sub-Slab 3 on June 12, 2013 using 1-liter SUMMA<sup>™</sup> canisters provided by Torrent. The method for sampling these points is described in Section 3.3.2. Following collection of each sample, the samples were relinquished under chain-of-custody documentation to Torrent for analysis by EPA method TO-15 for VOCs and by ASTM D1946 for helium.

#### 4.1.2 Indoor Air Sampling

Two indoor air samples were collected from the building on Site on June 12, 2013. The approximate sample locations are shown in Figure 2. The first sample, Indoor Air 1 (IA1), was collected near the center of the building between the office area and the main instruction area for students. The second sample, Indoor Air 2 (IA2), was collected in the northwest corner of the building near the student lounge, kitchen, and storage areas.

During the sampling event, air samples were collected in 6-liter pre-evacuated, lab-certified SUMMA<sup>™</sup> canisters with laboratory-calibrated flow controllers and particulate filters. All samples were collected over an eight-hour interval to simulate worker exposure. At the end of the eight-hour sampling period, the SUMMA<sup>™</sup> canisters were closed tightly and relinquished under chain-of-custody to Torrent. The samples were analyzed by EPA method TO-15 using gas chromatography/mass spectrometry (GC/MS) in the Selective Ion Monitoring (SIM) acquisition mode.

### 4.2 Sub-Slab and Indoor Air Sampling Results

#### 4.2.1 Sub-Slab Vapor Sample Results

Laboratory analytical results for the sub-slab samples collected on June 12, 2013 are presented in Table 3. As shown on the table, the sub-slab VOC concentrations from the June 12 samples were significantly lower than the samples previously collected, and more consistent to expected concentrations based on historical data collected from the Sub-Slab 1 location.

Helium was detected below 5 percent in both samples, and the laboratory results were corrected using the same method described in Section 3.5.1.

Indoor air concentrations were estimated based on the soil gas results as done for the May subslab results, and are provided in Table 3. These estimates indicated that indoor air concentrations of benzene, ethyl benzene, carbon tetrachloride, TCE, and PCE might be above applicable ESLs.

#### 4.2.2 Indoor Air Sample Results

As described in Section 4.1.2, indoor air samples were collected from the building on Site on June 12, 2013. Laboratory analytical results for the indoor air samples are presented in Table 4, with full laboratory analytical reports presented in Appendix E.

As shown in Table 4, a variety of VOCs were detected in each of the indoor air samples, none of which exceed the industrial indoor air ESLs.

Specifically, the concentrations of the compounds that were calculated to potentially cause indoor air concentrations above their ESLs using the attenuation factor, benzene, ethyl benzene, carbon tetrachloride, TCE, and PCE, were all below the industrial ESLs.

### 5.0 DATA EVALUATION

Investigation activities at the Site were performed between April and June, 2013. These activities included the installation and sampling of three dual-nested soil gas points along the southern property line of the Site and two sub-slab vapor probes within the building. After inconsistent results from the first round of sampling, additional sub-slab vapor samples and indoor air samples were collected.

#### 5.1 Laboratory Data Investigation

The laboratory analytical results from the May and June sub-slab vapor sampling events are provided in Table 2 and Table 3, respectively. Examination of the data revealed similar detection patterns in both data sets, but large discrepancies in the concentrations reported by the lab. Because of this, SGI requested that Torrent open a quality control investigation into each of the sets of samples.

After a thorough investigation, Torrent determined that the May samples from the Sub-Slab 2 and Sub-Slab 3 locations had been improperly reported. Dilution factors of 50X were applied to both samples, when the samples were actually analyzed at no dilution. This error resulted in constituents being reported 50 times higher than they were actually detected. The sample collected from Sub-Slab 1 was not subject to the error and was reported correctly. Torrent provided a revised laboratory analytical report for the May sampling event, which is provided in Appendix E. The revised May data is tabulated in Table 6.

#### 5.2 Comparison to ESLs

The results of the soil gas, sub-slab soil vapor, and indoor air sampling were compared to the ESLs for commercial land use. The ESLs are based on the lowest chemical-specific value that would be expected to represent an adverse cancer or non-cancer health risk using conservative exposure limitations. The ESLs assume an unacceptable health risk to be an excess cancer risk over one in a million (10<sup>-6</sup>) or a non-cancer Hazard Index over 0.2 (CRWQCB, 2013). If detected VOC concentrations exceed the applicable commercial/industrial ESLs, site-specific health risk calculations are required to determine if the health risk for the existing users is unacceptable.

#### 5.2.1 Soil Gas Data

The analytical results from the May 2013 soil gas sampling event were compared to the applicable ESLs for shallow soil gas. None of the six samples, collected from soil gas wells SG-07, SG-08, and SG-09, were reported to contain any VOC above the applicable ESL.

#### 5.2.2 Sub-Slab Vapor Data

The corrected May and June 2013 sub-slab vapor results from points Sub-Slab 1, Sub-Slab 2, and Sub-Slab3 were used to estimate indoor air concentrations within the building. An attenuation

factor of 0.05 was used to estimate indoor air concentrations from sub-slab vapor measurements collected during the initial round of sampling. This data is presented in Table 3 and Table 6. The estimated indoor air concentrations were above the commercial/industrial ESLs for benzene, carbon tetrachloride, TCE, and PCE during one or both of the sampling events. However, the laboratory data from indoor air samples collected in June 2013 supersede the estimated concentrations for risk evaluation purposes.

#### 5.2.3 Indoor Air Data

Indoor air sample results from June 2013 were compared to the applicable commercial/industrial ESLs. As discussed in Section 4.2, none of the constituents detected in the indoor air samples exceeded the applicable commercial/industrial ESLs.

### 6.0 CONCLUSIONS AND RECOMMENDATIONS

This report documents the installation and sampling of soil gas points and sub-slab vapor probes, as well as indoor air sampling, performed to determine potential health risks associated with VOC contamination in the subsurface at the Site. The results of the investigation activities conducted at the Site in April, May, and June 2013 do not indicate that there is an unacceptable health risk to occupants of the building on Site or to occupants in downgradient commercial buildings.

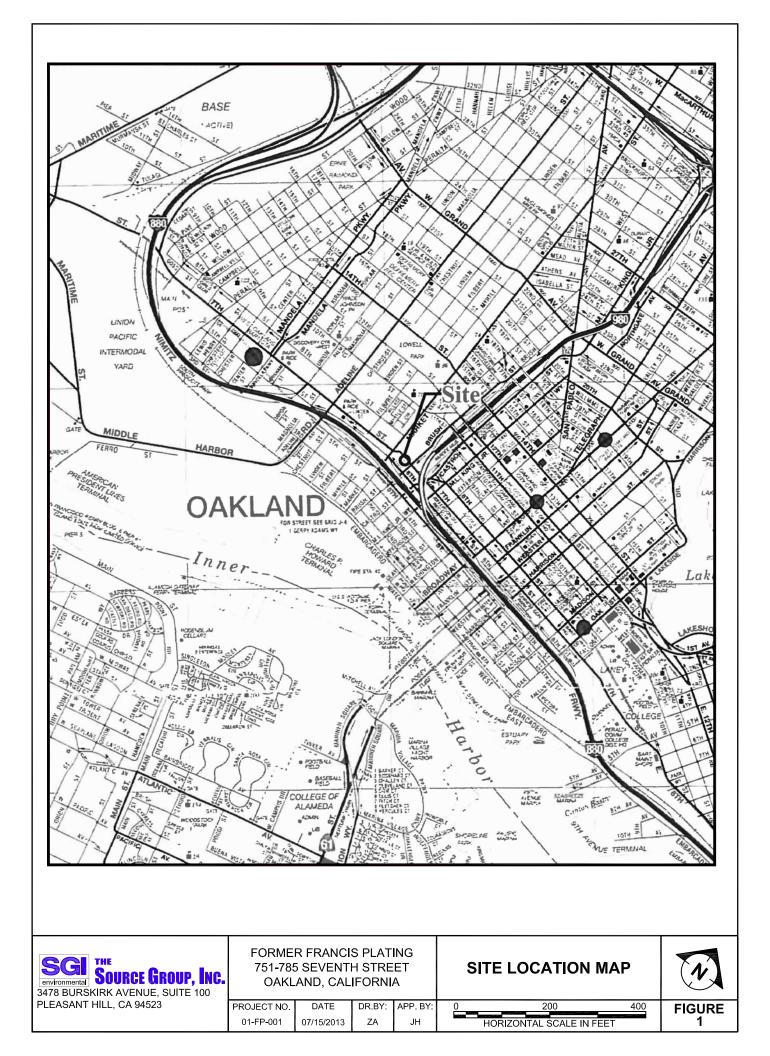
Soil gas points and indoor air samples did not contain any VOC concentrations above the applicable per Work Plan ESLs. As such, site-specific health risk calculations were not performed.

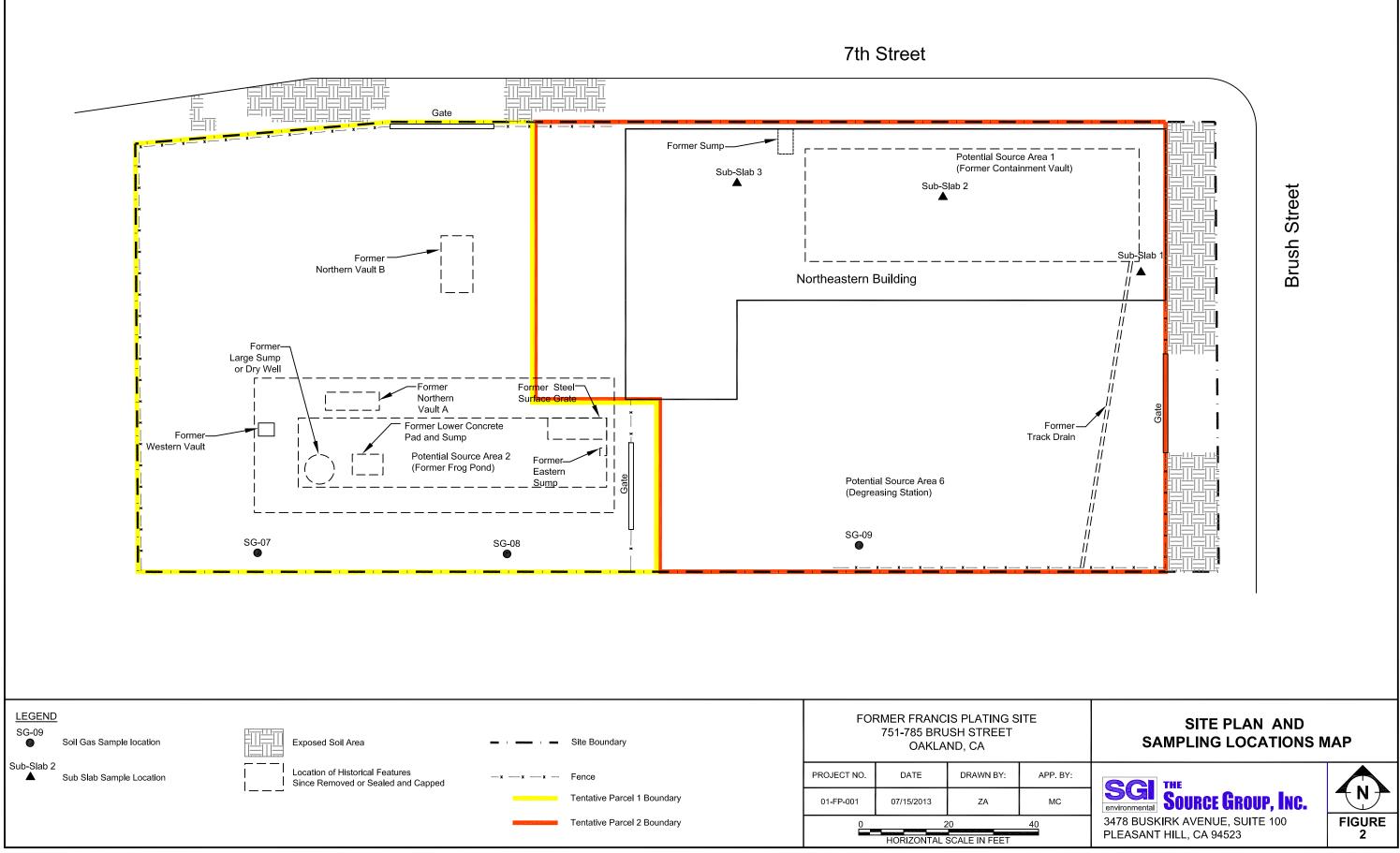
Based on the soil gas data and empirical indoor air data, soil vapor and indoor air concentrations do not exceed ESLs. SGI recommends preparing a simple risk management plan to ensure that the current cap on the Site remains in place and that any breach of the cap or exposure to residual contaminants in the soil are performed in a manner that does not expose users of the Site or construction workers to unacceptable health risks.

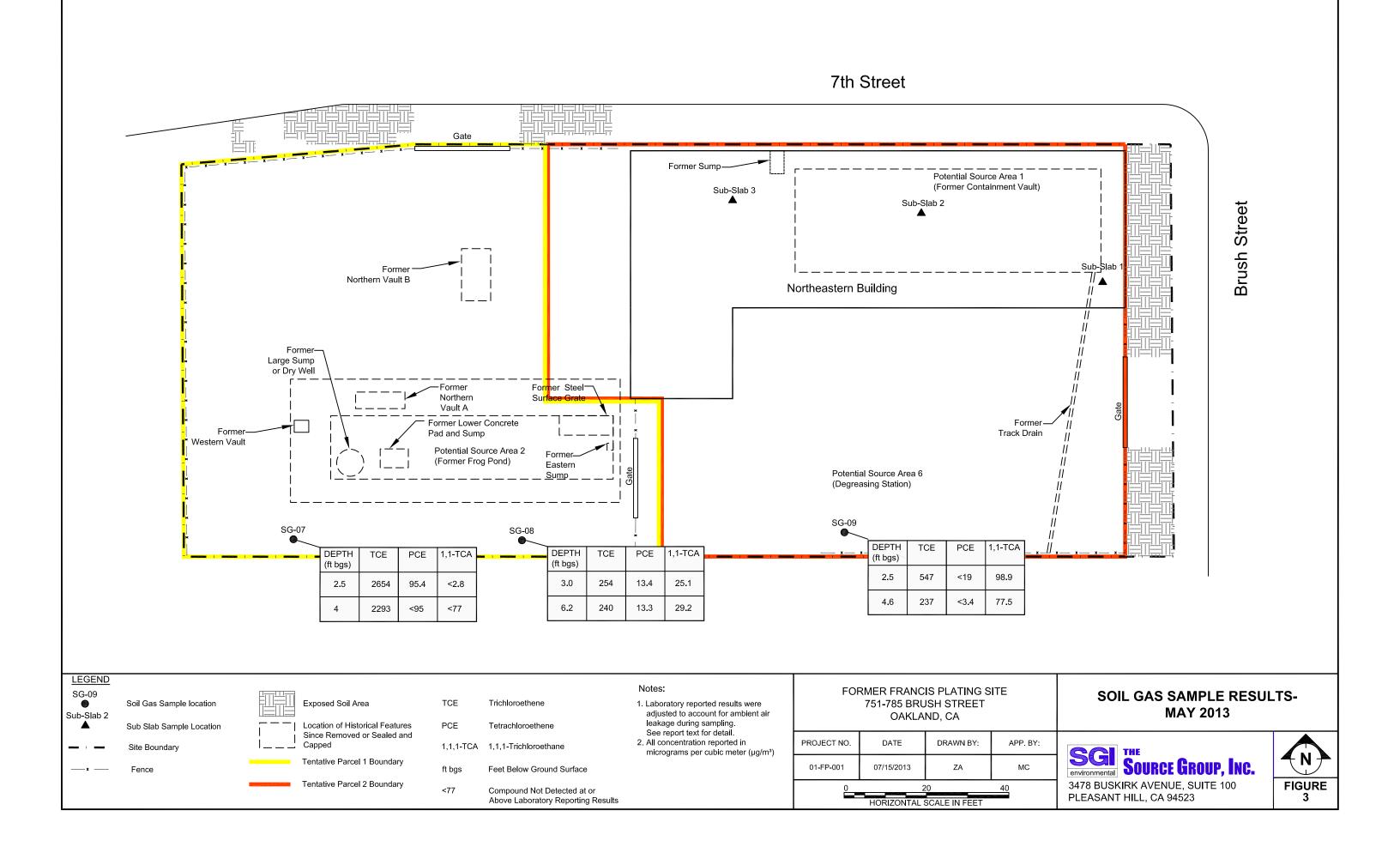
#### 7.0 REFERENCES

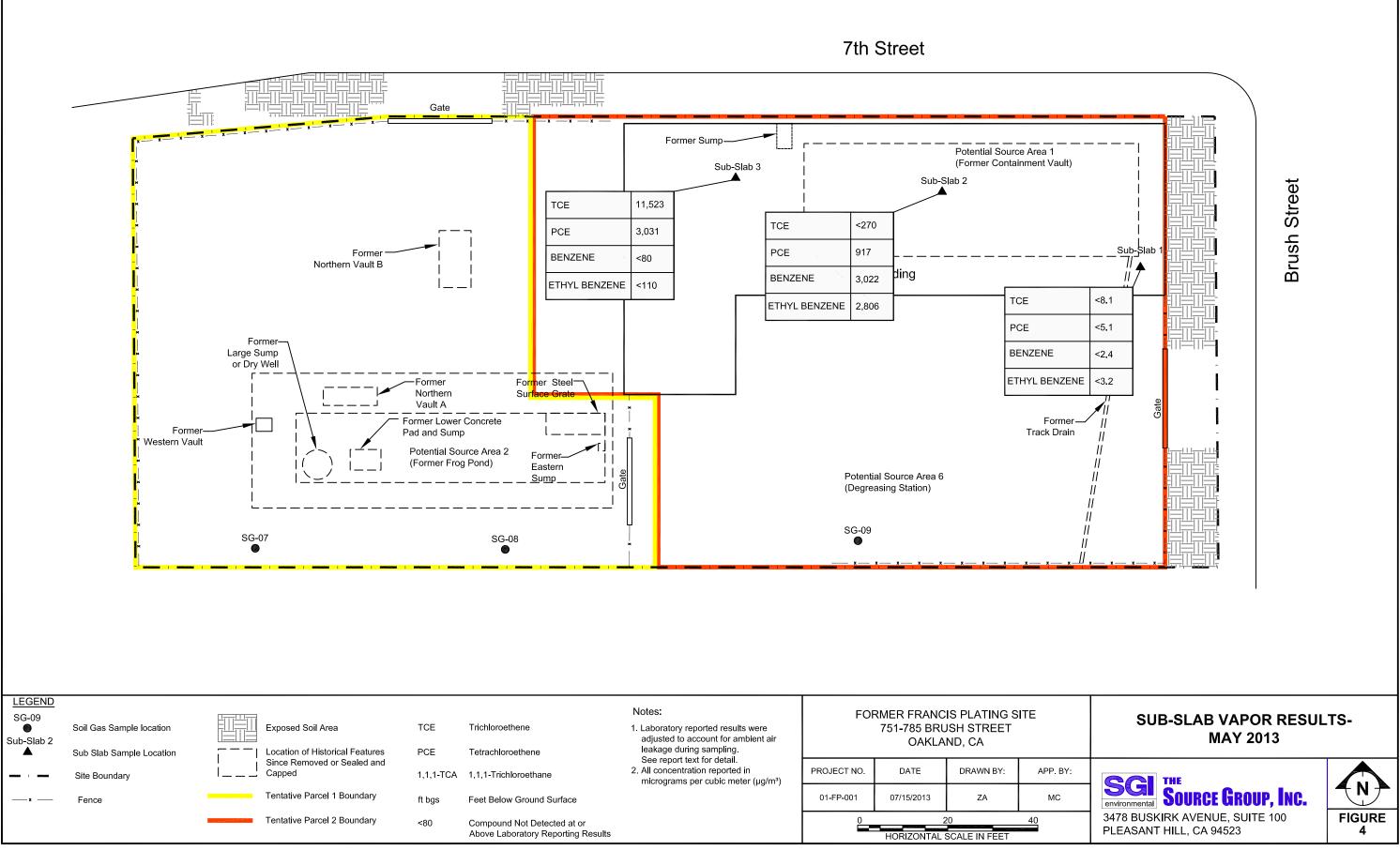
- BASELINE Environmental Consulting (BASELINE). 2012a. Soil Gas Survey, 751-785 Seventh Street, Oakland, California. 6 March.
- BASELINE. 2012b. Conceptual Site Model and Work Plan for Sub-Slab Vapor Investigation. June.
- BASELINE. 2012c. Revised Work Plan for Soil Gas and Sub-Slab Vapor Investigations. September
- California Regional Water Quality Control Board (CRWQCB), San Francisco Bay Area Region. 2013. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Summary Table E. February.
- Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board. 2012. Advisory – Active Soil Gas Investigations. April.
- DTSC. 2011. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. October.
- P&D Environmental (P&D). 2009. Subsurface Investigation Report, 601 Brush Street. 12 November.
- Regional Water Quality Control Board San Francisco Bay Region (SFRWQCB). 2007. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final. November. Revised May 2008.

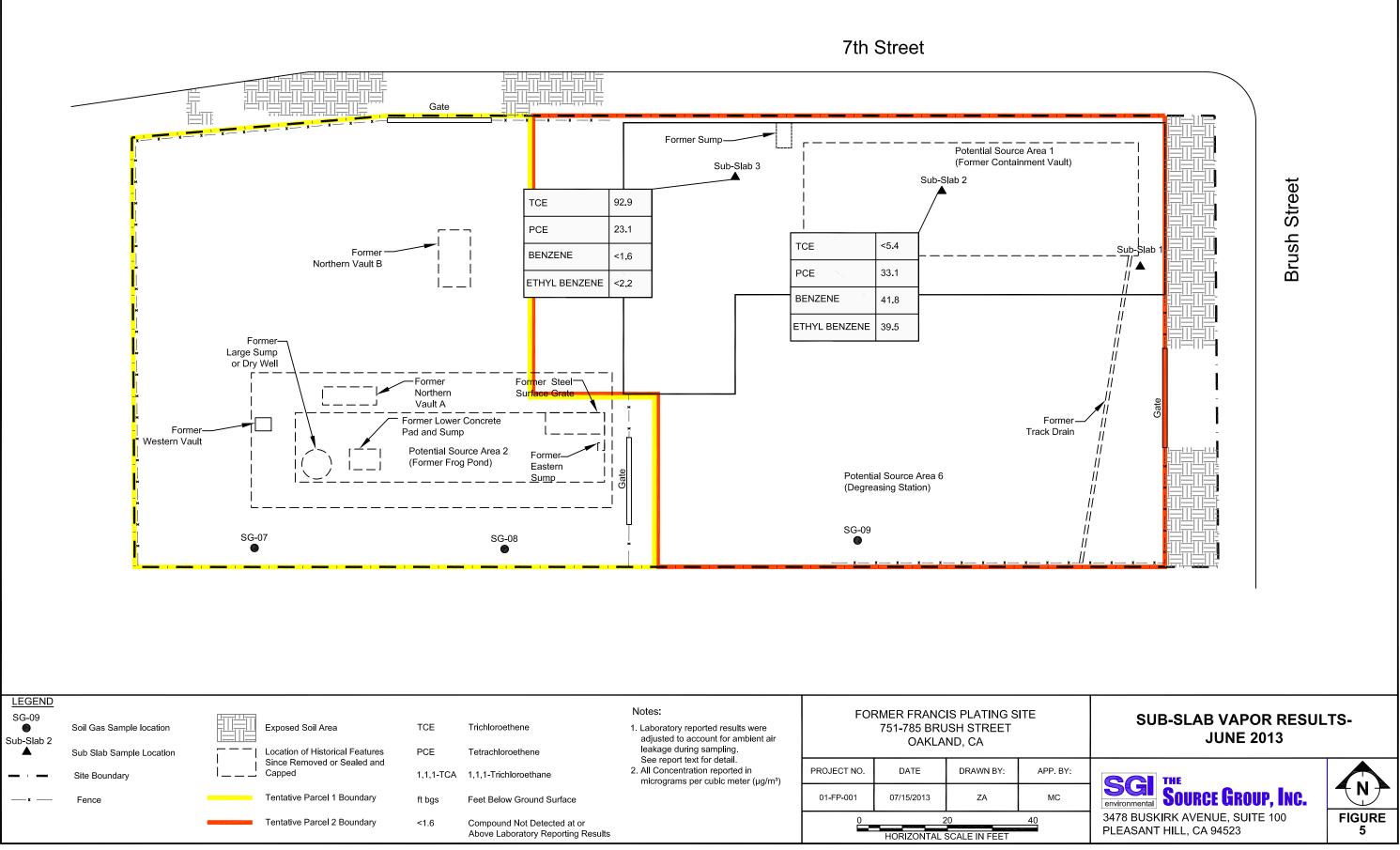
FIGURES

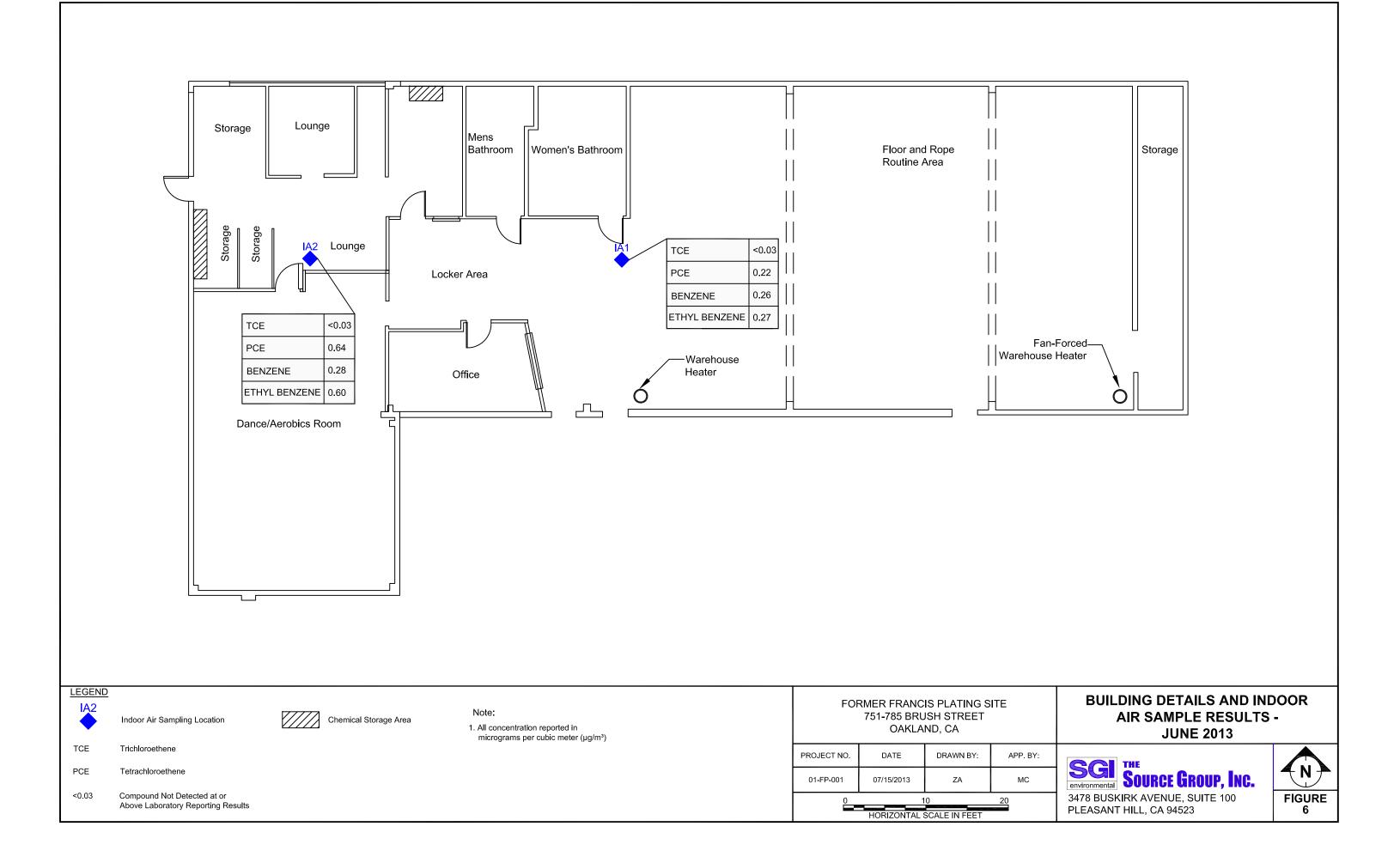


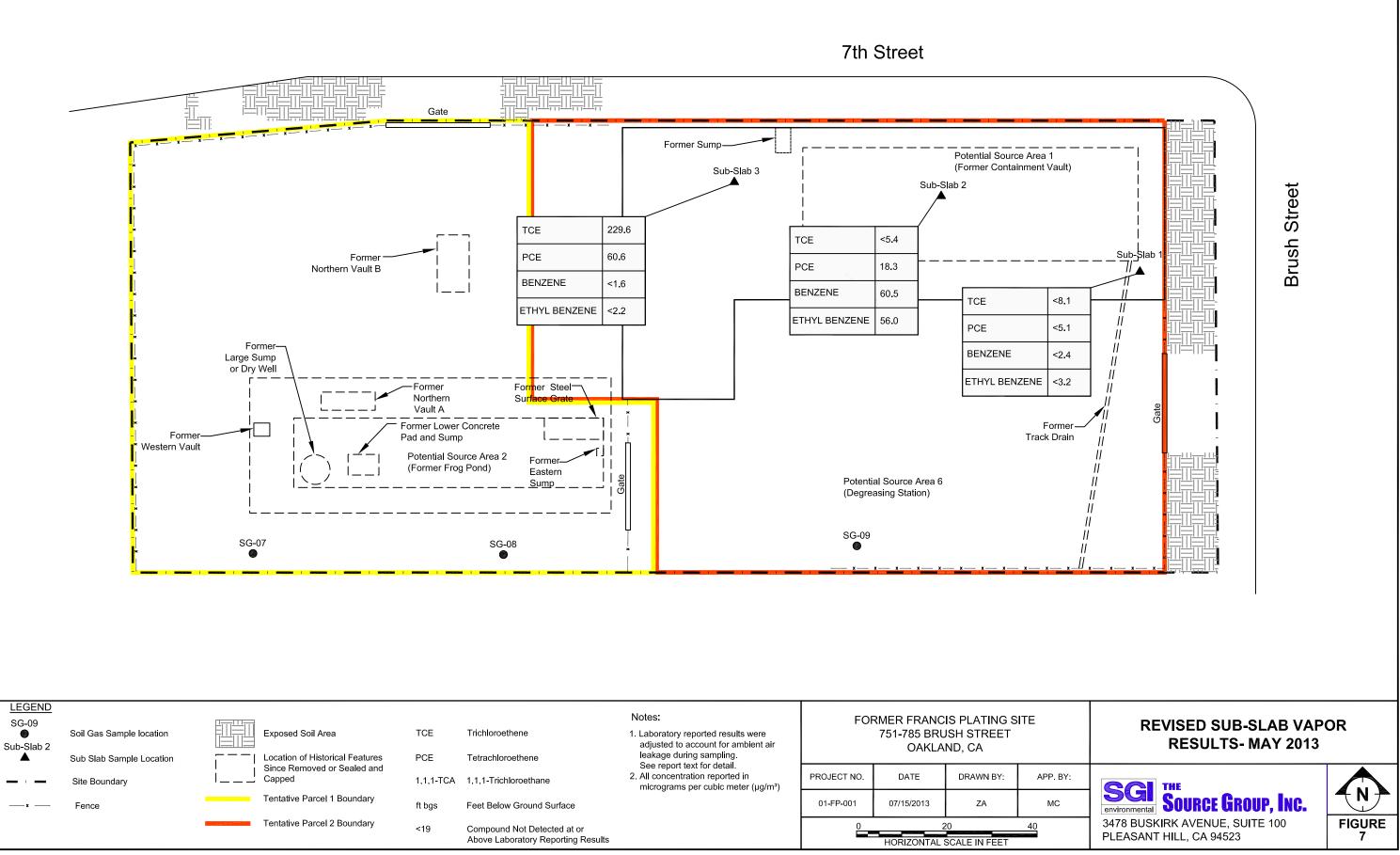












TABLES

# Table 1Soil Gas Sample Results - May 2013Former Francis Plating785 7th St., Oakland, California

		SV-07-4.0	SV-08-3.0	SV-08-6.2	SV-09-2.5		Soil Gas ESLs <sup>1</sup>		
Analyte	SV-07-2.5 <sup>2</sup>					SV-09-4.6	Residential Land Use	Industrial Land Use	
			As-Reported	Results					
Carbon Disulfide	< 3.1	< 87	< 3.1	11.9	< 17	< 3.1	NA	NA	
Benzene	< 1.6	< 45	< 1.6	4.87	< 8.8	< 1.6	42	420	
1,1,1-Trichloroethane (1,1,1-TCA)	< 2.8	< 77	22.5	25.5	86.5	70.1	2,600,000	22,000,000	
Trichloroethylene (TCE)	2030	2160	228	209	479	214	300	3000	
Tetrachloroethylene (PCE)	73.0	< 95	12.0	11.6	< 19	< 3.4	210	2100	
			Adjusted R	esults <sup>3</sup>					
Carbon Disulfide	< 3.1	< 87	< 3.1	13.6	< 17	< 3.1	NA	NA	
Benzene	< 1.6	< 45	< 1.6	5.6	< 8.8	< 1.6	42	420	
1,1,1-Trichloroethane (1,1,1-TCA)	< 2.8	< 77	25.1	29.2	98.9	77.5	2,600,000	22,000,000	
Trichloroethylene (TCE)	2654	2293	254	240	547	237	300	3000	
Tetrachloroethylene (PCE)	95.4	< 95	13.4	13.3	< 19	< 3.4	210	2100	

Notes:

All results given in micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>)

Values reported above the laboratory reporting limits are shown in **bold** 

Note 1 = California Regional Water Quality Control Board, San Francisco Bay Area Region, February 2013, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Summary Table E.

Note 2 = Helium was found in sample SV-07-2.5 above the 5 percent deemed acceptable by the Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board, April 2012, *Advisory Active Soil Gas Investigations.* As such, all adjusted VOC results are biased low.

Note 3 = Laboratory-reported results were adjusted to account for ambient air leakage using the dilution factors (DF) calculated in Table 5. The as-reported results were multiplied by (1 + DF) to calculate the adjusted result.

Gas Investigations. As such, all adjusted VOC results are biased low.

ESLs = Environmental Screening Levels

VOC = Volatile Organic Compounds

### Table 2Sub-Slab Vapor Results - May 2013Former Francis Plating785 7th St., Oakland, California

	Sub-Slab Sa	ample Results -	As-Reported	Sub-Slab S	Sample Results	- Adjusted <sup>1</sup>	Estimated	Indoor Air Conc	entrations <sup>2</sup>	Indoor Air ESL <sup>3</sup>	
Analyte	Sub-Slab1	Sub-Slab2	Sub-Slab3 <sup>4</sup>	Sub-Slab1	Sub-Slab2	Sub-Slab3 <sup>4</sup>	Sub-Slab1	Sub-Slab2	Sub-Slab3 <sup>4</sup>	Residential Ambient and Indoor Air	Industrial Ambient and Indoor Air
1,1-Dichloroethene	< 3.0	2200	< 100	< 2.0	2374	< 68	< 0.1	118.72	< 3.4	210	880
Acetone	5.22	1810	< 960	6.27	1954	< 960	0.31	97.68	< 48.0	32000	140000
Hexane	< 2.6	7630	< 88	< 2.6	8235	< 88	< 0.1	411.76	< 4.4	NA	NA
tert-Butanol	< 13	2560	< 420	< 13	2763	< 420	< 0.7	138.15	< 21.0	NA	NA
Carbon Tetrachloride	< 4.7	554	< 160	< 4.7	598	< 160	< 0.2	29.90	< 8.0	0.058	0.29
1,1,1-Trichloroethane	< 4.1	4200	4750	< 4.1	4533	10587	< 0.2	226.66	529.34	5200	22000
2-Butanone (MEK)	1.17	< 75	84.0	1.41	< 75	187	0.07	< 4	9.36	5200	22000
Ethyl Acetate	1.40	< 90	101	1.68	< 90	225	0.08	< 5	11.26	NA	NA
Benzene	< 2.4	2800	< 80	< 2.4	3022	< 80	< 0.1	151.10	< 4.0	0.084	0.42
Trichloroethylene	< 8.1	< 270	5170	< 8.1	< 270	11523	< 0.4	< 14	576.15	0.59	3.0
Toluene	< 2.9	2930	< 95	< 2.9	3162	< 95	< 0.1	158.12	< 4.8	310	1300
Tetrachloroethylene	< 5.1	850	1360	< 5.1	917	3031	< 0.3	45.87	151.56	0.41	2.1
Ethyl Benzene	< 3.2	2600	< 110	< 3.2	2806	< 110	< 0.2	140.31	< 5.5	0.97	4.9
m,p-Xylene	< 6.5	611	< 220	< 6.5	659	< 220	< 0.3	32.97	< 11.0	100 <sup>5</sup>	440 <sup>5</sup>
o-Xylene	< 3.2	5250	< 110	< 3.2	5666	< 110	< 0.2	283.32	< 5.5	100 <sup>5</sup>	440 <sup>5</sup>
Styrene	< 3.3	205	< 110	< 3.3	221	< 110	< 0.2	11.06	< 5.5	940	3900
4-Ethyl Toluene	< 3.7	3960	191	< 3.7	4274	426	< 0.2	213.70	21.29	NA	NA
1,3,5-Trimethylbenzene	< 3.7	7580	466	< 3.7	8181	1039	< 0.2	409.06	51.93	NA	NA
1,2,4-Trimethylbenzene	< 3.7	2000	162	< 3.7	2159	361	< 0.2	107.93	18.05	NA	NA

#### Notes:

All results given in micrograms per cubic meter (µg/m<sup>3</sup>)

Values reported above the laboratory reporting limits are shown in **bold** 

Note 1 = Laboratory-reported results were adjusted to account for ambient air leakage using the dilution factors (DF) calculated in Table 5. The

as-reported results were multiplied by (1 + DF) to calculate the adjusted result.

Gas Investigations. As such, all adjusted VOC results are biased low.

Note 2 = Results multiplied by 0.05 attenuation factor as recommended by the Cal/EPA Department of Toxic Substances Control.

Note 3 = California Regional Water Quality Control Board, San Francisco Bay Area Region, February 2013, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Summary Table E.

Note 4 = Helium was found in sample Sub-Slab3 above the 5 percent deemed acceptable by the Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board, April 2012, Advisory Active Soil Gas Investigations. As such, all adjusted VOC results are biased low.

Note 5 = Based on ESL for total xylenes

ESLs = Environmental Screening Levels

## Table 3Sub-Slab Vapor Results - June 2013Former Francis Plating785 7th St., Oakland, California

	Sub-Slab Sample R	esults - As-Reported	Sub-Slab Sample	Results - Adjusted <sup>1</sup>	Estimated Indoor	Air Concentration <sup>2</sup>	Indoor Air ESL <sup>3</sup>		
Analyte	Sub-Slab 2	Sub-Slab 3	Sub-Slab 2	Sub-Slab 3	Sub-Slab 2	Sub-Slab 3	Residential Ambient and Indoor Air	Industrial Ambient and Indoor Air	
1,1-Dichloroethene	25.6	< 2.0	29.7	< 1.4	1.28	< 0.1	210	880	
Acetone	< 19	< 19	< 19	< 19	0.95	< 1.0	32000	140000	
Hexane	106	< 1.8	123	< 1.8	5.3	< 0.1	NA	NA	
tert-Butanol	< 8.4	< 8.4	< 8.4	< 8.4	0.42	< 0.4	NA	NA	
Carbon Tetrachloride	< 3.2	< 3.2	< 3.2	< 3.2	< 0.2	< 0.2	0.058	0.29	
1,1,1-Trichloroethane	35.7	57.1	41.4	68.6	1.785	2.855	5200	22000	
2-Butanone (MEK)	< 1.5	< 1.5	< 1.8	< 1.5	< 0.1	0.1	5200	22000	
Ethyl Acetate	< 1.8	< 1.8	< 1.5	< 1.8	< 0.1	0.09	NA	NA	
Benzene	36.1	< 1.6	41.8	< 1.6	1.805	< 0.1	0.084	0.42	
Trichloroethylene	< 5.4	77.3	< 5.4	92.9	< 0.3	3.865	0.59	3.0	
Toluene	41.5	< 1.9	48.1	< 1.9	2.075	< 0.1	310	1300	
Tetrachloroethylene	28.6	19.2	33.1	23.1	1.43	0.96	0.41	2.1	
Ethyl Benzene	34.1	< 2.2	39.5	< 2.2	1.705	< 0.1	0.97	4.9	
m,p-Xylene	7.48	< 4.3	8.67	< 4.3	0.374	< 0.2	100 <sup>4</sup>	440 <sup>4</sup>	
o-Xylene	68.1	< 2.2	78.9	< 2.2	3.405	< 0.1	100 <sup>4</sup>	440 <sup>4</sup>	
Styrene	< 2.2	< 2.2	< 2.2	< 2.2	0.11	< 0.1	940	3900	
4-Ethyl Toluene	45.4	4.36	52.6	5.24	2.27	0.218	NA	NA	
1,3,5-Trimethylbenzene	80.2	11.8	93.0	14.2	4.01	0.59	NA	NA	
1,2,4-Trimethylbenzene	18.6	4.17	21.6	5.01	0.93	0.2085	NA	NA	

#### Notes:

All results given in micrograms per cubic meter (µg/m<sup>3</sup>)

Values reported above the laboratory reporting limits are shown in **bold** 

Note 1 = Laboratory-reported results were adjusted to account for ambient air leakage using the dilution factors (DF) calculated in Table 5. The

as-reported results were multiplied by (1 + DF) to calculate the adjusted result.

Gas Investigations. As such, all adjusted VOC results are biased low.

Note 2 = Results multiplied by 0.05 attenuation factor as recommended by the Cal/EPA Department of Toxic Substances Control.

Note 3 = California Regional Water Quality Control Board, San Francisco Bay Area Region, February 2013, Screening for Environmental Concerns

at Sites with Contaminated Soil and Groundwater, Summary Table E.

Note 4 = Based on ESL for total xylenes

ESLs = Environmental Screening Levels

# Table 4Indoor Air Sampling Results - June 2013Former Francis Plating785 7th St., Oakland, California

	Indoor Air C	oncentration	Indoor Air ESL <sup>2</sup>			
Analyte	Location 1 (IA1)	Location 2 (IA2)	Residential Ambient and Indoor Air	Industrial Ambient and Indoor Air		
1,1-Dichloroethene	< 0.02	< 0.02	210	880		
Acetone	20 E	46 E	32000	140000		
Hexane	< 0.02	< 0.02	NA	NA		
tert-Butanol	1.1	1.1	NA	NA		
Carbon Tetrachloride	< 0.03	< 0.03	0.058	0.29		
1,1,1-Trichloroethane	< 0.03	< 0.03	5200	22000		
2-Butanone (MEK)	< 0.02	< 0.02	5200	22000		
Ethyl Acetate	< 0.02	< 0.02	NA	NA		
Benzene	0.26	0.28	0.084	0.42		
Trichloroethylene	< 0.03	< 0.03	0.59	3.0		
Toluene	0.95	1.9	310	1300		
Tetrachloroethylene	0.22	0.64	0.41	2.1		
Ethyl Benzene	0.27	0.60	0.97	4.9		
m,p-Xylene	0.99	2.20	100 <sup>3</sup>	440 <sup>3</sup>		
o-Xylene	0.34	0.65	100 <sup>3</sup>	440 <sup>3</sup>		
Styrene	0.25	0.56	940	3900		
4-Ethyl Toluene	< 0.02	< 0.02	NA	NA		
1,3,5-Trimethylbenzene	0.11	0.16	NA	NA		
1,2,4-Trimethylbenzene	0.32	0.44	NA	NA		

#### Notes:

All results given in micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>)

Values reported above the laboratory reporting limits are shown in **bold** 

Note 1 = Results multiplied by 0.05 attenuation factor as recommended by the Cal/EPA Department of Toxic Substances Control.

Note 2 = California Regional Water Quality Control Board, San Francisco Bay Area Region, February 2013, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Summary Table E.

Note 3 = Based on ESL for total xylenes

E = Estimated value due to being outside of calibration range.

ESLs = Environmental Screening Levels

# Table 5Helium Results and Dilution Factor CalculationsFormer Francis Plating785 7th St., Oakland, California

	Helium in Sample (%)	Average Helium Under Shroud (%)	Dilution Factor (DF) <sup>1</sup>								
	May 1, 2013 Soil Gas Samples										
SV-07-2.5 <sup>2</sup>	<b>SV-07-2.5<sup>2</sup></b> 6.3 20.5 0.307										
SV-07-4.0	1.2	19.5	0.062								
SV-08-3.0	2.7	23.6	0.114								
SV-08-6.2	2.8	19.1	0.147								
SV-09-2.5	2.5	17.5	0.143								
SV-09-4.6	2.2	20.8	0.106								
	May 8, 2013 Sub-Sla	b Soil Vapor Samples <sup>3</sup>									
Sub-Slab 1	4.0	19.9	0.20								
Sub-Slab 2	2.3	29.0	0.08								
Sub-Slab 3 <sup>2</sup>	29	23.6	1.23								
	June 12, 2013 Sub-Slab Soil Vapor Samples										
Sub-Slab 2	3.0	18.9	0.16								
Sub-Slab 3	4.0	19.86	0.20								

Notes:

Note 1 = Dilution factor is calculated by dividing the helium concentration detected in the sample by the average helium concentration under the shroud during sampling

Note 2 = Helium was detected above the 5 percent deemed acceptable by the Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board, April 2012, *Advisory Active Soil Gas Investigations*. VOC results for these samples are adjusted using the calculated dilution factor are reported as "biased low".

Note 3 = Helium concentrations were the same in both the original and corrected laboratory analytical reports. The calculated dilution factors were applied to each.

### Table 6Revised Sub-Slab Vapor Results - May 2013Former Francis Plating785 7th St., Oakland, California

	Sub-Slab Sa	mple Results - A	As-Reported	Sub-Slab S	Sample Results	- Adjusted <sup>1</sup>	Estimated	Indoor Air Conc	entrations <sup>2</sup>	Indoor	Indoor Air ESL <sup>3</sup>	
Analyte	Sub-Slab1	Sub-Slab2	Sub-Slab3	Sub-Slab1	Sub-Slab2	Sub-Slab3	Sub-Slab1	Sub-Slab2	Sub-Slab3	Residential Ambient and Indoor Air	Industrial Ambient and Indoor Air	
1,1-Dichloroethene	< 3.0	44.0	< 2.0	< 2.0	47.5	< 2.0	< 0.1	2.37	< 0.1	210	880	
Acetone	5.22	36.2	< 19	6.27	39.1	< 19	0.31	1.95	< 1.0	32000	140000	
Hexane	< 2.6	153	< 1.8	< 2.6	165.1	< 1.8	< 0.1	8.26	< 0.1	NA	NA	
tert-Butanol	< 13	51.2	< 8.4	< 13	55.3	< 8.4	< 1	2.76	< 0.4	NA	NA	
Carbon Tetrachloride	< 4.7	11.1	< 3.2	< 4.7	12.0	< 3.2	< 0.2	0.60	< 0.2	0.058	0.29	
1,1,1-Trichloroethane	< 4.1	84.1	94.9	< 4.1	90.8	211.5	< 0.2	4.54	10.58	5200	22000	
2-Butanone (MEK)	1.17	< 1.5	1.68	1.41	< 1.5	3.74	0.07	< 0	0.19	5200	22000	
Ethyl Acetate	1.40	< 1.8	2.02	1.68	< 1.8	4.50	0.08	< 0	0.23	NA	NA	
Benzene	< 2.4	56.1	< 1.6	< 2.4	60.5	< 1.6	< 0.1	3.03	< 0.1	0.084	0.42	
Trichloroethylene	< 8.1	< 5.4	103	< 8.1	< 5.4	229.6	< 0.4	< 0	11.48	0.59	3.0	
Toluene	< 2.9	58.6	< 1.9	< 2.9	63.2	< 1.9	< 0.1	3.16	< 0.1	310	1300	
Tetrachloroethylene	< 5.1	17.0	27.2	< 5.1	18.3	60.6	< 0.3	0.92	3.03	0.41	2.1	
Ethyl Benzene	< 3.2	51.9	< 2.2	< 3.2	56.0	< 2.2	< 0.2	2.80	< 0.1	0.97	4.9	
m,p-Xylene	< 6.5	12.2	< 4.3	< 6.5	13.2	< 4.3	< 0.3	0.66	< 0.2	100 <sup>4</sup>	440 <sup>4</sup>	
o-Xylene	< 3.2	105	< 2.2	< 3.2	113.3	< 2.2	< 0.2	5.67	< 0.1	100 <sup>4</sup>	440 <sup>4</sup>	
Styrene	< 3.3	4.09	< 2.2	< 3.3	4.4	< 2.2	< 0.2	0.22	< 0.1	940	3900	
4-Ethyl Toluene	< 3.7	79.2	3.82	< 3.7	85.5	8.51	< 0.2	4.27	0.43	NA	NA	
1,3,5-Trimethylbenzene	< 3.7	152	9.31	< 3.7	164.1	20.8	< 0.2	8.20	1.04	NA	NA	
1,2,4-Trimethylbenzene	< 3.7	40.0	3.23	< 3.7	43.2	7.20	< 0.2	2.16	0.36	NA	NA	

#### Notes:

All results given in micrograms per cubic meter (µg/m<sup>3</sup>)

Values reported above the laboratory reporting limits are shown in **bold** 

Note 1 = Laboratory-reported results were adjusted to account for ambient air leakage using the dilution factors (DF) calculated in Table 5. The

as-reported results were multiplied by (1 + DF) to calculate the adjusted result.

Gas Investigations. As such, all adjusted VOC results are biased low.

Note 2 = Results multiplied by 0.05 attenuation factor as recommended by the Cal/EPA Department of Toxic Substances Control.

Note 3 = California Regional Water Quality Control Board, San Francisco Bay Area Region, February 2013, Screening for Environmental Concerns

at Sites with Contaminated Soil and Groundwater, Summary Table E.

Note 4 = Based on ESL for total xylenes

ESLs = Environmental Screening Levels

APPENDIX A

CORRESPONDENCE WITH ALAMEDA COUNTY ENVIRONMENTAL HEALTH

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

ALEX BRISCOE, Director



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

November 8, 2012

Mr. Tom McCoy 94612 (Sent via E-mail to: <u>tmccoy@bbiconstruction.com</u>) Brush Street Group, LLC 1155 3<sup>rd</sup> Street, Suite 230 Oakland, CA 94607

Subject: Conditional Work Plan Approval for SLIC Case RO0002586 and GeoTracker Global ID SL0600130797, Francis Plating, 751-785 7<sup>th</sup> Street, Oakland, CA 94607

Dear Mr. McCoy:

Alameda County Environmental Health (ACEH) staff has reviewed the Spills, Leaks, Investigation, and Cleanup (SLIC) case file for the above referenced site including the recently submitted document entitled, "*Revised Work Plan for Soil Gas and Sub-Slab Vapor Investigations, 751-785 Seventh Street, Oakland, California,*" dated September 21, 2012 and received by ACEH on October 11, 2012 (Revised Work Plan). The Revised Work Plan, which was prepared on your behalf by Baseline Environmental Consulting, presents plans for soil vapor sampling. The plans were revised in

The proposed scope of work is conditionally approved and may be implemented provided that the technical comments below are addressed and incorporated during the proposed activities. Submittal of a revised Work Plan or Work Plan Addendum is not required unless an alternate scope of work outside that described in the Work Plan and technical comment below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

Although this proposed scope of work is acceptable for implementation, the proposed scope of work represents a phased investigation approach that addresses some but not all remaining issues for the site. As previously discussed in both meetings and correspondence, several data gaps remain and remedial activities have not been initiated

#### TECHNICAL COMMENTS

- 1. **Soil Vapor Sample Locations.** We request that proposed soil vapor sample location SG-07 be moved approximately 10 feet east of the proposed location in order for the sampling location to be located between the likely source and the off-site building.
- Additional Soil Vapor Sampling. The Work Plan proposes soil vapor sampling at three locations without provisions for step-out sampling if elevated concentrations of chemicals of concern are detected. Please note that, contingent upon soil vapor sampling results from the six proposed locations, additional soil vapor sampling may be necessary during a future phase of investigation.

Mr. Tom McCoy RO0002586 November 8, 2012 Page 2

3. **Existing Sub-Slab Vapor Probe.** We request that existing probe Sub-Slab 1 be sampled coincident with sampling of the proposed additional sub-slab vapor probes Sub-Slab 2 and Sub-Slab 3. Please present the results in the Soil Vapor and Sub-Slab Vapor Investigation Report requested below.

#### TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

• April 30, 2013 – Soil Vapor and Sub-Slab Vapor Investigation Report File to be named: SWI\_R\_yyyy-mm-dd RO2586

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at <u>jerry.wickham@acgov.org</u>. Online case files are available for review at the following website: <u>http://www.acgov.org/aceh/index.htm</u>.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

- Attachment: Responsible Party(ies) Legal Requirements/Obligations
- Enclosure: ACEH Electronic Report Upload (ftp) Instructions
- cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (Sent via E-mail to: lgriffin@oaklandnet.com)

Margot Lederer Prado, City of Oakland Economic Development Division, Brownfields Management, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612 (*Sent via E-mail* to: <u>MPrado@oaklandnet.com</u>)

Jim McCarty, Baseline Environmental Consulting, 5900 Hollis Street, Suite D, Emeryville, CA 94608 (Sent via E-mail to: <u>jim@baseline-env.com</u>)

Mr. Tom McCoy RO0002586 November 8, 2012 Page 3

> Markus Niebanck, Amicus, 580 Second Street, Suite 260, Oakland, CA 94607 (Sent via Email to: <u>markus@amicusenv.com</u>)

Donna Drogos, ACEH (Sent via E-mail to: <u>donna.drogos@acgov.org</u>) Jerry Wickham, ACEH (Sent via E-mail to: <u>jerry.wickham@acgov.org</u>)

GeoTracker, eFile

#### Attachment 1

#### **Responsible Party(ies) Legal Requirements/Obligations**

#### **REPORT/DATA REQUESTS**

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water\_issues/programs/ust/electronic\_submittal/)

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup	REVISION DATE: July 25, 2012
Oversight Programs	ISSUE DATE: July 5, 2005
(LOP and SCP)	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### REQUIREMENTS

- Please <u>do not</u> submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a single Portable Document Format (PDF) with no password protection.
- It is preferable that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- <u>Do not</u> password protect the document. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password.
   Documents with password protection <u>will not</u> be accepted.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### **Submission Instructions**

- 1) Obtain User Name and Password
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.

i) Send an e-mail to <u>loptoxic@acgov.org</u>

b) In the subject line of your request, be sure to include "ftp PASSWORD REQUEST" and in the body of your request, include the Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.

#### 2) Upload Files to the ftp Site

- a) Using Internet Explorer (IE4+), go to ://alcoftp1.acgov.org
  - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
- b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
- c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
- d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
- e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to <u>.loptoxic@acgov.org</u> notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
  - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX B

PERMITS

#### Alameda County Public Works Agency - Water Resources Well Permit

PUBLIC	399 Elmhurst Street Hayward, CA 94544-139 Telephone: (510)670-6633 Fax:(5			
Application Approved	l on: 03/18/2013 By jamesy	Permits Vali	Permit Numbers: W2 d from 03/26/2013 to 03	
Application Id:	1363116668934	City of Pro	ject Site:Oakland	
Site Location: Project Start Date: Assigned Inspector:	751-785 7th St, Oakland CA 03/26/2013 Contact Steve Miller at (510) 670-5517 or steve		ion Date:03/29/2013	
Applicant:	The Source Group, Inc Mary Cunningham	04500	Phone: 925-951-6387	
Property Owner:	3478 Buskirk Ave, Suite 100, Pleasant Hill, CA Tom McCoy Brush Street Group LLC	94523	Phone:	
Client:	1155 3rd St Suite 230, Oakland, CA 94607 ** same as Property Owner **			
	Receipt Number: WR2013-0101	Total Due: Total Amount	Paid:	\$265.00 \$265.00

Receipt Number: WR2013-0101	Total Amount Paid:	\$265.00
Payer Name : The Source Group, Inc.	Paid By: CHECK	PAID IN FULL

#### Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 5 Wells Driller: Vironex, Inc. - Lic #: 705927 - Method: other

#### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013- 0210	03/18/2013	06/24/2013	SG-07	4.50 in.	4.50 in.	3.00 ft	9.00 ft
W2013- 0210	03/18/2013	06/24/2013	SG-08	4.50 in.	4.50 in.	3.00 ft	9.00 ft
W2013- 0210	03/18/2013	06/24/2013	SG-09	4.50 in.	4.50 in.	3.00 ft	9.00 ft
W2013- 0210	03/18/2013	06/24/2013	Sub-Slab2	1.00 in.	1.00 in.	0.50 ft	0.75 ft
W2013- 0210	03/18/2013	06/24/2013	Sub-Slab3	1.00 in.	1.00 in.	0.50 ft	0.75 ft

#### **Specific Work Permit Conditions**

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

Work Total: \$265.00

#### Alameda County Public Works Agency - Water Resources Well Permit

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

7. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

8. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

APPENDIX C

**BORING LOGS** 

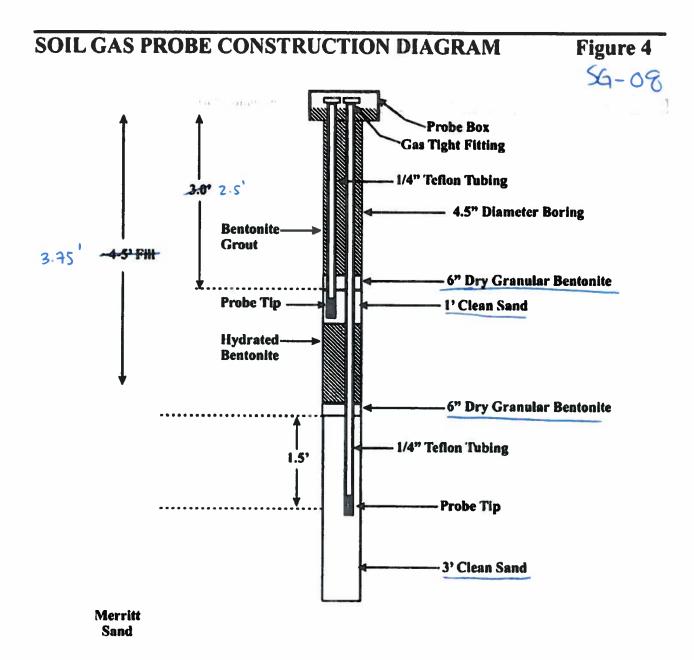
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# CONFIDENTIAL

## STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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785 Seventh Street Oakland, California

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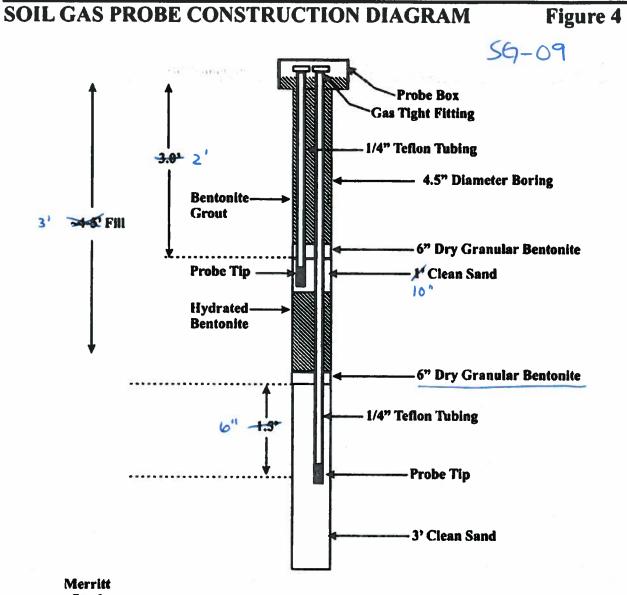
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785 Seventh Street Oakland, California

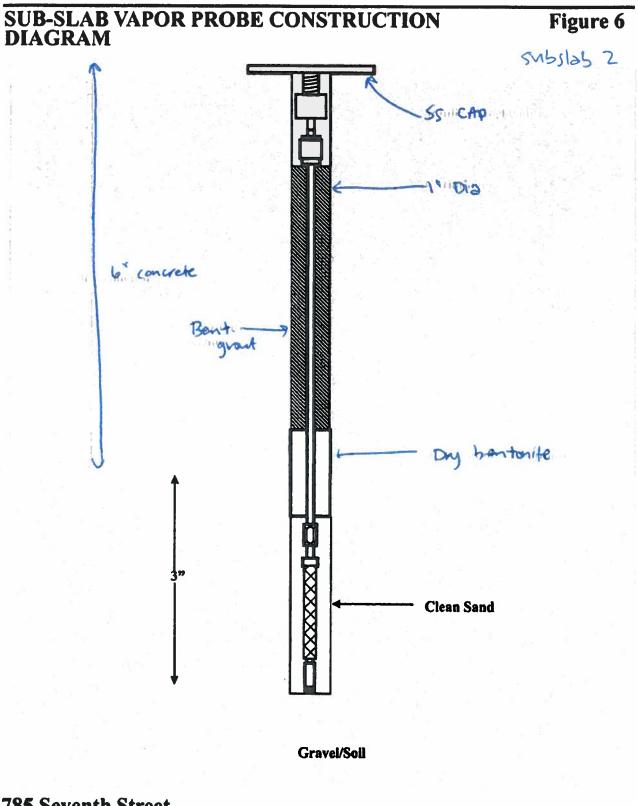
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# CONFIDENTIAL

## STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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#### 785 Seventh Street Oakland, California

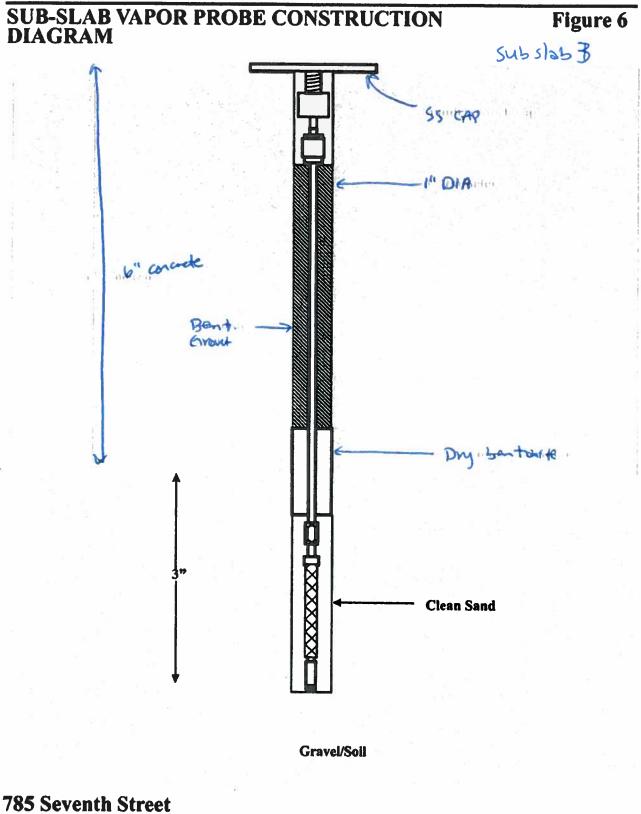
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## STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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Oakland, California Y0323-05.01944.Fig6.cdr 09/21/12

BASELINE

#### DAILY FIELD RECORD

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SGI THE SOURCE GROUP, INC.

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$ \begin{array}{c} & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & \\ & $	Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth <del>(feet)-</del> In Chef	Water-level	(classification, color, moisture, density, grain	n size/plasticity, oth	er) STATED	Well construction details
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					A						
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ONTRACTOR / AMPLING MET TART DATE/ (T IRST WATER (I URFACE ELEV	AND EQU	Parents .	3:	FOR	MER FRANCIS PLA	TNG	Project No.	01- FP-001
AMPLING MET TART DATE/ (T IRST WATER (I URFACE ELEV		H ( C):			FTH IT OPICIAN		Logged By:	M: Canninghom
TART DATE/ (T IRST WATER (I URFACE ELEV		PMEN	NT:	VIE	ONEX HARD ANGER			)
IRST WATER (I URFACE ELEV						MONITORING DEVICE:	-	
URFACE ELEV		_		41	9/13 1200	FINISH DATE/ TIME	4/19/13 13	40
	BGS):			ļ		STABILIZED WATER LEVEL:		
				ļ	-	CASING TOP ELEVATION:	_	
OTAL BORING	DEPTH(S	):		<u> </u>	416"	BORING DIAMETER/DEPTH:	4.5	
Date/Time Sample Interval	PID (ppm) Recovery (%)	Stratigraphy	Depth (feet)	Water-level	(classifical ALL PERCENTA	LITHOLOGIC DESCRIPTI tion, color, moisture, density, grain AGES ARE APPROXIMATE UNLE	size/plasticity, oth	ver) STATED (Meilister)
			0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			brown 10 YE 2]2, moist, i brown, 10 YE 5/b, moist raturated		sand - O

S	G		THE Po			C.			BORING/WELL		
environn	nonte	<u> </u>	<b>b</b> u	UH	IGE (	6 K	OUP, INC.		SG-	08	
ROJECT	NAME	EANE	) ADE	DRES	S:	Fe	DEMER FRANCIS PL	ATING	Project No.	01-FP-001	
ORING LO	DCAT	10N (	AT SI	/TE):		79	AS TTH IT OBIGLAN	Q PARKING LOT	Logged By:	M Cunningh	m
ONTRAC		-		PMEN	NT:	VI	PONEX	/		J	
AMPLING	MET	HOD						MONITORING DEVICE:	_		
TART DA	TE/ (T	1ME):	;			41	19/13 0940	FINISH DATE/ TIME	1130 4	11-113	
RST WAT	ER (I	BGS):						STABILIZED WATER LEVEL:	-		
URFACE	ELEV		N:				~	CASING TOP ELEVATION:			
OTAL BO	RING	DEPT	TH(S)	):			7'8"	BORING DIAMETER/DEPTH:	4.5		
Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	(classificat	LITHOLOGIC DESCRIPTI tion, color, moisture, density, grain AGES ARE APPROXIMATE UNLE	ION n size/plasticity, oth	her) : STATED	Well construction details
										1	11
					0		concrete (~4")	(ta )		grant	
1						1 7	Concrete pieces, grave	1 (~8')		*	
					. ' '	1 /	sifty sand, very dark	to be fill dert	, loore, finel ,	med grain rand,	
- 1				$\rightarrow$	2	1 /	TO ODDA . MUMINED	The se the mere		dry -	\$
					۱ <u> </u>	1 7				Sand -	3
					3	$'$	~1.40 <sup>11</sup>				<u>n</u>
			_		Ļ		Silty and, yellowish	brown. 10 YRS16, mol	A lasse fir	manin mainter	->
					4	1 7	Inda Assumed Meri	brown, 10 YRS 16, mol.	17, 100, 1	gran, "I dat	-
					5	4 7		11( )			
						1 / 2				1	I
			-+	$\rightarrow$	6	1 7					ø
						(  )					
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					[]	[ ]				-	
					8	( )	Total danks	-10"			
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					9	( )	Soil	7'8" Vopor points at: h'2" (Me	`		
	$\rightarrow$		-+	+		1 1	-	6'z" (Me 3' (fill	ernt rand)	1	
					10	1 1	1	3' (61)	(that)		
ŀ		$\rightarrow$	-+	$\rightarrow$	11	( )		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
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S	3	יו				_	_		BORING/WELL I	D:
environr	nonte		50	UR	ICE (	Gr	OUP, INC.		SG-	-09
ROJECT	NAM	EANE	) ADE	DRES	S:	For	ZMER FRANKIS PLI	IDNG	Project No.	01-FP-001
ORING L	OCAT	ION (	AT SI	TE):		72	S ATH IT OAKLAND	, PARKING LOT	Logged By:	Many Cunningh
ONTRAC	TOR	AND E	EQUI	PMEN	IT:	VI	RONEX			1 5
AMPLING		-				-	1pc	MONITORING DEVICE:		
TART DA				_	•	44	13 0900	FINISH DATE/ TIME	4/19/13	10.30
RST WAT								STABILIZED WATER LEVEL:		
URFACE								CASING TOP ELEVATION:		
OTAL BO	RING	DEPI	TH(S)	:			61	BORING DIAMETER/DEPTH:	4.5' d	
Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	(classifica) ALL PERCENT/	LITHOLOGIC DESCRIPTI tion, color, moisture, density, grain NGES ARE APPROXIMATE UNLE	size/plasticity, oth	ver) STATED Oustruction details
					0		Concrete 5" Concrete pieces, yrav	el 6-7"		
			_		1		silty sand, very dia sand, no adar (A	vk brown, 104p 2/2, mi 11 dirt)	oist, 10056, f	me med gran
					3		Sitty sand, yellow.	the brown 10 YR 5/6, 1 believe to be Morritt some	, stal, thism	fine grain 24.7
					4		N/ alas	fellowsh brun, 10 YR in sand, no odar		
					6					6
					7		Total depth		+)	
					8		24	probes @ 2'b" (fill du- 4'7" (Mennt	t sand)	
			$\neg$	_	10					
					11					
					12 13					
		-	-	-	14					
					15					
		_		-	16 17					
		+			18					
			$\square$		19 20					
- 0.000 (Contraction of the						- 1				

APPENDIX D

SAMPLING FIELD FORMS

## The Source Group, Inc.

Date:	5/1/13	Sampler:	Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	6321		
Sample ID:	59-7-2	<	
Weather Conditions	Temperature:	90	Precipitation:

Sampling Device:	1L Summa			
Leak Test:	Yes	Leak Check Compou	ınd: Helium	
Purge Volume:	3x tubing vol			8
Purge Start Time:	1356	End Time:	1357	
Sample Start Time:	1402	End Time:	1406	
Canister Start Vacuum:	-28	End Vacuum:	-5	-

#### Field Measurements

Time	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
1402	150	29	22-9 × HO
1402		25	20-42 He
1403		20	21.0 % 140
1404		15	20-6
1405		10	18-3
1406		5	19-7
······			

Notes

The Source Group, Inc.

## The Source Group, Inc.

Date:	5/1/13	Sampler:	Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	6115		
Sample ID:	56-67-1	4.0	
Weather Conditions	Temperature:	RD	Precipitation:

Sampling Device:	1L Summa	······································		
Leak Test:	Yes	Leak Check Compo	ound: Helium	
Purge Volume:	<b>3x tubing vol</b>	the second se		209
Purge Start Time:	1420	End Time:	1421	
Sample Start Time:	2423	End Time:	1429	
Canister Start Vacuum:	30	End Vacuum:	L L	

#### **Field Measurements**

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
1423	150	30	19.1 % He
1424		25	19-5 7 He
1425		20	19.9 2 He
1426		15	19.8 2 He
1427		lo	20-1 2 He
1429		4	19.5 % He

	Notes
······	

## The Source Group, Inc.

Date:	5/1/13	Sampler:	Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	17462		
Sample ID:	50-08-3	.0	
Weather Conditions	Temperature:	80	Precipitation:

Sampling Device:	1L Summa				
Leak Test:	Yes	Leak Check Compo	und: Helium		
Purge Volume:	3x tubing vo				
Purge Start Time:	757	End Time:	253		
Sample Start Time:	1901 12	S End Time:	130)		
Canister Start Vacuum:	- 29	End Vacuum:	- V		

#### Field Measurements

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
1256	150	-29	21.3
1259		-20	27.5
130)		15	24.9
1300		10	73.3
130		4	20.8

Notes	

## The Source Group, Inc.

Date:	5/1/13 Sampler: Mary Cunni		Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	A7559		
Sample ID:	56-08-1	2	
Weather Conditions	Temperature:	9D	Precipitation:

Sampling Device:	1L Summa       Yes       Leak Check Compound: Helium       3x tubing volume ≈       IBin       End Time:				
Leak Test:				Yes Leak Check Compound: Helium	· · · · · · · · · · · · · · · · · · ·
Purge Volume:					
Purge Start Time:					
Sample Start Time:	1315	End Time:	1321		
Canister Start Vacuum:	78	End Vacuum:			

#### **Field Measurements**

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
13/5	150	29.	16.5 2 He
1316		X	20.8
317		26	19.8
1319		15	19.1
1320		10	19.3
1321		4	19.3

Notes

The Source Group, Inc.

## The Source Group, Inc.

ate:	5/1/13 Sampler: Mary Cunningham		5/1/13 Sampler:		Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001		
Container ID:	A7468				
Sample ID:	56-09-	7.5			
Weather Conditions	Temperature:	80	Precipitation:		

Sampling Device:	1L Summa         Yes       Leak Check Compound: Helium         3x tubing volume ≈       90 m L         10 43       End Time:       1044		
eak Test:			
Purge Volume:			
Purge Start Time:			
Sample Start Time:	1054	End Time:	1100
Canister Start Vacuum:	29	End Vacuum:	2

#### **Field Measurements**

Time	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
1054	150	29	18.5
1055		25	15-9
1056		8	17.3
1058		12	17.5
1059		8	18.4
1100		5	17.5
······			
	l		

Notes

## The Source Group, Inc.

Date:	5/1/13 Sampler:		Mary Cunningham		
Client:	Francis Plating Project #:		ht: Francis Plating Project #:	Project #:	01-FP-001
Container ID:	ATSUS				
Sample ID:	59-09-1	41.			
Weather Conditions	Temperature:	50	Precipitation:		

Sampling Device:	1L Summa       Yes     Leak Check Compound: Helium       3x tubing volume ≈ 120 mL       11 2.3       End Time:		
Leak Test:			
Purge Volume:			
Purge Start Time:			
Sample Start Time:	1176	End Time:	1132
Canister Start Vacuum:	20	End Vacuum:	use

#### **Field Measurements**

Time	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
10.76	150	30	
178	Ň	25	2302 He
1129		7.0	70.02
1130		15	2252 He
11 30 11 3 Z		10	18.0% He
		<u> </u>	70.32 He
		_	

lotes

## The Source Group, Inc.

Date:	5/1/13	Sampler:	Mary Cunningham	
Client:	Francis Plating	Project #:	01-FP-001	
Container ID:	6337			
Sample ID:	Sub126)		Manual Annual	8 - C
Weather Conditions	Temperature:	- 105.	Precipitation:	

Sampling Device:	1L Summa		
Leak Test:	Yes	Leak Check Compo	ound: Helium
Purge Volume:	3x tubing volume ≈ 55 m (		
Purge Start Time:	17856	End Time:	0856
Sample Start Time:	0990	End Time:	0905
Canister Start Vacuum:	-30	End Vacuum:	- units

#### **Field Measurements**

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
090	150	- 30	19.42 He
0902		-25	20.08 He
10902		-20	20-22 He
0102		-15	20.82 He
0705		~[0	19-72 He

Notes

The Source Group, Inc.

### The Source Group, Inc.

Date:	5/3/13	Sampler:	Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	A 7552		
Sample ID:	subria62		
Weather Conditions	Temperature:	65 (inside)	Precipitation:

Sampling Device:	1L Summa			
Leak Test:	Yes	Leak Check Compo	und: Helium	
Purge Volume:	3x tubing volume ≈ 95 mL		-	
Purge Start Time:	0815	End Time:	OAL	
Sample Start Time:	6923	End Time:	0929	
Canister Start Vacuum:	-30	End Vacuum:	-5	

**Field Measurements** 

-

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
0823	150	-30	29.5% He
0924		-25	27-45 He
0925		- 20	33-12 He
0927		-15	30.84 He
0927		-16	28.73 He
0979		-5	24.45, 10
	_		
	_		

Notes

## The Source Group, Inc.

Date:	5/1/13	Sampler:	Mary Cunningham
Client:	Francis Plating	Project #:	01-FP-001
Container ID:	A7481	1	
Sample ID:	5455100 3		
Weather Conditions	Temperature:	invide Too	Precipitation:

Sampling Device:	1L Summa	ni tuto di		
Leak Test:	Yes	Leak Check Compo	und: Helium	
Purge Volume:	<b>3x tubing vo</b>	Statement of the local division of the local		
Purge Start Time:	0932	End Time:	0933	1.1
Sample Start Time:	6938	End Time:	0943	
Canister Start Vacuum:	-29)	End Vacuum:	-5	

#### **Field Measurements**

lime	Flow (ml/min)	Vacuum Pressure (inches Hg)	Comments
0938	150	-28	26.3 3 He
0940		- 20	22.03 He
0941		-15	22-8 5 He
0942		-10	23-24 He
0943		-5	N/AX

Notes				
* He	detector died. Bottery not holding change.			

### DAILY FIELD RECORD

(

5/1

5/8

DAILY FIELD RECORD							
Project and T	ask Number: 01-FP-00	Date: 51/13					
Project Name			stitus stutus				
Location:			y, wa	r I	· · · · · · · · · · · · · · · · · · ·		
PERSONNEL	.: Name	Company			Time Out		
Mary Cuppingham		561		0900	1500		
 	J			0745	1100		
PERSONAL	SAFETY CHECKLIST						
Stee	el-toed Boots	Hard Hat	Hard Hat		Tyvek Coveralls		
	ber Gloves	Safety Goggles		1/2 Face Respirator			
DRUM I.D.	DESCRIPTION OF	OF CONTENTS AND QUANTITY LOCATION		TION			
				· · · · · · · · · · · · · · · · · · ·			
TIME	DESCRIPTION OF WORK PERFORMED						
0800	00 Arrive at site. Dan't have the detector. Detector arrives at 0945.						
	Do not have time to sample subclab 2 since it's under the						
	main class area mat. More to subclab/ - This point has						
· · · · · ·	different fittings, so unable to comple.						
1036	More astride, begin 50-09-2.5. Sample time 1054.						
1100	Begin at SG-09-4-6- sample time 1126						
1145	Lundh						
1240	Back at site, start 56-8-3.0. Sample time 1256						
1330	Begin SG-08-6.2. Sample time 1315.						
1410	Mare to SG-07. Start 16-07-2.5; sample time 1356						
1500	Set up at 56-07-4.0. sample time 1423. Finish deaning up, aff rite.						
	,			<u></u>			
			······				
0745	On site. Begin un	th Mbs/262.					

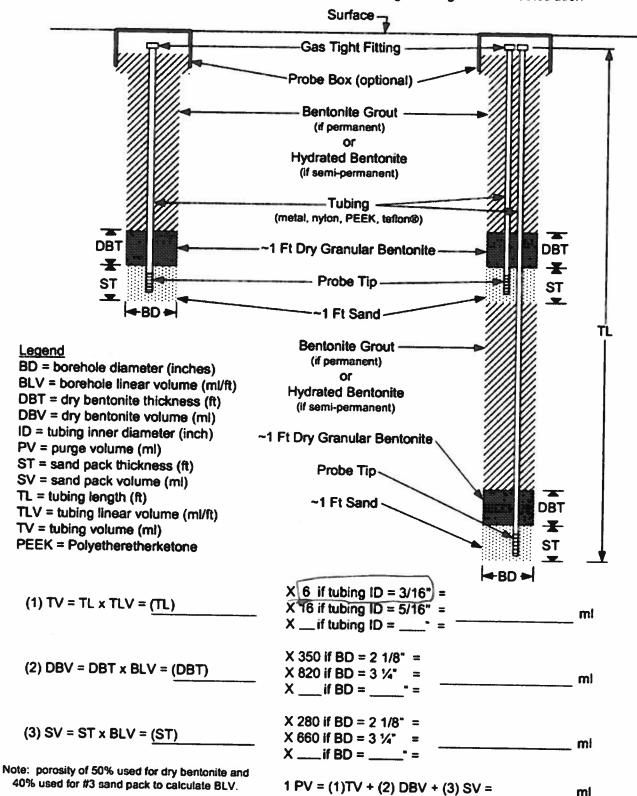
5/1 518

## DAILY FIELD RECORD (Continued)



Page 2 of 2.

Ĭ	Project and T	ask Number: Date:					
	TIME DESCRIPTION OF WORK PERFORMED						
	0823	sample substable. More to substable					
	0900	sample subrish I. Mannessantes Helium detecto					
+		battery dies as sampling ends. Plug in to recharge. Regin at subside 3. Sample time 0938. Helvin detector					
+	0930						
┢		dies again despite saying bottery was campletely charged when					
┝		sampling started. It worked for most of sampling time so					
$\vdash$		it was acrumed that was sufficient					
	1100	Papermork complete, off site.					
F							
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4							
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+							
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$\vdash$							
	<u> </u>						
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2							



#### Figure 1

#### Typical Single and Nested Soil Gas Probe Design & Purge Volume Calculation

ml

	<b>Tubing linear volume</b>	<b>Tubing length</b>	<b>Tubing volume</b>	Purge volume (3x)	Purge Time	Purge Time
	mL/ft	ft	mL	mL	min	sec
Subslab1	6	3	18	54	0.36	22
Subslab2	6	3	18	54	0.36	22
Subslab3	6	3	18	54	0.36	22
SG-07-2.5	6	4.5	27	81	0.54	32
SG-07-4.0	6	6	36	108	0.72	43
SG-08-3.0	6	5	30	90	0.6	36
SG-08-6.2	6	8.2	49.2	147.6	0.984	59
SG-09-2.5	6	4.5	27	81	0.54	32
SG-09-4.6	6	6.6	39.6	118.8	0.792	48

APPENDIX E

LABORATORY ANALYTICAL DATA



Matthew C. Sutton The Source Group, Inc 3478 Buskirk Avenue, Suite 100 Pleasant Hill, California 94523 Tel: 925.951.6386 Fax: 925.944.2859 Email: msutton@thesourcegroup.net

RE: Former Francis Plating

Work Order No.: 1305024

Dear Matthew Sutton:

Torrent Laboratory, Inc. received 6 sample(s) on May 03, 2013 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

of She

Janice Winn-Shilling Sr. Project Manager

May 10, 2013

Date



#### Date: 5/10/2013

Client: The Source Group, Inc Project: Former Francis Plating Work Order: 1305024

#### **CASE NARRATIVE**

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.



## Sample Result Summary

Report prepared for:	Matthew Sutton					Received: 05/03/13
SG-07-2.5	The Source Group, Inc				Date F	Reported: 05/10/13 1305024-001A
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u> ug/m3
Tetrachloroethylene		ETO15	1	0.91	3.4	73.0
Trichloroethylene		ETO15	20	28	110	2030
Helium		D1946	2.66	0.013	0.013	6.3
SG-07-4.0						1305024-002A
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	<u>PQL</u>	<u>Results</u> ug/m3
Trichloroethylene		ETO15	28	39	150	2160
Helium		D1946	2.18	0.011	0.011	1.2
SG-08-3.0						1305024-003A
Parameters:		<u>Analysis</u> <u>Method</u>	DF	<u>MDL</u>	<u>PQL</u>	<u>Results</u> ug/m3
1,1,1-Trichloroethane Tetrachloroethylene		ETO15 ETO15	1 1	0.85 0.91	2.8 3.4	22.5 12.0
Trichloroethylene		ETO15	2.5	3.5	14	228
Helium		D1946	3.45	0.017	0.017	2.7



## Sample Result Summary

Report prepared for:	Matthew Sutton				Date R	Received: 05/03/13
	The Source Group, Inc				Date R	Reported: 05/10/13
SG-08-6.2						1305024-004A
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u> ug/m3
Carbon Disulfide		ETO15	1	0.81	3.1	11.9
1,1,1-Trichloroethane		ETO15	1	0.85	2.8	25.5
Benzene		ETO15	1	0.69	1.6	4.87
Tetrachloroethylene		ETO15	1	0.91	3.4	11.6
Trichloroethylene		ETO15	2.5	3.5	14	209
Helium		D1946	3.19	0.016	0.016	2.8
SG-09-2.5						1305024-005A
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	PQL	<u>Results</u> ug/m3
Helium		D1946	2.2	0.011	0.011	2.5
1,1,1-Trichloroethane		ETO15	5.5	4.7	15	86.5
Trichloroethylene		ETO15	5.5	7.6	30	479
SG-09-4.6						1305024-006A
Parameters:		<u>Analysis</u> Method	<u>DF</u>	MDL	PQL	<u>Results</u> ug/m3

	Method				<u>ug/m3</u>	
1,1,1-Trichloroethane	ETO15	1	0.85	2.8	70.1	
Helium	D1946	1.67	0.0084	0.0084	2.2	
Trichloroethylene	ETO15	4.23	5.9	23	214	



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/03 rted: 05/10	
Client Sample ID:	SG-07-2.5				Lab Sa	ample ID:	13	305024-001A	۸		
Project Name/Location:	Former Franci	s Plating				le Matrix:	Ai	r			
Project Number:	01-FP-001	5									
Date/Time Sampled:	05/01/13 / 14:	02			Certifie	ed Clean \	NO # ·				
Canister/Tube ID:	6321	-				ved PSI :	-	11.5			
Collection Volume (L):	0.00					ted PSI :		0.0			
	Former Franci	o Dioting			Conec	leur or.		0.0			
Tag Number:	Former Franci	is Flating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/07/13	1	1.5	5.0	ND	ND		415373	NA
1,1-Difluoroethane	ETO15	NA	05/07/13	1	0.50	1.4	ND	ND		415373	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/07/13	1	4.9	14	ND	ND		415373	NA
Chloromethane	ETO15	NA	05/07/13	1	0.32	1.1	ND	ND		415373	NA
Vinyl Chloride	ETO15	NA	05/07/13	1	0.67	2.6	ND	ND		415373	NA
1,3-Butadiene	ETO15	NA	05/07/13	1	0.45	1.1	ND	ND		415373	NA
Bromomethane	ETO15	NA	05/07/13	1	0.72	2.0	ND	ND		415373	NA
Chloroethane	ETO15	NA	05/07/13	1	0.50	1.3	ND	ND		415373	NA
Trichlorofluoromethane	ETO15	NA	05/07/13	1	1.8	5.6	ND	ND		415373	NA
1,1-Dichloroethene	ETO15	NA	05/07/13	1	0.61	2.0	ND	ND		415373	NA
Freon 113	ETO15	NA	05/07/13	1	0.85	3.9	ND	ND		415373	NA
Carbon Disulfide	ETO15	NA	05/07/13	1	0.81	3.1	ND	ND		415373	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/07/13	1	0.97	20	ND	ND		415373	NA
Methylene Chloride	ETO15	NA	05/07/13	1	0.58	28	ND	ND		415373	NA
Acetone	ETO15	NA	05/07/13	1	0.88	19	ND	ND		415373	NA
trans-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.64	2.0	ND	ND		415373	NA
Hexane	ETO15	NA	05/07/13	1	0.53	1.8	ND	ND		415373	NA
MTBE	ETO15	NA	05/07/13	1	0.87	1.8	ND	ND		415373	NA
tert-Butanol	ETO15	NA	05/07/13	1	0.91	8.4	ND	ND		415373	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/07/13	1	0.88	2.1	ND	ND		415373	NA
1,1-Dichloroethane	ETO15	NA	05/07/13	1	0.75	2.1	ND	ND		415373	NA
ETBE	ETO15	NA	05/07/13	1	0.68	2.1	ND	ND		415373	NA
cis-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.54	2.0	ND	ND		415373	NA
Chloroform	ETO15	NA	05/07/13	1	1.2	4.9	ND	ND		415373	NA
Vinyl Acetate	ETO15	NA	05/07/13	1	0.57	1.8	ND	ND		415373	NA
Carbon Tetrachloride	ETO15	NA	05/07/13	1	0.86	3.2	ND	ND		415373	NA
1,1,1-Trichloroethane	ETO15	NA	05/07/13	1	0.85	2.8	ND	ND		415373	NA
2-Butanone (MEK)	ETO15	NA	05/07/13	1	0.63	1.5	ND	ND		415373	NA
Ethyl Acetate	ETO15	NA	05/07/13	1	0.74	1.8	ND	ND		415373	NA
Tetrahydrofuran	ETO15	NA	05/07/13	1	0.30	1.5	ND	ND		415373	NA
Benzene	ETO15	NA	05/07/13	1	0.69	1.6	ND	ND		415373	NA
	ETO15	NA	05/07/13	1	0.36	2.1	ND	ND		415373	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/07/13	1	0.99	2.1	ND	ND		415373	NA
1,2-Dichloropropane	ETO15	NA	05/07/13	1	1.3	4.6	ND	ND		415373	NA
Bromodichloromethane	ETO15	NA	05/07/13	1	0.89	3.4	ND	ND		415373	NA



Report prepared for:	Matthew Sutton The Source Group, In	с								ived: 05/03 rted: 05/10	
Client Sample ID: Project Name/Location: Project Number:	SG-07-2.5 Former Francis Pl 01-FP-001	ating				ample ID: le Matrix:	13 Ai	805024-001A r	Δ		
Date/Time Sampled:	05/01/13 / 14:02				Certifie	ed Clean V	NO # :				
Canister/Tube ID:	6321				Receiv	ed PSI :		11.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Francis PI	ating									
Parameters:	-	rep ate	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15 N	١A	05/07/13	1	1.2	3.6	ND	ND		415373	NA
trans-1,3-Dichloropropene	ETO15 N	٨	05/07/13	1	0.87	2.3	ND	ND		415373	NA
Toluene	ETO15 N	ΝA	05/07/13	1	0.95	1.9	ND	ND		415373	NA
4-Methyl-2-Pentanone (MIBK)	ETO15 N	٨	05/07/13	1	0.85	2.1	ND	ND		415373	NA
cis-1,3-Dichloropropene	ETO15 N	٨	05/07/13	1	1.1	2.3	ND	ND		415373	NA
Tetrachloroethylene	ETO15 N	ΝA	05/07/13	1	0.91	3.4	73.0	10.74		415373	NA
1,1,2-Trichloroethane	ETO15 N	٨	05/07/13	1	0.93	2.8	ND	ND		415373	NA
Dibromochloromethane	ETO15 N	A	05/07/13	1	1.7	4.3	ND	ND		415373	NA
1,2-Dibromoethane (EDB)	ETO15 N	A	05/07/13	1	2.0	7.7	ND	ND		415373	NA
Trichloroethylene	ETO15 N	١A	05/08/13	20	28	110	2030	375.93		415396	NA
2-Hexanone	ETO15 N	١A	05/07/13	1	1.1	4.1	ND	ND		415373	NA
Ethyl Benzene	ETO15 N	A	05/07/13	1	0.99	2.2	ND	ND		415373	NA
Chlorobenzene	ETO15 N	A	05/07/13	1	0.71	2.3	ND	ND		415373	NA
1,1,1,2-Tetrachloroethane	ETO15 N	A	05/07/13	1	1.0	3.5	ND	ND		415373	NA
m,p-Xylene		A	05/07/13	1	1.6	4.3	ND	ND		415373	NA
o-Xylene		NA	05/07/13	1	0.81	2.2	ND	ND		415373	NA
Styrene		NA NA	05/07/13	1	0.69	2.2	ND	ND		415373	NA
Bromoform		NA NA	05/07/13	1	1.1	5.0	ND	ND		415373	NA
1,1,2,2-Tetrachloroethane		A A	05/07/13	1	0.70	3.5	ND	ND		415373	NA
4-Ethyl Toluene		A	05/07/13	1	0.82	2.5	ND	ND		415373	NA
1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene		NA NA	05/07/13 05/07/13	1 1	0.76 0.69	2.5 2.5	ND ND	ND ND		415373 415373	NA NA
1,2,4- mineinyidenzene		NA NA	05/07/13	1	0.69	2.5 3.0	ND	ND		415373	NA
1,3-Dichlorobenzene		NA NA	05/07/13	1	0.85	3.0 3.0	ND	ND		415373	NA
1,2-Dichlorobenzene		NA NA	05/07/13	1	0.84	3.0 3.0	ND	ND		415373	NA
Hexachlorobutadiene		NA NA	05/07/13	1	2.4	5.5	ND	ND		415373	NA
1,2,4-Trichlorobenzene		NA NA	05/07/13	1	3.4	7.4	ND	ND		415373	NA
Naphthalene		NA NA	05/07/13	1	1.5	5.2	ND	ND		415373	NA
(S) 4-Bromofluorobenzene		NA NA	05/07/13	1	65	135	123 %			415373	NA
(S) 4-Bromofluorobenzene	ETO15 N	ΝA	05/08/13	20	65	135	102 %			415396	NA



Report prepared for:	Matthew Sutton The Source Grou	p, Inc						_		ived: 05/03 rted: 05/10	
Client Sample ID:	SG-07-2.5				Lab Sa	ample ID:		1305024-001A			
Project Name/Location:	Former France	cis Plating			Sampl	e Matrix:		Air			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 14	:02			Certifie	ed Clean	WO # :				
Canister/Tube ID:	6321				Receiv	ed PSI :		11.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former France	cis Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	2.66	0.013	0.013	6.3			415401	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/03 rted: 05/10	-
Client Sample ID:	SG-07-4.0				Lab Sa	ample ID:	1:	305024-002A	١		
Project Name/Location:	Former Franci	s Plating			Sampl	e Matrix:	A	ir			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 14:	23			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	6115				Receiv	ed PSI :		12.9			
Collection Volume (L):	0.00					ted PSI :		0.0			
( )	Former Franci	e Platina			001100			0.0			
Tag Number:	Former Franci	s Flating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/08/13	28	42	140	ND	ND		415396	NA
1,1-Difluoroethane	ETO15	NA	05/08/13	28	14	38	ND	ND		415396	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/08/13	28	140	390	ND	ND		415396	NA
Chloromethane	ETO15	NA	05/08/13	28	8.9	29	ND	ND		415396	NA
Vinyl Chloride	ETO15	NA	05/08/13	28	19	73	ND	ND		415396	NA
1,3-Butadiene	ETO15	NA	05/08/13	28	12	31	ND	ND		415396	NA
Bromomethane	ETO15	NA	05/08/13	28	20	55	ND	ND		415396	NA
Chloroethane	ETO15	NA	05/08/13	28	14	36	ND	ND		415396	NA
Trichlorofluoromethane	ETO15	NA	05/08/13	28	51	160	ND	ND		415396	NA
1,1-Dichloroethene	ETO15	NA	05/08/13	28	17	56	ND	ND		415396	NA
Freon 113	ETO15	NA	05/08/13	28	24	110	ND	ND		415396	NA
Carbon Disulfide	ETO15	NA	05/08/13	28	23	87	ND	ND		415396	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/08/13	28	27	560	ND	ND		415396	NA
Methylene Chloride	ETO15	NA	05/08/13	28	16	780	ND	ND		415396	NA
Acetone	ETO15	NA	05/08/13	28	25	540	ND	ND		415396	NA
trans-1,2-Dichloroethene	ETO15	NA	05/08/13	28	18	56	ND	ND		415396	NA
Hexane	ETO15	NA	05/08/13	28	15	49	ND	ND		415396	NA
MTBE	ETO15	NA	05/08/13	28	24	50	ND	ND		415396	NA
tert-Butanol	ETO15	NA	05/08/13	28	26	240	ND	ND		415396	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/08/13	28	25	59	ND	ND		415396	NA
1,1-Dichloroethane	ETO15	NA	05/08/13	28	21	57	ND	ND		415396	NA
ETBE	ETO15	NA	05/08/13	28	19	59	ND	ND		415396	NA
cis-1,2-Dichloroethene	ETO15	NA	05/08/13	28	15	56	ND	ND		415396	NA
Chloroform	ETO15	NA	05/08/13	28	35	140	ND	ND		415396	NA
Vinyl Acetate	ETO15	NA	05/08/13	28	16	49	ND	ND		415396	
Carbon Tetrachloride	ETO15	NA	05/08/13	28	24	88	ND	ND		415396	NA
1,1,1-Trichloroethane	ETO15	NA	05/08/13 05/08/13	28	24	77 42	ND			415396	NA
2-Butanone (MEK)	ETO15	NA		28	18 21	42 50				415396	NA
Ethyl Acetate Tetrahydrofuran	ETO15 ETO15	NA NA	05/08/13 05/08/13	28 28	21 8.5	50 42	ND ND	ND ND		415396 415396	NA NA
•	ETO15 ETO15	NA	05/08/13	28 28	8.5 19	42 45	ND	ND		415396	
Benzene TAME	ETO15 ETO15	NA NA	05/08/13	28 28	19	45 59	ND	ND		415396	NA NA
1,2-Dichloroethane (EDC)	ETO15 ETO15	NA	05/08/13	28 28	28	59 57	ND	ND		415396	NA
Trichloroethylene	ETO15 ETO15	NA	05/08/13	∠o 28	28 39	57 150	2160	400.00		415396	NA NA
1,2-Dichloropropane	ETO15 ETO15	NA	05/08/13	20 28	39 37	130	2160 ND	400.00 ND		415396	NA
	L1013	1 11/71	00/00/10	20	57	130	ND			-10090	11/7



Report prepared for:	Matthew Sutton The Source Group	, Inc								ved: 05/03 rted: 05/10	
Client Sample ID:	SG-07-4.0				Lab Sa	ample ID:		1305024-002/	4		
Project Name/Location:	Former Franci	s Plating				e Matrix:	ŀ	Air			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 14:2	23			Certifie	d Clean \	NO # :				
Canister/Tube ID:	6115				Receiv	ed PSI :		12.9			
Collection Volume (L):	0.00					ted PSI :		0.0			
Tag Number:	Former Franci	s Plating			oonco			0.0			
-	<u> </u>					-		1	1		
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Bromodichloromethane	ETO15	NA	05/08/13	28	25	94	ND	ND	1	415396	NA
,4-Dioxane	ETO15	NA	05/08/13	28	35	100	ND	ND		415396	NA
rans-1,3-Dichloropropene	ETO15	NA	05/08/13	28	24	63	ND	ND		415396	NA
oluene	ETO15	NA	05/08/13	28	27	53	ND	ND		415396	NA
-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/08/13	28	24	57	ND	ND		415396	NA
is-1,3-Dichloropropene	ETO15	NA	05/08/13	28	32	63	ND	ND		415396	NA
etrachloroethylene	ETO15	NA	05/08/13	28	25	95	ND	ND		415396	NA
,1,2-Trichloroethane	ETO15	NA	05/08/13	28	26	77	ND	ND		415396	NA
bibromochloromethane	ETO15	NA	05/08/13	28	49	120	ND	ND		415396	NA
,2-Dibromoethane (EDB)	ETO15	NA	05/08/13	28	57	220	ND	ND		415396	NA
-Hexanone	ETO15	NA	05/08/13	28	31	110	ND	ND		415396	NA
thyl Benzene	ETO15	NA	05/08/13	28	28	60	ND	ND		415396	NA
Chlorobenzene	ETO15	NA	05/08/13	28	20	64	ND	ND		415396	NA
,1,1,2-Tetrachloroethane	ETO15	NA	05/08/13	28	29	97	ND	ND		415396	NA
n,p-Xylene	ETO15	NA	05/08/13	28	45	120	ND	ND		415396	NA
-Xylene	ETO15	NA	05/08/13	28	23	60	ND	ND		415396	NA
ityrene	ETO15	NA	05/08/13	28	19	62	ND	ND		415396	NA
Bromoform	ETO15	NA	05/08/13	28	31	140	ND	ND		415396	NA
,1,2,2-Tetrachloroethane	ETO15	NA	05/08/13	28	20	97	ND	ND		415396	NA
-Ethyl Toluene	ETO15	NA	05/08/13	28	23	69	ND	ND		415396	NA
,3,5-Trimethylbenzene	ETO15	NA	05/08/13	28	21	69	ND	ND		415396	NA
,2,4-Trimethylbenzene	ETO15	NA	05/08/13	28	19	69	ND	ND		415396	NA
,4-Dichlorobenzene	ETO15	NA	05/08/13	28	18	84	ND	ND		415396	NA
,3-Dichlorobenzene	ETO15	NA	05/08/13	28	24	84	ND	ND		415396	NA
,2-Dichlorobenzene	ETO15	NA	05/08/13	28	25	84	ND	ND		415396	NA
lexachlorobutadiene	ETO15	NA	05/08/13	28	68	150	ND	ND		415396	NA
,2,4-Trichlorobenzene	ETO15	NA	05/08/13	28	95	210	ND	ND		415396	NA
laphthalene	ETO15	NA	05/08/13	28	41	150	ND	ND		415396	NA
S) 4-Bromofluorobenzene	ETO15	NA	05/08/13	28	65	135	104 %			415396	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	2 18	0.011	0.011	1.2			415401	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/03 rted: 05/10	-
Client Sample ID:	SG-08-3.0					ample ID:		305024-003A	A Contraction of the second se		
Project Name/Location:	Former Franci	is Plating			Samp	e Matrix:	Ai	ir			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 12:	56			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	A7462				Receiv	ed PSI :		11.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Franci	is Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
			· · · · · <b>,</b> - · · ·			<b>.</b>	<b>.</b>	P. P			
Dichlorodifluoromethane	ETO15	NA	05/07/13	1	1.5	5.0	ND	ND		415373	NA
1,1-Difluoroethane	ETO15	NA	05/07/13	1	0.50	1.4	ND	ND		415373	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/07/13	1	4.9	14	ND	ND		415373	NA
Chloromethane	ETO15	NA	05/07/13	1	0.32	1.1	ND	ND		415373	NA
Vinyl Chloride	ETO15	NA	05/07/13	1	0.67	2.6	ND	ND		415373	NA
1,3-Butadiene	ETO15	NA	05/07/13	1	0.45	1.1	ND	ND		415373	NA
Bromomethane	ETO15	NA	05/07/13	1	0.72	2.0	ND	ND		415373	NA
Chloroethane	ETO15	NA	05/07/13	1	0.50	1.3	ND	ND		415373	NA
Trichlorofluoromethane	ETO15	NA	05/07/13	1	1.8	5.6	ND	ND		415373	NA
1,1-Dichloroethene	ETO15	NA	05/07/13	1	0.61	2.0	ND	ND		415373	NA
Freon 113	ETO15	NA	05/07/13	1	0.85	3.9	ND	ND		415373	NA
Carbon Disulfide	ETO15	NA	05/07/13	1	0.81	3.1	ND	ND		415373	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/07/13	1	0.97	20	ND	ND		415373	NA
Methylene Chloride	ETO15	NA	05/07/13	1	0.58	28	ND	ND		415373	NA
Acetone	ETO15	NA	05/07/13	1	0.88	19	ND	ND		415373	NA
trans-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.64	2.0	ND	ND		415373	NA
Hexane	ETO15	NA	05/07/13	1	0.53	1.8	ND	ND		415373	NA
MTBE	ETO15	NA	05/07/13	1	0.87	1.8	ND	ND		415373	NA
tert-Butanol	ETO15	NA	05/07/13	1	0.91	8.4	ND	ND		415373	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/07/13	1	0.88	2.1	ND	ND		415373	NA
1,1-Dichloroethane	ETO15	NA	05/07/13	1	0.75	2.1	ND	ND		415373	NA
ETBE	ETO15	NA	05/07/13	1	0.68	2.1	ND	ND		415373	NA
cis-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.54	2.0	ND	ND		415373	NA
Chloroform	ETO15	NA	05/07/13	1	1.2	4.9	ND	ND		415373	NA
Vinyl Acetate	ETO15	NA	05/07/13	1	0.57	1.8	ND	ND		415373	NA
Carbon Tetrachloride	ETO15	NA	05/07/13	1	0.86	3.2	ND	ND		415373	NA
1,1,1-Trichloroethane	ETO15	NA	05/07/13	1	0.85	2.8	22.5	4.09		415373	NA
2-Butanone (MEK)	ETO15	NA	05/07/13	1	0.63	1.5	ND	ND		415373	NA
Ethyl Acetate	ETO15	NA	05/07/13	1	0.74	1.8	ND	ND		415373	NA
Tetrahydrofuran	ETO15	NA	05/07/13	1	0.30	1.5	ND	ND		415373	NA
Benzene	ETO15	NA	05/07/13	1	0.69	1.6		ND		415373	NA
TAME	ETO15	NA	05/07/13	1	0.36	2.1				415373	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/07/13 05/07/13	1	0.99	2.1		ND		415373	NA
1,2-Dichloropropane	ETO15	NA	05/07/13	1	1.3	4.6				415373	NA
Bromodichloromethane	ETO15	NA	05/07/13	1	0.89	3.4	ND	ND		415373	NA



Report prepared for:	Matthew Sutton The Source Group, Ir	nc								ived: 05/03 rted: 05/10	
Client Sample ID: Project Name/Location: Project Number:	SG-08-3.0 Former Francis P 01-FP-001	lating				ample ID: e Matrix:	13 Air	05024-003A ,			
Date/Time Sampled:	05/01/13 / 12:56				Certifie	ed Clean V	NO # :				
Canister/Tube ID:	A7462				Receiv	ed PSI :		11.5			
Collection Volume (L):	0.00					ted PSI :		0.0			
Tag Number:	Former Francis P	lating			001100						
Parameters:		Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15	NA	05/07/13	1	1.2	3.6	ND	ND		415373	NA
trans-1,3-Dichloropropene		NA	05/07/13	1	0.87	2.3	ND	ND		415373	NA
Toluene		NA	05/07/13	1	0.95	1.9	ND	ND		415373	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/07/13	1	0.85	2.1	ND	ND		415373	NA
cis-1,3-Dichloropropene	ETO15	NA	05/07/13	1	1.1	2.3	ND	ND		415373	NA
Tetrachloroethylene	ETO15	NA	05/07/13	1	0.91	3.4	12.0	1.76		415373	NA
1,1,2-Trichloroethane	ETO15	NA	05/07/13	1	0.93	2.8	ND	ND		415373	NA
Dibromochloromethane	ETO15	NA	05/07/13	1	1.7	4.3	ND	ND		415373	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/07/13	1	2.0	7.7	ND	ND		415373	NA
Trichloroethylene	ETO15	NA	05/08/13	2.5	3.5	14	228	42.22		415396	NA
2-Hexanone	ETO15	NA	05/07/13	1	1.1	4.1	ND	ND		415373	NA
Ethyl Benzene	ETO15	NA	05/07/13	1	0.99	2.2	ND	ND		415373	NA
Chlorobenzene	ETO15	NA	05/07/13	1	0.71	2.3	ND	ND		415373	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/07/13	1	1.0	3.5	ND	ND		415373	NA
m,p-Xylene	ETO15	NA	05/07/13	1	1.6	4.3	ND	ND		415373	NA
o-Xylene	ETO15	NA	05/07/13	1	0.81	2.2	ND	ND		415373	NA
Styrene		NA	05/07/13	1	0.69	2.2	ND	ND		415373	NA
Bromoform		NA	05/07/13	1	1.1	5.0	ND	ND		415373	NA
1,1,2,2-Tetrachloroethane		NA	05/07/13	1	0.70	3.5	ND	ND		415373	NA
4-Ethyl Toluene		NA	05/07/13	1	0.82	2.5	ND	ND		415373	NA
1,3,5-Trimethylbenzene		NA	05/07/13	1	0.76	2.5	ND	ND		415373	NA
1,2,4-Trimethylbenzene		NA	05/07/13	1	0.69	2.5	ND	ND		415373	NA
1,4-Dichlorobenzene		NA	05/07/13	1	0.65	3.0	ND	ND		415373	NA
1,3-Dichlorobenzene		NA	05/07/13	1	0.84	3.0	ND	ND		415373	NA
1,2-Dichlorobenzene		NA	05/07/13	1	0.91	3.0	ND	ND		415373	NA
Hexachlorobutadiene 1,2,4-Trichlorobenzene		NA	05/07/13	1 1	2.4	5.5 7 4	ND ND	ND ND		415373 415373	NA
Naphthalene		NA	05/07/13		3.4 1.5	7.4 5.2					NA
(S) 4-Bromofluorobenzene		NA NA	05/07/13 05/07/13	1 1	1.5 65	5.2 135	ND 108 %	ND		415373 415373	NA NA
(S) 4-Bromofluorobenzene		NA	05/08/13	2.5	65	135	110 %			415396	NA



Report prepared for:	Matthew Sutton The Source Grou	p, Inc						_		ived: 05/03 rted: 05/10	
Client Sample ID:	SG-08-3.0				Lab Sa	ample ID:		1305024-003A			
Project Name/Location: Project Number:	Former Franc 01-FP-001	cis Plating			Sampl	e Matrix:		Air			
Date/Time Sampled:	05/01/13 / 12	:56			Certifie	ed Clean	WO # :				
Canister/Tube ID:	A7462				Receiv	ed PSI :		11.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former France	cis Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	3.45	0.017	0.017	2.7		•	415401	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/03 rted: 05/10	
Client Sample ID:	SG-08-6.2				Lab Sa	ample ID:	13	305024-004/	Ą		
Project Name/Location:	Former Franci	s Plating			Sampl	e Matrix:	A	ir			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 13:	15			Certifie	ed Clean V	NO # :				
Canister/Tube ID:	A7558				Receiv	ed PSI :		12.4			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Franci	e Platina			001100			0.0			
Tag Nulliber.	i onner i fanci	STIALING									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/07/13	1	1.5	5.0	ND	ND		415373	NA
1,1-Difluoroethane	ETO15	NA	05/07/13	1	0.50	1.4	ND	ND		415373	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/07/13	1	4.9	14	ND	ND		415373	NA
Chloromethane	ETO15	NA	05/07/13	1	0.32	1.1	ND	ND		415373	NA
Vinyl Chloride	ETO15	NA	05/07/13	1	0.67	2.6	ND	ND		415373	NA
1,3-Butadiene	ETO15	NA	05/07/13	1	0.45	1.1	ND	ND		415373	NA
Bromomethane	ETO15	NA	05/07/13	1	0.72	2.0	ND	ND		415373	NA
Chloroethane	ETO15	NA	05/07/13	1	0.50	1.3	ND	ND		415373	NA
Trichlorofluoromethane	ETO15	NA	05/07/13	1	1.8	5.6	ND	ND		415373	NA
1,1-Dichloroethene	ETO15	NA	05/07/13	1	0.61	2.0	ND	ND		415373	NA
Freon 113	ETO15	NA	05/07/13	1	0.85	3.9	ND	ND		415373	NA
Carbon Disulfide	ETO15	NA	05/07/13	1	0.81	3.1	11.9	3.84		415373	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/07/13	1	0.97	20	ND	ND		415373	NA
Methylene Chloride	ETO15	NA	05/07/13	1	0.58	28	ND	ND		415373	NA
Acetone	ETO15	NA	05/07/13	1	0.88	19	ND	ND		415373	NA
trans-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.64	2.0	ND	ND		415373	NA
Hexane	ETO15	NA	05/07/13	1	0.53	1.8	ND	ND		415373	NA
MTBE	ETO15	NA	05/07/13	1	0.87	1.8	ND	ND		415373	NA
tert-Butanol	ETO15	NA	05/07/13	1	0.91	8.4	ND	ND		415373	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/07/13	1	0.88	2.1	ND	ND		415373	NA
1,1-Dichloroethane	ETO15	NA	05/07/13	1	0.75	2.1	ND	ND		415373	NA
ETBE	ETO15	NA	05/07/13	1	0.68	2.1	ND	ND		415373	NA
cis-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.54	2.0	ND	ND		415373	NA
Chloroform	ETO15	NA	05/07/13	1	1.2	4.9	ND	ND		415373	NA
Vinyl Acetate	ETO15	NA	05/07/13	1	0.57	1.8		ND		415373	NA
Carbon Tetrachloride	ETO15	NA	05/07/13	1	0.86	3.2	ND 25.5	ND		415373	NA
1,1,1-Trichloroethane	ETO15	NA	05/07/13 05/07/13	1	0.85	2.8	25.5	4.64		415373	NA
2-Butanone (MEK) Ethyl Acetate	ETO15 ETO15	NA NA	05/07/13	1	0.63 0.74	1.5 1 9				415373 415373	NA
Tetrahydrofuran	ETO15 ETO15	NA	05/07/13	1 1	0.74	1.8 1.5	ND ND	ND ND		415373 415373	NA NA
Benzene	ETO15 ETO15	NA	05/07/13	1	0.30	1.5 1.6	4.87	1.52		415373	NA
TAME	ETO15 ETO15	NA	05/07/13	1	0.89	2.1	4.87 ND	1.52 ND		415373	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/07/13	1	0.38	2.1	ND	ND		415373	NA
1,2-Dichloropropane	ETO15 ETO15	NA	05/07/13	1	1.3	4.6	ND	ND		415373	NA
Bromodichloromethane	ETO15	NA	05/07/13	1	0.89	4.0 3.4	ND	ND		415373	NA
	21010		00,01,10	•	0.00	0.1					



Report prepared for:	Matthew Sutton The Source Group, Inc									ived: 05/03 rted: 05/10	
Client Sample ID: Project Name/Location: Project Number:	SG-08-6.2 Former Francis Plat 01-FP-001	ting				ample ID: le Matrix:	13 Ai	305024-004A ir	٨		
Date/Time Sampled:	05/01/13 / 13:15				Certifie	ed Clean V	NO # :				
Canister/Tube ID:	A7558				Receiv	ed PSI :		12.4			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Francis Plat	ting									
Parameters:	Analysis Pre Method Dat		Date alyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15 NA	A 05	/07/13	1	1.2	3.6	ND	ND		415373	NA
trans-1,3-Dichloropropene	ETO15 NA	A 05	/07/13	1	0.87	2.3	ND	ND		415373	NA
Toluene	ETO15 NA	A 05	/07/13	1	0.95	1.9	ND	ND		415373	NA
4-Methyl-2-Pentanone (MIBK)	ETO15 NA	A 05	/07/13	1	0.85	2.1	ND	ND		415373	NA
cis-1,3-Dichloropropene	ETO15 NA	A 05	/07/13	1	1.1	2.3	ND	ND		415373	NA
Tetrachloroethylene	ETO15 NA	A 05	/07/13	1	0.91	3.4	11.6	1.71		415373	NA
1,1,2-Trichloroethane	ETO15 NA	A 05	/07/13	1	0.93	2.8	ND	ND		415373	NA
Dibromochloromethane	ETO15 NA	A 05	/07/13	1	1.7	4.3	ND	ND		415373	NA
1,2-Dibromoethane (EDB)	ETO15 NA	A 05	/07/13	1	2.0	7.7	ND	ND		415373	NA
Trichloroethylene	ETO15 NA	A 05	/08/13	2.5	3.5	14	209	38.70		415396	NA
2-Hexanone	ETO15 NA	A 05	/07/13	1	1.1	4.1	ND	ND		415373	NA
Ethyl Benzene	ETO15 NA	A 05	/07/13	1	0.99	2.2	ND	ND		415373	NA
Chlorobenzene	ETO15 NA	A 05	/07/13	1	0.71	2.3	ND	ND		415373	NA
1,1,1,2-Tetrachloroethane	ETO15 NA	A 05	/07/13	1	1.0	3.5	ND	ND		415373	NA
m,p-Xylene	ETO15 NA	A 05	/07/13	1	1.6	4.3	ND	ND		415373	NA
o-Xylene	ETO15 NA	A 05	/07/13	1	0.81	2.2	ND	ND		415373	NA
Styrene	ETO15 NA	A 05	/07/13	1	0.69	2.2	ND	ND		415373	NA
Bromoform	ETO15 NA	A 05	/07/13	1	1.1	5.0	ND	ND		415373	NA
1,1,2,2-Tetrachloroethane	ETO15 NA		/07/13	1	0.70	3.5	ND	ND		415373	NA
4-Ethyl Toluene	ETO15 NA		/07/13	1	0.82	2.5	ND	ND		415373	NA
1,3,5-Trimethylbenzene	ETO15 NA		/07/13	1	0.76	2.5	ND	ND		415373	NA
1,2,4-Trimethylbenzene	ETO15 NA		/07/13	1	0.69	2.5	ND	ND		415373	NA
1,4-Dichlorobenzene	ETO15 NA		/07/13	1	0.65	3.0	ND	ND		415373	NA
1,3-Dichlorobenzene	ETO15 NA		/07/13	1	0.84	3.0	ND	ND		415373	NA
1,2-Dichlorobenzene	ETO15 NA		/07/13	1	0.91	3.0	ND	ND		415373	NA
Hexachlorobutadiene	ETO15 NA		/07/13	1	2.4	5.5	ND	ND		415373	NA
1,2,4-Trichlorobenzene	ETO15 NA		/07/13	1	3.4	7.4	ND	ND		415373	NA
Naphthalene	ETO15 NA		/07/13	1	1.5	5.2	ND	ND		415373	NA
(S) 4-Bromofluorobenzene	ETO15 NA		/07/13	1	65	135	110 %			415373	NA
(S) 4-Bromofluorobenzene	ETO15 NA	A 05	/08/13	2.5	65	135	116 %			415396	NA



Report prepared for:	Matthew Sutton The Source Grou	p, Inc						_		ived: 05/03 rted: 05/10	
Client Sample ID:	SG-08-6.2				Lab Sa	ample ID:		1305024-004A			
Project Name/Location:	Former France	cis Plating			Sampl	e Matrix:		Air			
Project Number: Date/Time Sampled:	01-FP-001 05/01/13 / 13	:15			Certifie	ed Clean	WO # :				
Canister/Tube ID:	A7558				Receiv	ed PSI :		12.4			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former France	cis Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	3.19	0.016	0.016	2.8			415401	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc						_		i <b>ved:</b> 05/03 rted: 05/10	
Client Sample ID:	SG-09-2.5				Lab Sa	ample ID:	13	05024-005A			
Project Name/Location:	Former France	is Plating			Sampl	le Matrix:	Ai	r			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 10:	54			Certifie	ed Clean \	NO # :				
Canister/Tube ID:					Receiv	ed PSI :		0.0			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Franc	is Plating									
	Analysis	Prep	Date	DF	MDL	PQL	Results	Results	Lab	Analytical	Prep
Parameters:	Method	Date	Analyzed		ug/m3	ug/m3	ug/m3	ppbv	Qualifier	Batch	Batch
Dichlorodifluoromethane	ETO15	NA	05/08/13	5.5	8.3	28	ND	ND		415396	NA
1,1-Difluoroethane	ETO15	NA	05/08/13	5.5	2.7	7.4	ND	ND		415396	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/08/13	5.5	27	77	ND	ND		415396	NA
Chloromethane	ETO15	NA	05/08/13	5.5	1.7	5.8	ND	ND		415396	NA
Vinyl Chloride	ETO15	NA	05/08/13	5.5	3.7	14	ND	ND		415396	NA
1,3-Butadiene	ETO15	NA	05/08/13	5.5	2.5	6.1	ND	ND		415396	NA
Bromomethane	ETO15	NA	05/08/13	5.5	4.0	11	ND	ND		415396	NA
Chloroethane	ETO15	NA	05/08/13	5.5	2.8	7.2	ND	ND		415396	NA
Trichlorofluoromethane	ETO15	NA	05/08/13	5.5	9.9	31	ND	ND		415396	NA
1,1-Dichloroethene	ETO15	NA	05/08/13	5.5	3.4	11	ND	ND		415396	NA
Freon 113	ETO15	NA	05/08/13	5.5	4.7	21	ND	ND		415396	NA
Carbon Disulfide	ETO15	NA	05/08/13	5.5	4.5	17	ND	ND		415396	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/08/13	5.5	5.3	110	ND	ND		415396	NA
Methylene Chloride	ETO15	NA	05/08/13	5.5	3.2	150	ND	ND		415396	NA
Acetone	ETO15	NA	05/08/13	5.5	4.8	110	ND	ND		415396	NA
trans-1,2-Dichloroethene	ETO15	NA	05/08/13	5.5	3.5	11	ND	ND		415396	NA
Hexane	ETO15	NA	05/08/13	5.5	2.9	9.6	ND	ND		415396	NA
MTBE	ETO15	NA	05/08/13	5.5	4.8	9.9	ND	ND		415396	NA
tert-Butanol	ETO15	NA	05/08/13	5.5	5.0	46	ND	ND		415396	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/08/13	5.5	4.8	12	ND	ND		415396	NA
1,1-Dichloroethane	ETO15	NA	05/08/13	5.5	4.1	11	ND	ND		415396	NA
ETBE	ETO15	NA	05/08/13	5.5	3.7	12	ND	ND		415396	NA
cis-1,2-Dichloroethene	ETO15	NA	05/08/13	5.5	3.0	11	ND	ND		415396	NA
Chloroform	ETO15	NA	05/08/13	5.5	6.8	27	ND	ND		415396	NA
Vinyl Acetate	ETO15	NA	05/08/13	5.5	3.1	9.6	ND	ND		415396	NA
Carbon Tetrachloride	ETO15	NA	05/08/13	5.5	4.7	17	ND	ND		415396	NA
1,1,1-Trichloroethane	ETO15	NA	05/08/13	5.5	4.7	15	86.5	15.73		415396	NA
2-Butanone (MEK)	ETO15	NA	05/08/13	5.5	3.5	8.3	ND	ND		415396	NA
Ethyl Acetate	ETO15	NA	05/08/13	5.5	4.1	9.9	ND	ND		415396	NA
Tetrahydrofuran	ETO15	NA	05/08/13	5.5	1.7	8.3	ND	ND		415396	NA
Benzene	ETO15	NA	05/08/13	5.5	3.8	8.8	ND	ND		415396	NA
TAME	ETO15	NA	05/08/13	5.5	2.0	12	ND	ND		415396	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/08/13	5.5	5.4	11	ND	ND		415396	NA
Trichloroethylene	ETO15	NA	05/08/13	5.5	7.6	30	479	88.70		415396	NA
1,2-Dichloropropane	ETO15	NA	05/08/13	5.5	7.2	25	ND	ND		415396	NA



Report prepared for:	Matthew Sutton The Source Group,	Inc								ived: 05/03 rted: 05/10	
Client Sample ID:	SG-09-2.5				Lab Sa	ample ID:	13	05024-005A			
Project Name/Location:	Former Francis	Plating			Sampl	e Matrix:	Ai	r			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 10:54	1			Certifie	ed Clean V	NO # :				
Canister/Tube ID:					Receiv	ed PSI :		0.0			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Francis	Plating			Conce			0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Bromodichloromethane	ETO15	NA	05/08/13	5.5	4.9	18	ND	ND		415396	NA
,4-Dioxane	ETO15	NA	05/08/13	5.5	6.9	20	ND	ND		415396	NA
rans-1,3-Dichloropropene	ETO15	NA	05/08/13	5.5	4.8	12	ND	ND		415396	NA
oluene	ETO15	NA	05/08/13	5.5	5.2	10	ND	ND		415396	NA
-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/08/13	5.5	4.7	11	ND	ND		415396	NA
is-1,3-Dichloropropene	ETO15	NA	05/08/13	5.5	6.2	12	ND	ND		415396	NA
etrachloroethylene	ETO15	NA	05/08/13	5.5	5.0	19	ND	ND		415396	NA
,1,2-Trichloroethane	ETO15	NA	05/08/13	5.5	5.1	15	ND	ND		415396	NA
Dibromochloromethane	ETO15	NA	05/08/13	5.5	9.6	23	ND	ND		415396	NA
,2-Dibromoethane (EDB)	ETO15	NA	05/08/13	5.5	11	42	ND	ND		415396	NA
2-Hexanone	ETO15	NA	05/08/13	5.5	6.2	23	ND	ND		415396	NA
Ethyl Benzene	ETO15	NA	05/08/13	5.5	5.4	12	ND	ND		415396	NA
Chlorobenzene	ETO15	NA	05/08/13	5.5	3.9	13	ND	ND		415396	NA
,1,1,2-Tetrachloroethane	ETO15	NA	05/08/13	5.5	5.7	19	ND	ND		415396	NA
n,p-Xylene	ETO15	NA	05/08/13	5.5	8.9	24	ND	ND		415396	NA
o-Xylene	ETO15	NA	05/08/13	5.5	4.4	12	ND	ND		415396	NA
Styrene	ETO15	NA	05/08/13	5.5	3.8	12	ND	ND		415396	NA
Bromoform	ETO15	NA	05/08/13	5.5	6.1	28	ND	ND		415396	NA
,1,2,2-Tetrachloroethane	ETO15	NA	05/08/13	5.5	3.9	19	ND	ND		415396	NA
-Ethyl Toluene	ETO15	NA	05/08/13	5.5	4.5	13	ND	ND		415396	NA
,3,5-Trimethylbenzene	ETO15	NA	05/08/13	5.5	4.2	13	ND	ND		415396	NA
,2,4-Trimethylbenzene	ETO15	NA	05/08/13	5.5	3.8	13	ND	ND		415396	NA
,4-Dichlorobenzene	ETO15	NA	05/08/13	5.5	3.6	17	ND	ND		415396	NA
,3-Dichlorobenzene	ETO15	NA	05/08/13	5.5	4.6	17	ND	ND		415396	NA
Benzyl Chloride	ETO15	NA	05/08/13	5.5	3.4	14	ND	ND		415396	NA
,2-Dichlorobenzene	ETO15	NA	05/08/13	5.5	5.0	17	ND	ND		415396	NA
lexachlorobutadiene	ETO15	NA	05/08/13	5.5	13	30	ND	ND		415396	NA
,2,4-Trichlorobenzene	ETO15	NA	05/08/13	5.5	19	41	ND	ND		415396	NA
Naphthalene	ETO15	NA	05/08/13	5.5	8.0	29	ND	ND		415396	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/08/13	5.5	65	135	115 %			415396	NA

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Report prepared for:	Matthew Sutton The Source Grou	p, Inc						_		ived: 05/03 rted: 05/10	
Client Sample ID:	SG-09-2.5				Lab Sa	ample ID:		1305024-005A			
Project Name/Location:	Former France	cis Plating			Sampl	e Matrix:		Air			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 10	:54			Certifie	ed Clean	WO # :				
Canister/Tube ID:					Receiv	ed PSI :		0.0			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former France	cis Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	2.2	0.011	0.011	2.5	8		415401	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/03 rted: 05/10	
Client Sample ID:	SG-09-4.6				Lab S	ample ID:	13	305024-006A			
Project Name/Location:	Former Franci	e Plating				le Matrix:	Ai		N Contraction of the second se		
	01-FP-001	is Flating			Samp		A	1			
Project Number:		26			Contifi		NO # .				
Date/Time Sampled:	05/01/13 / 11:	20				ed Clean \	-				
Canister/Tube ID:	A7545					ed PSI :		12.3			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former Franci	is Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/07/13	1	1.5	5.0	ND	ND		415373	NA
1,1-Difluoroethane	ETO15	NA	05/07/13	1	0.50	1.4	ND	ND		415373	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/07/13	1	4.9	14	ND	ND		415373	NA
Chloromethane	ETO15	NA	05/07/13	1	0.32	1.1	ND	ND		415373	NA
Vinyl Chloride	ETO15	NA	05/07/13	1	0.67	2.6	ND	ND		415373	NA
1,3-Butadiene	ETO15	NA	05/07/13	1	0.45	1.1	ND	ND		415373	NA
Bromomethane	ETO15	NA	05/07/13	1	0.72	2.0	ND	ND		415373	NA
Chloroethane	ETO15	NA	05/07/13	1	0.50	1.3	ND	ND		415373	NA
Trichlorofluoromethane	ETO15	NA	05/07/13	1	1.8	5.6	ND	ND		415373	NA
1,1-Dichloroethene	ETO15	NA	05/07/13	1	0.61	2.0	ND	ND		415373	NA
Freon 113	ETO15	NA	05/07/13	1	0.85	3.9	ND	ND		415373	NA
Carbon Disulfide	ETO15	NA	05/07/13	1	0.81	3.1	ND	ND		415373	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/07/13	1	0.97	20	ND	ND		415373	NA
Methylene Chloride	ETO15	NA	05/07/13	1	0.58	28	ND	ND		415373	NA
Acetone	ETO15	NA	05/07/13	1	0.88	19	ND	ND		415373	NA
trans-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.64	2.0	ND	ND		415373	NA
Hexane	ETO15	NA	05/07/13	1	0.53	1.8	ND	ND		415373	NA
MTBE	ETO15	NA	05/07/13	1	0.87	1.8	ND	ND		415373	NA
tert-Butanol	ETO15	NA	05/07/13	1	0.91	8.4	ND	ND		415373	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/07/13	1	0.88	2.1	ND	ND		415373	NA
1,1-Dichloroethane	ETO15	NA	05/07/13	1	0.75	2.1	ND	ND		415373	NA
ETBE	ETO15	NA	05/07/13	1	0.68	2.1	ND	ND		415373	NA
cis-1,2-Dichloroethene	ETO15	NA	05/07/13	1	0.54	2.0	ND	ND		415373	NA
Chloroform	ETO15	NA	05/07/13	1	1.2	4.9	ND	ND		415373	NA
Vinyl Acetate	ETO15	NA	05/07/13	1	0.57	1.8	ND	ND		415373	NA
Carbon Tetrachloride	ETO15	NA	05/07/13	1	0.86	3.2	ND	ND		415373	NA
1,1,1-Trichloroethane	ETO15	NA	05/07/13	1	0.85	2.8	70.1	12.75		415373	NA
2-Butanone (MEK)	ETO15	NA	05/07/13	1	0.63	1.5	ND	ND		415373	NA
Ethyl Acetate	ETO15	NA	05/07/13	1	0.74	1.8 1.5		ND		415373	NA
Tetrahydrofuran	ETO15	NA	05/07/13	1	0.30	1.5		ND		415373	NA
Benzene	ETO15	NA	05/07/13	1	0.69	1.6		ND		415373	NA
TAME	ETO15	NA	05/07/13	1	0.36	2.1		ND		415373	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/07/13	1	0.99	2.1		ND		415373	NA
1,2-Dichloropropane Bromodichloromethane	ETO15 ETO15	NA	05/07/13 05/07/13	1	1.3	4.6 3.4		ND		415373	NA
Bromodichioromethane	21015	NA	05/07/13	1	0.89	3.4	ND	ND		415373	NA



Report prepared for:	Matthew Sutton The Source Group, Inc								ived: 05/03 rted: 05/10	-
Client Sample ID: Project Name/Location: Project Number:	SG-09-4.6 Former Francis Plat 01-FP-001	ing			ample ID: le Matrix:	13 Ai	305024-006A r	۱.		
Date/Time Sampled:	05/01/13 / 11:26			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	A7545			Receiv	/ed PSI :		12.3			
Collection Volume (L):	0.00			Correc	ted PSI :		0.0			
Tag Number:	Former Francis Plat	ing								
Parameters:	Analysis Pre Method Dat		DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15 NA	05/07/13	1	1.2	3.6	ND	ND		415373	NA
trans-1,3-Dichloropropene	ETO15 NA		1	0.87	2.3	ND	ND		415373	NA
Toluene	ETO15 NA	05/07/13	1	0.95	1.9	ND	ND		415373	NA
4-Methyl-2-Pentanone (MIBK)	ETO15 NA	05/07/13	1	0.85	2.1	ND	ND		415373	NA
cis-1,3-Dichloropropene	ETO15 NA	05/07/13	1	1.1	2.3	ND	ND		415373	NA
Tetrachloroethylene	ETO15 NA	05/07/13	1	0.91	3.4	ND	ND		415373	NA
1,1,2-Trichloroethane	ETO15 NA	05/07/13	1	0.93	2.8	ND	ND		415373	NA
Dibromochloromethane	ETO15 NA	05/07/13	1	1.7	4.3	ND	ND		415373	NA
1,2-Dibromoethane (EDB)	ETO15 NA	05/07/13	1	2.0	7.7	ND	ND		415373	NA
Trichloroethylene	ETO15 NA	05/08/13	4.23	5.9	23	214	39.63		415396	NA
2-Hexanone	ETO15 NA	05/07/13	1	1.1	4.1	ND	ND		415373	NA
Ethyl Benzene	ETO15 NA	05/07/13	1	0.99	2.2	ND	ND		415373	NA
Chlorobenzene	ETO15 NA	05/07/13	1	0.71	2.3	ND	ND		415373	NA
1,1,1,2-Tetrachloroethane	ETO15 NA	05/07/13	1	1.0	3.5	ND	ND		415373	NA
m,p-Xylene	ETO15 NA	05/07/13	1	1.6	4.3	ND	ND		415373	NA
o-Xylene	ETO15 NA	05/07/13	1	0.81	2.2	ND	ND		415373	NA
Styrene	ETO15 NA	05/07/13	1	0.69	2.2	ND	ND		415373	NA
Bromoform	ETO15 NA	05/07/13	1	1.1	5.0	ND	ND		415373	NA
1,1,2,2-Tetrachloroethane	ETO15 NA		1	0.70	3.5	ND	ND		415373	NA
4-Ethyl Toluene	ETO15 NA		1	0.82	2.5	ND	ND		415373	NA
1,3,5-Trimethylbenzene	ETO15 NA		1	0.76	2.5	ND	ND		415373	NA
1,2,4-Trimethylbenzene	ETO15 NA		1	0.69	2.5	ND	ND		415373	NA
1,4-Dichlorobenzene	ETO15 NA		1	0.65	3.0	ND	ND		415373	NA
1,3-Dichlorobenzene	ETO15 NA		1	0.84	3.0	ND	ND		415373	NA
1,2-Dichlorobenzene	ETO15 NA		1	0.91	3.0	ND	ND		415373	NA
Hexachlorobutadiene	ETO15 NA		1	2.4	5.5	ND	ND		415373	NA
1,2,4-Trichlorobenzene	ETO15 NA		1	3.4	7.4	ND	ND		415373	NA
Naphthalene	ETO15 NA		1	1.5	5.2	ND	ND		415373	NA
(S) 4-Bromofluorobenzene	ETO15 NA		1	65	135	82.4 %			415373	NA
(S) 4-Bromofluorobenzene	ETO15 NA	05/08/13	4.23	65	135	105 %			415396	NA



Report prepared for:	Matthew Sutton The Source Grou	p, Inc						_		ived: 05/03 rted: 05/10	
Client Sample ID:	SG-09-4.6				Lab Sa	ample ID:		1305024-006A			
Project Name/Location:	Former France	cis Plating			Sampl	e Matrix:		Air			
Project Number:	01-FP-001										
Date/Time Sampled:	05/01/13 / 11	:26			Certifie	ed Clean	WO # :				
Canister/Tube ID:	A7545				Receiv	ed PSI :		12.3			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Tag Number:	Former France	is Plating									
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/10/13	1.67	0.0084	0.0084	2.2		•	415401	NA



Work Order:	1305024	Prep I	Method:	NA	Prep D	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Analyz	ed Date:	05/07/13	Analytical	415373
Units:	ppbv	Metho	od:					Batch:	
					1				
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluorom	nethane	0.30	1.00	ND					
1,1-Difluoroethan	ne	0.18	10.0	ND					
1,2-Dichlorotetraf	fluoroethane	0.70	2.00	ND					
Chloromethane		0.15	0.500	ND					
Vinyl Chloride		0.26	1.00	ND					
1,3-Butadiene		0.20	0.500	ND					
Bromomethane		0.18	0.500	ND					
Chloroethane		0.19	0.500	ND					
Trichlorofluorome	ethane	0.32	1.00	ND					
1,1-Dichloroether	ne	0.15	0.500	ND					
Freon 113		0.11	0.500	ND					
Carbon Disulfide		0.26	1.00	ND					
2-Propanol (Isopr	ropyl Alcohol)	0.39	8.00	ND					
Methylene Chlori	de	0.17	8.00	0.335					
Acetone		0.37	8.00	ND					
trans-1,2-Dichlor	oethene	0.16	0.500	ND					
Hexane		0.15	0.500	ND					
MTBE		0.24	0.500	ND					
tert-Butanol		0.22	2.00	ND					
Diisopropyl ether	· (DIPE)	0.21	0.500	ND					
1,1-Dichloroethar	ne	0.18	0.500	ND					
ETBE		0.16	0.500	ND					
cis-1,2-Dichloroe	thene	0.13	0.500	ND					
Chloroform		0.25	1.00	ND					
Vinyl Acetate		0.16	0.500	ND					
Carbon Tetrachlo		0.14	0.500	ND					
1,1,1-Trichloroeth		0.15	0.500	ND					
2-Butanone (ME	K)	0.21	0.500	ND					
Ethyl Acetate		0.21	0.500	ND					
Tetrahydrofuran		0.10	0.500	ND					
Benzene		0.21	0.500	ND					
TAME		0.086	0.500	ND					
1,2-Dichloroethar		0.24	0.500	ND					
Trichloroethylene		0.26	1.00	ND					
1,2-Dichloropropa		0.29	1.00	ND					
Bromodichlorome	ethane	0.13	0.500	ND					
1,4-Dioxane		0.35	1.00	ND					
trans-1,3-Dichlor	opropene	0.19	0.500	ND					
Toluene		0.25	0.500	ND					
4-Methyl-2-Penta		0.21	0.500	ND					
cis-1,3-Dichlorop	ropene	0.25	0.500	ND					



Work Order:	1305024	Prep l	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Anal	yzed Date:	05/07/13	Analytical	415373
Units:	ppbv	Metho	ba:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Tetrachloroethyle	ne	0.13	0.500	ND					
1,1,2-Trichloroeth		0.17	0.500	ND					
Dibromochlorome	ethane	0.20	0.500	ND					
1,2-Dibromoetha	ne (EDB)	0.27	1.00	ND					
2-Hexanone		0.27	1.00	ND					
Ethyl Benzene		0.23	0.500	ND					
Chlorobenzene		0.15	0.500	ND					
1,1,1,2-Tetrachlor	roethane	0.15	0.500	ND					
m,p-Xylene		0.38	1.00	ND					
o-Xylene		0.19	0.500	ND					
Styrene		0.16	0.500	ND					
Bromoform		0.11	0.500	ND					
1,1,2,2-Tetrachlor	roethane	0.10	0.500	ND					
4-Ethyl Toluene		0.17	0.500	ND					
1,3,5-Trimethylbe	enzene	0.15	0.500	ND					
1,2,4-Trimethylbe	enzene	0.14	0.500	ND					
1,4-Dichlorobenz	ene	0.11	0.500	ND					
1,3-Dichlorobenz	ene	0.14	0.500	ND					
1,2-Dichlorobenz	ene	0.15	0.500	ND					
Hexachlorobutadi	iene	0.22	0.500	ND					
1,2,4-Trichlorobe	nzene	0.46	1.00	ND					
Naphthalene		0.28	1.00	ND					
(S) 4-Bromofluor	obenzene			97.8					



Work Order:	1305024	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Analy	zed Date:	05/08/13	Analytical	415396
Units:	ppbv	Metho	od:					Batch:	
		1	[						
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluorom	lethane	0.30	1.00	ND					
1,1-Difluoroethan	е	0.18	10.0	ND					
1,2-Dichlorotetraf	luoroethane	0.70	2.00	ND					
Chloromethane		0.15	0.500	ND					
Vinyl Chloride		0.26	1.00	ND					
1,3-Butadiene		0.20	0.500	ND					
Bromomethane		0.18	0.500	ND					
Chloroethane		0.19	0.500	ND					
Trichlorofluorome	thane	0.32	1.00	ND					
1,1-Dichloroether	ne	0.15	0.500	ND					
Freon 113		0.11	0.500	ND					
Carbon Disulfide		0.26	1.00	ND					
2-Propanol (Isopr	opyl Alcohol)	0.39	8.00	ND					
Methylene Chlorid	de	0.17	8.00	ND					
Acetone		0.37	8.00	0.550					
trans-1,2-Dichloro	pethene	0.16	0.500	ND					
Hexane		0.15	0.500	ND					
MTBE		0.24	0.500	ND					
tert-Butanol		0.22	2.00	ND					
Diisopropyl ether	(DIPE)	0.21	0.500	ND					
1,1-Dichloroethar	ne	0.18	0.500	ND					
ETBE		0.16	0.500	ND					
cis-1,2-Dichloroet	thene	0.13	0.500	ND					
Chloroform		0.25	1.00	ND					
Vinyl Acetate		0.16	0.500	ND					
Carbon Tetrachlo	ride	0.14	0.500	ND					
1,1,1-Trichloroeth	nane	0.15	0.500	ND					
2-Butanone (ME	()	0.21	0.500	ND					
Ethyl Acetate		0.21	0.500	ND					
Tetrahydrofuran		0.10	0.500	ND					
Benzene		0.21	0.500	ND					
TAME		0.086	0.500	ND					
1,2-Dichloroethar	. ,	0.24	0.500	ND					
Trichloroethylene		0.26	1.00	ND					
1,2-Dichloropropa	ane	0.29	1.00	ND					
Bromodichlorome	ethane	0.13	0.500	ND					
1,4-Dioxane		0.35	1.00	ND					
trans-1,3-Dichloro	opropene	0.19	0.500	ND					
Toluene		0.25	0.500	ND					
4-Methyl-2-Penta	none (MIBK)	0.21	0.500	ND					
cis-1,3-Dichloropi	ropene	0.25	0.500	ND					



Work Order: 1305024		Prep I	Prep Method:		Prep Date:		NA	Prep Batch:	NA
Matrix: Air		Analytical		ETO15	Analyzed Date:		05/08/13	Analytical	415396
Units:	ppbv	Metho	od:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Tetrachloroethylen	e	0.13	0.500	ND					
1,1,2-Trichloroetha	ine	0.17	0.500	ND					
Dibromochloromet	hane	0.20	0.500	ND					
1,2-Dibromoethan	e (EDB)	0.27	1.00	ND					
2-Hexanone		0.27	1.00	ND					
Ethyl Benzene		0.23	0.500	ND					
Chlorobenzene		0.15	0.500	ND					
1,1,1,2-Tetrachloro	oethane	0.15	0.500	ND					
m,p-Xylene		0.38	1.00	ND					
o-Xylene		0.19	0.500	ND					
Styrene		0.16	0.500	ND					
Bromoform		0.11	0.500	ND					
1,1,2,2-Tetrachloro	oethane	0.10	0.500	ND					
4-Ethyl Toluene		0.17	0.500	ND					
1,3,5-Trimethylber	zene	0.15	0.500	ND					
1,2,4-Trimethylber	zene	0.14	0.500	ND					
1,4-Dichlorobenze	ne	0.11	0.500	ND					
1,3-Dichlorobenze	ne	0.14	0.500	ND					
1,2-Dichlorobenze	ne	0.15	0.500	ND					
Hexachlorobutadie	ne	0.22	0.500	ND					
1,2,4-Trichloroben	zene	0.46	1.00	ND					
Naphthalene		0.28	1.00	ND					
(S) 4-Bromofluorol	penzene			113					
Work Order:	1305024	Prep	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		D1946	Anal	yzed Date:	05/10/13	Analytical	415401
Units:	%	Metho	ba:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Helium		0.0050	0.0050	ND					



## LCS/LCSD Summary Report

Raw values are used in quality control assessment. Work Order: 1305024 **Prep Method:** NA NA Prep Batch: NA Prep Date: Matrix: Analytical ETO15 Analyzed Date: 05/07/13 Analytical 415373 Air Method: Batch: Units: ppbv Method LCS % LCSD % LCS/LCSD % Spike Parameters MDL PQL Blank Conc. Recovery Recovery % RPD Recovery % RPD Lab Limits Qualifier Conc. Limits 1,1-Dichloroethene 0.15 0.500 ND 8 101 94.1 7.16 65 - 135 30 0.500 ND 8 93.6 95.3 65 - 135 30 Benzene 0.21 1.87 Trichloroethylene 8 0.26 1.00 ND 104 105 0.729 65 - 135 30 Toluene 0.25 0.500 ND 8 88.8 90.3 1.62 65 - 135 30 84.0 83.0 65 - 135 Chlorobenzene 0.15 0.500 ND 8 1.15 30 (S) 4-Bromofluorobenzene ND 8 80.0 76.3 65 - 135 Prep Batch: Work Order: 1305024 Prep Method: NA Prep Date: NA NA Matrix: Air Analytical ETO15 Analyzed Date: 05/08/13 Analytical 415396 Method: Batch: Units: ppbv Method Spike LCS % LCSD % LCS/LCSD % MDL PQL Recovery Recovery **Parameters** Blank Recovery % RPD % RPD Conc. Lab Conc. Limits Limits Qualifier 1,1-Dichloroethene 0.15 0.500 ND 8 112 111 1.01 65 - 135 30 90.8 65 - 135 Benzene 0.21 0.500 ND 8 95.2 4.65 30 Trichloroethylene 97.0 0.26 1.00 ND 8 96.5 0.517 65 - 135 30 Toluene 0.25 0.500 8 93.8 93.9 0.173 65 - 135 30 ND 0.500 ND 8 87.7 86.3 1.67 65 - 135 30 Chlorobenzene 0.15 87.5 (S) 4-Bromofluorobenzene ND 8 85.0 65 - 135 Work Order: 1305024 **Prep Method:** NA Prep Date: NA Prep Batch: NA Matrix: Air Analytical D1946 05/10/13 Analytical 415401 Analyzed Date: Method: Batch: Units: % Method Spike LCS % LCSD % LCS/LCSD % PQL MDL % RPD Parameters Blank Conc. Recovery Recovery % RPD Recovery Lab Limits Limits Qualifier Conc. Helium 0.0050 0.0050 ND 1000 101 110 8.78 65 - 135 30



# Laboratory Qualifiers and Definitions

#### **DEFINITIONS:**

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.

Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.

**Duplicate** - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)

Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.

Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)

**Matrix Spike (MS/MSD)** - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.

Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero

**Practical Quantitation Limit (PQL)** - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.

Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates

Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis

**Tentatively Identified Compound (TIC)** - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.

Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/M3, mg.m3, ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

#### LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank

**D** - Surrogate is not recoverable due to the necessary dilution of the sample

**E** - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.

H- Indicates that the recommended holding time for the analyte or compound has been exceeded

J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative

NA - Not Analyzed

N/A - Not Applicable

**NR** - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added

R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts

S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative

**X** -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Client Name: The Source Group, Inc

Project Name: Former Francis Plating

Work Order No.: <u>1305024</u>

# Sample Receipt Checklist

Date and Time Received: <u>5/3/2013</u> <u>15:08</u> Received By: <u>kb</u> Physically Logged By: <u>kb</u> Checklist Completed By: <u>kb</u> Carrier Name: <u>Client Drop Off</u>

#### Chain of Custody (COC) Information

		· · · ·			
Chain of custody present?		Yes			
Chain of custody signed when relinquished and	I received?	Yes			
Chain of custody agrees with sample labels?		Yes			
Custody seals intact on sample bottles?		Not Present			
	Sample Receip	t Information			
Custody seals intact on shipping container/coo	ler?	Not Present			
Shipping Container/Cooler In Good Condition?		Yes			
Samples in proper container/bottle?		Yes			
Samples containers intact?		Yes			
Sufficient sample volume for indicated test?		Yes			
Sample Pro	eservation and H	old Time (HT) Info	rmation		
All samples received within holding time?		<u>Yes</u>			
Container/Temp Blank temperature in complian	nce?	Yes	Temperature:	<u>23</u>	°C
Water-VOA vials have zero headspace?		No VOA vials sub	mitted		
Water-pH acceptable upon receipt?		<u>N/A</u>			
pH Checked by: <u>n/a</u>		pH Adjusted by: <u>r</u>	<u>n/a</u>		

Air samples received at ambient temperature.



	483 Sinclair Fro Milpitas, CA 95 Phone: 408.263 FAX: 408.263.8 www.torrentlab.	035 .5258 293	• NOTE			-			VLY•	LAB WORK ORDER NO
Company Name: The Source		com		(Env. 🚺 IH [	Food	Special Lo	cation of Sam	pling: Forme		
Address: 3478 Buskirk Ave, S					Purpo	se:	yara			
city: Pleasant HII	State: CIA	Zip Coo	de: 94523		Speci	al Instructio	ons / Commen	ts:		
Telephone: 925-944-2856	FAX: 925-944-	2859			Proje	ct No. 01-H	P-001			
REPORT TO: Matt Sutton	SAMPLER: Ma	ry Cunningham	ı .		P.O. #	<b>#</b> :	EMAIL:	msutton	@thesou	urcegroup.net
TURNAROUND TIME:	SAMPLE	/PE:  R	EPORT FO	RMAT:		946				
10 Work Days       4 Work Days         7 Work Days       3 Work Days         5 Work Days       2 Work Days	Noon - Nxt Day	ter 🗹 Air ater 🗋 Other	CC Level IV EDF Excel / EDD		TO-15 (VOCs)	Helium by ASTM D1946				ANALYSIS REQUESTED
LAB ID CANISTER	SAMPLE I.D. DATE / TIMI			ONT	TO-1	Heliu				REMARKS
Sub-	Slab1				1	1				
	Slab2				1	1	+			
Sub-	Slab3				1	1				
001A 6321 SG-1	17-2.5 5/1/13	Kapa	1 1	VMM	1	1				
002A 6115 SG-0	17-4.0 5/1/13 1423		1 50	- MMA	1	$\checkmark$				
Dasa A7462 SG-1	18-3.0 5/1/13 1256		1 11		1	1				
		++-								
004A A 7559 SG-0	8-6.2 5/1/13 1315		1 5	UMMA	1	1				
0057 A7468 SG-0	9-2.5 5/1/13		1 5	UMLA	1	$\checkmark$				
00617 A7545 SG-0	9-4.6 5/1/13 1126	7	, 11	IMMA	1	1				
XU	Print: Mart Date	3  3    73  3 <sup>   </sup>		A	eived By:	2	Print: 0 Phys 0 Phys	enst	Date: 5/3/ Date: N 5	13 Time: 7205-pm 3 B 3:08 PM
Were Samples Received in Good C NOTE: Samples   are discarded Log In By:	by the laboratory 30 days from Date: 50	101	- /	rangements a	'	oment	T-CS Date:	san San San San San San San San San San S	mple seals inta	act? Yes NO N/A ge of Rev. 1



Matthew C. Sutton The Source Group, Inc 3478 Buskirk Avenue, Suite 100 Pleasant Hill, California 94523 Tel: 925.951.6386 Fax: 925.944.2859 Email: msutton@thesourcegroup.net RE:

Work Order No.: 1305039

Dear Matthew Sutton:

Torrent Laboratory, Inc. received 3 sample(s) on May 08, 2013 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

yes Bhe

Janice Winn-Shilling Sr. Project Manager

May 15, 2013

Date



Client: The Source Group, Inc Project: Work Order: 1305039

### **CASE NARRATIVE**

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.



### Sample Result Summary

Report prepared for:	Matthew Sutton				Date F	Received: 05/08/13
	The Source Group, Inc				Date R	Reported: 05/15/13
Subslab 2						1305039-001
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u> ug/m3
Helium		D1946	2.5	0.013	0.013	2.3
1,1-Dichloroethene		ETO15	50	31	100	2200
Acetone		ETO15	50	44	960	1810
Hexane		ETO15	50	26	88	7630
tert-Butanol		ETO15	50	46	420	2560
Carbon Tetrachloride		ETO15	50	43	160	554
1,1,1-Trichloroethane		ETO15	50	42	140	4200
Benzene		ETO15	50	34	80	2800
Toluene		ETO15	50	48	95	2930
Tetrachloroethylene		ETO15	50	45	170	850
Ethyl Benzene		ETO15	50	50	110	2600
m,p-Xylene		ETO15	50	81	220	611
o-Xylene		ETO15	50	40	110	5250
Styrene		ETO15	50	34	110	205
4-Ethyl Toluene		ETO15	50	41	120	3960
1,3,5-Trimethylbenzene		ETO15	50	38	120	7580
1,2,4-Trimethylbenzene		ETO15	50	34	120	2000
Subslab 1						1305039-002/

Parameters:	<u>Analysis</u> <u>Method</u>	DF	MDL	<u>PQL</u>	<u>Results</u> ug/m3
Acetone	ETO15	1.5	1.3	29	5.22
2-Butanone (MEK)	ETO15	1.5	0.94	2.3	1.17
Ethyl Acetate	ETO15	1.5	1.1	2.7	1.40
Helium	D1946	6	0.030	0.030	4.0



### Sample Result Summary

Report prepared for:	Matthew Sutton The Source Group, Inc				Date Received: 05/08/13 Date Reported: 05/15/13 1305039-003		
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	Results ug/m3	
1,1,1-Trichloroethane		ETO15	50	42	140	4750	
2-Butanone (MEK)		ETO15	50	31	75	84.0	
Ethyl Acetate		ETO15	50	37	90	101	
Trichloroethylene		ETO15	50	69	270	5170	
Tetrachloroethylene		ETO15	50	45	170	1360	
4-Ethyl Toluene		ETO15	50	41	120	191	
1,3,5-Trimethylbenzene		ETO15	50	38	120	466	
1,2,4-Trimethylbenzene		ETO15	50	34	120	162	
Helium		D1946	75	0.38	0.38	29	



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/08 rted: 05/15	
Client Sample ID:	Subslab 2				Lab Sa	ample ID:	13	305039-001 <i>A</i>	\ \		
Project Name/Location:	0000100 2					le Matrix:	Ai		•		
Project Number:					Campi		7.	•			
Date/Time Sampled:	05/08/13 / 8:2	3			Cortifie	ed Clean \	NO # ·				
•		5						40 5			
Canister/Tube ID:	A7552					ed PSI :		13.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/09/13	50	76	250	ND	ND		415444	NA
1,1-Difluoroethane	ETO15	NA	05/09/13	50	25	68	ND	ND		415444	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/09/13	50	250	700	ND	ND		415444	NA
Chloromethane	ETO15	NA	05/09/13	50	16	53	ND	ND		415444	NA
Vinyl Chloride	ETO15	NA	05/09/13	50	33	130	ND	ND		415444	NA
1,3-Butadiene	ETO15	NA	05/09/13	50	22	55	ND	ND		415444	NA
Bromomethane	ETO15	NA	05/09/13	50	36	98	ND	ND		415444	NA
Chloroethane	ETO15	NA	05/09/13	50	25	65	ND	ND		415444	NA
Trichlorofluoromethane	ETO15	NA	05/09/13	50	90	280	ND	ND		415444	NA
1,1-Dichloroethene	ETO15	NA	05/09/13	50	31	100	2200	550.00		415444	NA
Freon 113	ETO15	NA	05/09/13	50	42	190	ND	ND		415444	NA
Carbon Disulfide	ETO15	NA	05/09/13	50	41	160	ND	ND		415444	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/09/13	50	49	1000	ND	ND		415444	NA
Methylene Chloride	ETO15	NA	05/09/13	50	29	1400	ND	ND		415444	NA
Acetone	ETO15	NA	05/09/13	50	44	960	1810	754.17		415444	NA
trans-1,2-Dichloroethene	ETO15	NA	05/09/13	50	32	100	ND	ND		415444	NA
Hexane	ETO15	NA	05/09/13	50	26	88	7630	2,180.00		415444	NA
МТВЕ	ETO15	NA	05/09/13	50	43	90	ND	ND		415444	NA
tert-Butanol	ETO15	NA	05/09/13	50	46	420	2560	609.52		415444	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/09/13	50	44	110	ND	ND		415444	NA
1,1-Dichloroethane	ETO15	NA	05/09/13	50	38	100	ND	ND		415444	NA
ETBE	ETO15	NA	05/09/13	50	34	110	ND	ND		415444	NA
cis-1,2-Dichloroethene	ETO15	NA	05/09/13	50	27	100	ND	ND		415444	NA
Chloroform	ETO15	NA	05/09/13	50	62	250	ND	ND		415444	NA
Vinyl Acetate	ETO15	NA	05/09/13	50	28	88	ND	ND		415444	NA
Carbon Tetrachloride	ETO15	NA	05/09/13	50	43	160	554	87.94		415444	NA
1,1,1-Trichloroethane	ETO15	NA	05/09/13	50	42	140	4200	763.64		415444	NA
2-Butanone (MEK)	ETO15	NA	05/09/13	50	31	75	ND	ND		415444	NA
Ethyl Acetate	ETO15	NA	05/09/13	50	37	90	ND	ND		415444	NA
Tetrahydrofuran	ETO15	NA	05/09/13	50	15	75	ND	ND		415444	NA
Benzene	ETO15	NA	05/09/13	50	34	80	2800	875.00		415444	NA
TAME	ETO15	NA	05/09/13	50	18	110	ND	ND		415444	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/09/13	50	49	100	ND	ND		415444	NA
Trichloroethylene	ETO15	NA	05/09/13	50	69	270	ND	ND		415444	NA
1,2-Dichloropropane	ETO15	NA	05/09/13	50	66	230	ND	ND		415444	NA
Bromodichloromethane	ETO15	NA	05/09/13	50	44	170	ND	ND		415444	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc						_		ived: 05/08 rted: 05/15	
Client Sample ID: Project Name/Location:	Subslab 2					ample ID: e Matrix:	13 Ai	805039-001A r			
Project Number: Date/Time Sampled:	05/08/13 / 8:23	<b>,</b>			Cortific	ed Clean V	NO # .				
•		)					-	40 5			
Canister/Tube ID:	A7552					ed PSI :		13.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15	NA	05/09/13	50	62	180	ND	ND		415444	NA
trans-1,3-Dichloropropene	ETO15	NA	05/09/13	50	43	110	ND	ND		415444	NA
Toluene	ETO15	NA	05/09/13	50	48	95	2930	771.05		415444	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/09/13	50	42	100	ND	ND		415444	NA
cis-1,3-Dichloropropene	ETO15	NA	05/09/13	50	56	110	ND	ND		415444	NA
Tetrachloroethylene	ETO15	NA	05/09/13	50	45	170	850	125.00		415444	NA
1,1,2-Trichloroethane	ETO15	NA	05/09/13	50	46	140	ND	ND		415444	NA
Dibromochloromethane	ETO15	NA	05/09/13	50	87	210	ND	ND		415444	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/09/13	50	100	390	ND	ND		415444	NA
2-Hexanone	ETO15	NA	05/09/13	50	56	210	ND	ND		415444	NA
Ethyl Benzene	ETO15	NA	05/09/13	50	50	110	2600	604.65		415444	NA
Chlorobenzene	ETO15	NA	05/09/13	50	36	120	ND	ND		415444	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/09/13	50	52	170	ND	ND		415444	NA
m,p-Xylene	ETO15	NA	05/09/13	50	81	220	611	142.09		415444	NA
o-Xylene	ETO15	NA	05/09/13	50	40	110	5250	1,220.93		415444	NA
Styrene	ETO15	NA	05/09/13	50	34	110	205	46.59		415444	NA
Bromoform	ETO15	NA	05/09/13	50	55	250	ND	ND		415444	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/09/13	50	35	170	ND	ND		415444	NA
4-Ethyl Toluene	ETO15	NA	05/09/13	50	41	120	3960	808.16		415444	NA
1,3,5-Trimethylbenzene	ETO15	NA	05/09/13	50	38	120	7580	1,546.94		415444	NA
1,2,4-Trimethylbenzene	ETO15	NA	05/09/13	50	34	120	2000	408.16		415444	NA
1,4-Dichlorobenzene	ETO15	NA	05/09/13	50	32	150	ND	ND		415444	NA
1,3-Dichlorobenzene	ETO15	NA	05/09/13	50	42	150	ND	ND		415444	NA
1,2-Dichlorobenzene	ETO15	NA	05/09/13	50	45	150	ND	ND		415444	NA
Hexachlorobutadiene	ETO15	NA	05/09/13	50	120	280	ND	ND		415444	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/09/13	50	170	370	ND	ND		415444	NA
Naphthalene	ETO15	NA	05/09/13	50	73	260	ND	ND		415444	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/09/13	50	65	135	94.4 %			415444	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/14/13	2.5	0.013	0.013	2.3		•	415451	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/08 rted: 05/15	
Client Sample ID:	Subslab 1				Lab Sa	ample ID:	1:	305039-002/	4		
Project Name/Location:	Oubblab 1					le Matrix:	Ai		·		
Project Number:					Samp			1			
Date/Time Sampled:	05/08/13 / 8:5	C.			Contifi	ed Clean \	NO # .				
•		0					-				
Canister/Tube ID:	6337				Receiv	ed PSI :		6.9			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
The results shown below a	are reported using	their MD	Ĺ.								
Dichlorodifluoromethane	ETO15	NA	05/13/13	1.5	2.3	7.5	ND	ND		415441	NA
1,1-Difluoroethane	ETO15	NA	05/13/13	1.5	0.75	2.0	ND	ND		415441	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/13/13	1.5	7.4	21	ND	ND		415441	NA
Chloromethane	ETO15	NA	05/13/13	1.5	0.48	1.6	ND	ND		415441	NA
Vinyl Chloride	ETO15	NA	05/13/13	1.5	1.0	3.9	ND	ND		415441	NA
1,3-Butadiene	ETO15	NA	05/13/13	1.5	0.67	1.7	ND	ND		415441	NA
Bromomethane	ETO15	NA	05/13/13	1.5	1.1	2.9	ND	ND		415441	NA
Chloroethane	ETO15	NA	05/13/13	1.5	0.75	2.0	ND	ND		415441	NA
Trichlorofluoromethane	ETO15	NA	05/13/13	1.5	2.7	8.4	ND	ND		415441	NA
1,1-Dichloroethene	ETO15	NA	05/13/13	1.5	0.92	3.0	ND	ND		415441	NA
Freon 113	ETO15	NA	05/13/13	1.5	1.3	5.8	ND	ND		415441	NA
Carbon Disulfide	ETO15	NA	05/13/13	1.5	1.2	4.7	ND	ND		415441	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/13/13	1.5	1.5	30	ND	ND		415441	NA
Methylene Chloride	ETO15	NA	05/13/13	1.5	0.88	42	ND	ND		415441	NA
Acetone	ETO15	NA	05/13/13	1.5	1.3	29	5.22	2.18	J	415441	NA
trans-1,2-Dichloroethene	ETO15	NA	05/13/13	1.5	0.96	3.0	ND	ND		415441	NA
Hexane	ETO15	NA	05/13/13	1.5	0.79	2.6	ND	ND		415441	NA
MTBE	ETO15	NA	05/13/13	1.5	1.3	2.7	ND	ND		415441	NA
tert-Butanol	ETO15	NA	05/13/13	1.5	1.4	13	ND	ND		415441	NA
Diisopropyl ether (DIPE) 1.1-Dichloroethane	ETO15	NA	05/13/13	1.5	1.3	3.2				415441 415441	NA
ETBE	ETO15	NA	05/13/13	1.5	1.1	3.1				415441 415441	NA
	ETO15	NA	05/13/13 05/13/13	1.5 1.5	1.0 0.81	3.2 3.0	ND ND	ND ND		415441 415441	NA NA
cis-1,2-Dichloroethene Chloroform	ETO15 ETO15	NA NA	05/13/13	1.5 1.5	1.8	3.0 7.4	ND	ND			NA
Vinyl Acetate	ETO15 ETO15	NA NA	05/13/13	1.5 1.5	0.85	7.4 2.6	ND	ND ND		415441 415441	NA
Carbon Tetrachloride	ETO15 ETO15	NA	05/13/13	1.5 1.5	0.85 1.3	2.6 4.7	ND	ND		415441 415441	NA
1,1,1-Trichloroethane	ETO15 ETO15	NA	05/13/13	1.5 1.5	1.3	4.7 4.1	ND	ND		415441 415441	NA
2-Butanone (MEK)	ETO15	NA	05/13/13	1.5	0.94	2.3	1.17	0.39	J	415441	NA
Ethyl Acetate	ETO15	NA	05/13/13	1.5	1.1	2.3	1.40	0.39	J	415441	NA
Tetrahydrofuran	ETO15	NA	05/13/13	1.5	0.45	2.3	ND	ND	Ū	415441	NA
Benzene	ETO15	NA	05/13/13	1.5	1.0	2.4	ND	ND		415441	NA
TAME	ETO15	NA	05/13/13	1.5	0.54	3.2	ND	ND		415441	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/13/13	1.5	1.5	3.1	ND	ND		415441	NA
Trichloroethylene	ETO15	NA	05/13/13	1.5	2.1	8.1	ND	ND		415441	NA
1,2-Dichloropropane	ETO15	NA	05/13/13	1.5	2.0	6.9	ND	ND		415441	NA
,	2.0.0										



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 05/18	
Client Sample ID: Project Name/Location: Project Number:	Subslab 1					ample ID: le Matrix:	1: A	305039-002 <i>i</i> ir	Ą		
Date/Time Sampled:	05/08/13 / 8:56	6			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	6337				Receiv	ed PSI :		6.9			
Collection Volume (L):	0.00					ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Bromodichloromethane	ETO15	NA	05/13/13	1.5	1.3	5.0	ND	ND		415441	NA
1,4-Dioxane	ETO15	NA	05/13/13	1.5	1.9	5.4	ND	ND		415441	NA
trans-1,3-Dichloropropene	ETO15	NA	05/13/13	1.5	1.3	3.4	ND	ND		415441	NA
Toluene	ETO15	NA	05/13/13	1.5	1.4	2.9	ND	ND		415441	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/13/13	1.5	1.3	3.1	ND	ND		415441	NA
cis-1,3-Dichloropropene	ETO15	NA	05/13/13	1.5	1.7	3.4	ND	ND		415441	NA
Tetrachloroethylene	ETO15	NA	05/13/13	1.5	1.4	5.1	ND	ND		415441	NA
1,1,2-Trichloroethane	ETO15	NA	05/13/13	1.5	1.4	4.1	ND	ND		415441	NA
Dibromochloromethane	ETO15	NA	05/13/13	1.5	2.6	6.4	ND	ND		415441	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/13/13	1.5	3.1	12	ND	ND		415441	NA
NOTE: Reporting limit incre	eased due to low initial p	ressure i	n canister.								
The results shown below	are reported using	their ML	DL.								
2-Hexanone	ETO15	NA	05/13/13	1.5	1.7	6.2	ND	ND		415441	NA
Ethyl Benzene	ETO15	NA	05/13/13	1.5	1.5	3.2	ND	ND		415441	NA
Chlorobenzene	ETO15	NA	05/13/13	1.5	1.1	3.5	ND	ND		415441	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/13/13	1.5	1.6	5.2	ND	ND		415441	NA
m,p-Xylene	ETO15	NA	05/13/13	1.5	2.4	6.5	ND	ND		415441	NA
o-Xylene	ETO15	NA	05/13/13	1.5	1.2	3.2	ND	ND		415441	NA
Styrene	ETO15	NA	05/13/13	1.5	1.0	3.3	ND	ND		415441	NA
Bromoform	ETO15	NA	05/13/13	1.5	1.7	7.5	ND	ND		415441	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/13/13	1.5	1.1	5.2	ND	ND		415441	NA
4-Ethyl Toluene	ETO15	NA	05/13/13	1.5	1.2	3.7	ND	ND		415441	NA
1,3,5-Trimethylbenzene	ETO15	NA	05/13/13	1.5	1.1	3.7	ND	ND		415441	NA
1,2,4-Trimethylbenzene	ETO15	NA	05/13/13	1.5	1.0	3.7	ND	ND		415441	NA
1,4-Dichlorobenzene	ETO15	NA	05/13/13	1.5	0.97	4.5	ND	ND		415441	NA
1,3-Dichlorobenzene	ETO15	NA	05/13/13	1.5	1.3	4.5	ND	ND		415441	NA
1,2-Dichlorobenzene	ETO15	NA	05/13/13	1.5	1.4	4.5	ND	ND		415441	NA
Hexachlorobutadiene	ETO15	NA	05/13/13	1.5	3.6	8.3	ND	ND		415441	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/13/13	1.5	5.1	11	ND	ND		415441	NA
Naphthalene	ETO15	NA	05/13/13	1.5	2.2	7.8	ND	ND		415441	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/13/13	1.5	65	135	95.7 %			415441	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 05/18	
Client Sample ID:	Subslab 1					ample ID:		1305039-002/	Ą		
Project Name/Location: Project Number:					Sampl	e Matrix:		Air			
Date/Time Sampled:	05/08/13 / 8:5	6			Certifie	ed Clean	WO # :				
Canister/Tube ID:	6337				Receiv	ed PSI :		6.9			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
lelium	D1946	NA	05/14/13	6	0.030	0.030	4.0	1	I	415451	NA



Report prepared for:	Matthew Sutton									ived: 05/08	
	The Source Group	, inc							Date Repo	rted: 05/15	0/13
Client Sample ID:	Subslab 3				Lab Sa	ample ID:	13	305039-003A	۸		
Project Name/Location:						le Matrix:	Ai	r			
Project Number:											
Date/Time Sampled:	05/08/13 / 9:3	8			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	A7481	-				ved PSI :	-	12.2			
Collection Volume (L):	0.00					ted PSI :		0.0			
	0.00				Correc	ieu F SI .		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
N'al-1	FTO15		05/00/40	50	70	050		ND		445444	N1.0
Dichlorodifluoromethane	ETO15	NA	05/09/13	50	76 25	250		ND		415444	NA
,1-Difluoroethane	ETO15	NA	05/09/13	50	25 250	68 700		ND ND		415444	NA
,2-Dichlorotetrafluoroethane	ETO15	NA	05/09/13	50	250	700	ND			415444	NA
Chloromethane	ETO15	NA	05/09/13	50	16 22	53 120		ND		415444	NA
/inyl Chloride ,3-Butadiene	ETO15 ETO15	NA NA	05/09/13 05/09/13	50 50	33 22	130 55	ND ND	ND ND		415444 415444	NA NA
Bromomethane	ETO15	NA	05/09/13	50	36 25	98 65		ND ND		415444	NA
	ETO15	NA	05/09/13	50	25	65	ND			415444	NA
richlorofluoromethane	ETO15 ETO15	NA NA	05/09/13 05/09/13	50 50	90 31	280 100	ND ND	ND ND		415444 415444	NA NA
,1-Dichloroethene Freon 113	ETO15 ETO15	NA	05/09/13	50 50	42	190	ND	ND		415444	NA
Carbon Disulfide	ETO15 ETO15	NA	05/09/13	50 50	42 41	190 160	ND	ND		415444	NA
	ETO15	NA	05/09/13	50 50	41	1000	ND	ND		415444	NA
P-Propanol (Isopropyl Alcohol) Methylene Chloride	ETO15 ETO15	NA	05/09/13	50 50	49 29	1400	ND	ND		415444	NA
Acetone	ETO15	NA	05/09/13	50 50	29 44	960	ND	ND		415444	NA
rans-1,2-Dichloroethene	ETO15 ETO15	NA	05/09/13	50 50	44 32	960 100	ND	ND		415444	NA
lexane	ETO15	NA	05/09/13	50 50	26	88	ND	ND		415444	NA
ATBE	ETO15	NA	05/09/13	50 50	20 43	90	ND	ND		415444	NA
ert-Butanol	ETO15	NA	05/09/13	50 50	43 46	420	ND	ND		415444	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/09/13	50	44	110	ND	ND		415444	NA
,1-Dichloroethane	ETO15	NA	05/09/13	50	38	100	ND	ND		415444	NA
TBE	ETO15	NA	05/09/13	50	34	110	ND	ND		415444	NA
is-1,2-Dichloroethene	ETO15	NA	05/09/13	50	27	100	ND	ND		415444	NA
Chloroform	ETO15	NA	05/09/13	50	62	250	ND	ND		415444	NA
/inyl Acetate	ETO15	NA	05/09/13	50	28	88	ND	ND		415444	NA
Carbon Tetrachloride	ETO15	NA	05/09/13	50 50	43	160	ND	ND		415444	NA
,1,1-Trichloroethane	ETO15	NA	05/09/13	50 50	42	140	4750	863.64		415444	NA
2-Butanone (MEK)	ETO15	NA	05/09/13	50	31	75	84.0	28.00		415444	NA
Ethyl Acetate	ETO15	NA	05/09/13	50	37	90	101	28.06		415444	NA
Tetrahydrofuran	ETO15	NA	05/09/13	50	15	75	ND	ND		415444	NA
Benzene	ETO15	NA	05/09/13	50	34	80	ND	ND		415444	NA
TAME	ETO15	NA	05/09/13	50	18	110	ND	ND		415444	NA
,2-Dichloroethane (EDC)	ETO15	NA	05/09/13	50	49	100	ND	ND		415444	NA
richloroethylene	ETO15	NA	05/09/13	50	69	270	5170	957.41		415444	NA
,2-Dichloropropane	ETO15	NA	05/09/13	50 50	66	230	ND	ND		415444	NA
Bromodichloromethane	ETO15	NA	05/09/13	50	44	170	ND	ND		415444	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 05/15	
Client Sample ID: Project Name/Location:	Subslab 3					ample ID: e Matrix:	13 Ai	805039-003A r			
Project Number: Date/Time Sampled:	05/08/13 / 9:3	8			Cortific	ed Clean V	NO # ·				
Canister/Tube ID:	A7481	5					-	12.2			
	-					ed PSI :					
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15	NA	05/09/13	50	62	180	ND	ND		415444	NA
trans-1,3-Dichloropropene	ETO15	NA	05/09/13	50	43	110	ND	ND		415444	NA
Toluene	ETO15	NA	05/09/13	50	48	95	ND	ND		415444	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/09/13	50	42	100	ND	ND		415444	NA
cis-1,3-Dichloropropene	ETO15	NA	05/09/13	50	56	110	ND	ND		415444	NA
Tetrachloroethylene	ETO15	NA	05/09/13	50	45	170	1360	200.00		415444	NA
1,1,2-Trichloroethane	ETO15	NA	05/09/13	50	46	140	ND	ND		415444	NA
Dibromochloromethane	ETO15	NA	05/09/13	50	87	210	ND	ND		415444	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/09/13	50	100	390	ND	ND		415444	NA
2-Hexanone	ETO15	NA	05/09/13	50	56	210	ND	ND		415444	NA
Ethyl Benzene	ETO15	NA	05/09/13	50	50	110	ND	ND		415444	NA
Chlorobenzene	ETO15	NA	05/09/13	50	36	120	ND	ND		415444	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/09/13	50	52	170	ND	ND		415444	NA
m,p-Xylene	ETO15	NA	05/09/13	50	81	220	ND	ND		415444	NA
o-Xylene	ETO15	NA	05/09/13	50	40	110	ND	ND		415444	NA
Styrene	ETO15	NA	05/09/13	50	34	110	ND	ND		415444	NA
Bromoform	ETO15	NA	05/09/13	50	55	250	ND	ND		415444	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/09/13	50	35	170	ND	ND		415444	NA
4-Ethyl Toluene	ETO15	NA	05/09/13	50	41	120	191	38.98		415444	NA
1,3,5-Trimethylbenzene	ETO15	NA	05/09/13	50	38	120	466	95.10		415444	NA
1,2,4-Trimethylbenzene	ETO15	NA	05/09/13	50	34	120	162	33.06		415444	NA
1,4-Dichlorobenzene	ETO15	NA	05/09/13	50	32	150	ND	ND		415444	NA
1,3-Dichlorobenzene	ETO15	NA	05/09/13	50	42	150	ND	ND		415444	NA
1,2-Dichlorobenzene	ETO15	NA	05/09/13	50	45	150	ND	ND		415444	NA
Hexachlorobutadiene	ETO15	NA	05/09/13	50	120	280	ND	ND		415444	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/09/13	50	170	370	ND	ND		415444	NA
Naphthalene	ETO15	NA	05/09/13	50	73	260	ND	ND		415444	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/09/13	50	65	135	97.4 %			415444	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/14/13	75	0.38	0.38	29			415451	NA



Work Order:	1305039	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Analy	zed Date:	05/13/13	Analytical	415441
Units:	ppbv	Metho	od:					Batch:	
	FF								
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluorom	ethane	0.30	1.00	ND					
1,1-Difluoroethane	е	0.18	10.0	ND					
1,2-Dichlorotetrafl	uoroethane	0.70	2.00	ND					
Chloromethane		0.15	0.500	ND					
Vinyl Chloride		0.26	1.00	ND					
1,3-Butadiene		0.20	0.500	ND					
Bromomethane		0.18	0.500	ND					
Chloroethane		0.19	0.500	ND					
Trichlorofluorome	thane	0.32	1.00	ND					
1,1-Dichloroethen	e	0.15	0.500	ND					
Freon 113		0.11	0.500	ND					
Carbon Disulfide		0.26	1.00	ND					
2-Propanol (Isopr	opyl Alcohol)	0.39	8.00	0.530					
Methylene Chloric	le	0.17	8.00	ND					
Acetone		0.37	8.00	0.450					
trans-1,2-Dichloro	ethene	0.16	0.500	ND					
Hexane		0.15	0.500	ND					
MTBE		0.24	0.500	ND					
tert-Butanol		0.22	2.00	ND					
Diisopropyl ether	(DIPE)	0.21	0.500	ND					
1,1-Dichloroethan	е	0.18	0.500	ND					
ETBE		0.16	0.500	ND					
cis-1,2-Dichloroet	hene	0.13	0.500	ND					
Chloroform		0.25	1.00	ND					
Vinyl Acetate		0.16	0.500	ND					
Carbon Tetrachlor	ide	0.14	0.500	ND					
1,1,1-Trichloroeth	ane	0.15	0.500	ND					
2-Butanone (MEK		0.21	0.500	ND					
Ethyl Acetate		0.21	0.500	ND					
Tetrahydrofuran		0.10	0.500	ND					
Benzene		0.21	0.500	ND					
TAME		0.086	0.500	ND					
1,2-Dichloroethan	e (EDC)	0.24	0.500	ND					
Trichloroethylene		0.26	1.00	ND					
1,2-Dichloropropa	ine	0.29	1.00	ND					
Bromodichlorome		0.13	0.500	ND					
1,4-Dioxane		0.35	1.00	ND					
trans-1,3-Dichloro	propene	0.19	0.500	ND					
Toluene		0.25	0.500	ND					
4-Methyl-2-Pentar	none (MIBK)	0.21	0.500	ND					
cis-1,3-Dichloropr	. ,	0.25	0.500	ND					



Work Order: 1305039		Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy Metho		ETO15	Analyzed Date:		05/13/13	Analytical Batch:	415441
Units:	ppbv	Weth	u.					Balcii.	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Tetrachloroethyle	ne	0.13	0.500	ND					
1,1,2-Trichloroeth	nane	0.17	0.500	ND					
Dibromochlorome	ethane	0.20	0.500	ND					
1,2-Dibromoethar	ne (EDB)	0.27	1.00	ND					
2-Hexanone		0.27	1.00	ND					
Ethyl Benzene		0.23	0.500	ND					
Chlorobenzene		0.15	0.500	ND					
1,1,1,2-Tetrachlor	roethane	0.15	0.500	ND					
m,p-Xylene		0.38	1.00	ND					
o-Xylene		0.19	0.500	ND					
Styrene		0.16	0.500	ND					
Bromoform		0.11	0.500	ND					
1,1,2,2-Tetrachlor	roethane	0.10	0.500	ND					
4-Ethyl Toluene		0.17	0.500	ND					
1,3,5-Trimethylbe	enzene	0.15	0.500	ND					
1,2,4-Trimethylbe	enzene	0.14	0.500	ND					
1,4-Dichlorobenz	ene	0.11	0.500	ND					
1,3-Dichlorobenz	ene	0.14	0.500	ND					
1,2-Dichlorobenz	ene	0.15	0.500	ND					
Hexachlorobutad	iene	0.22	0.500	ND					
1,2,4-Trichlorober	nzene	0.46	1.00	ND					
Naphthalene		0.28	1.00	ND					
(S) 4-Bromofluor	obenzene			106					



Work Order:	1305039	Prep I	Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Analyzed Da	te: 05/09/13	Analytical	415444
Units:	ppbv	Metho	od:				Batch:	
	••							
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier			
Dichlorodifluorom	ethane	0.30	1.00	ND				
1,1-Difluoroethan	e	0.18	10.0	ND				
1,2-Dichlorotetraf	uoroethane	0.70	2.00	ND				
Chloromethane		0.15	0.500	ND				
Vinyl Chloride		0.26	1.00	ND				
1,3-Butadiene		0.20	0.500	ND				
Bromomethane		0.18	0.500	ND				
Chloroethane		0.19	0.500	ND				
Trichlorofluorome	thane	0.32	1.00	ND				
1,1-Dichloroethen	e	0.15	0.500	ND				
Freon 113		0.11	0.500	ND				
Carbon Disulfide		0.26	1.00	ND				
2-Propanol (Isopr	opyl Alcohol)	0.39	8.00	ND				
Methylene Chlorid	le	0.17	8.00	ND				
Acetone		0.37	8.00	0.370				
trans-1,2-Dichlord	ethene	0.16	0.500	ND				
Hexane		0.15	0.500	ND				
MTBE		0.24	0.500	ND				
tert-Butanol		0.22	2.00	ND				
Diisopropyl ether	(DIPE)	0.21	0.500	ND				
1,1-Dichloroethan	e	0.18	0.500	ND				
ETBE		0.16	0.500	ND				
cis-1,2-Dichloroet	hene	0.13	0.500	ND				
Chloroform		0.25	1.00	ND				
Vinyl Acetate		0.16	0.500	ND				
Carbon Tetrachlo	ide	0.14	0.500	ND				
1,1,1-Trichloroeth	ane	0.15	0.500	ND				
2-Butanone (MEK	()	0.21	0.500	ND				
Ethyl Acetate		0.21	0.500	ND				
Tetrahydrofuran		0.10	0.500	ND				
Benzene		0.21	0.500	ND				
TAME		0.086	0.500	ND				
1,2-Dichloroethan	e (EDC)	0.24	0.500	ND				
Trichloroethylene		0.26	1.00	ND				
1,2-Dichloropropa	ine	0.29	1.00	ND				
Bromodichlorome	thane	0.13	0.500	ND				
1,4-Dioxane		0.35	1.00	ND				
trans-1,3-Dichloro	propene	0.19	0.500	ND				
Toluene	-	0.25	0.500	ND				
4-Methyl-2-Penta	none (MIBK)	0.21	0.500	ND				
cis-1,3-Dichloropr		0.25	0.500	ND				



Work Order:	1305039	Prep I	Method:	NA	Prep Date:		NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Anal	yzed Date:	05/09/13	Analytical	415444
Units:	ppbv	Metho	od:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Tetrachloroethyle	ne	0.13	0.500	ND					
1,1,2-Trichloroeth		0.17	0.500	ND					
Dibromochlorome	ethane	0.20	0.500	ND					
1,2-Dibromoethar	ne (EDB)	0.27	1.00	ND					
2-Hexanone		0.27	1.00	ND					
Ethyl Benzene		0.23	0.500	ND					
Chlorobenzene		0.15	0.500	ND					
1,1,1,2-Tetrachlor	oethane	0.15	0.500	ND					
m,p-Xylene		0.38	1.00	ND					
o-Xylene		0.19	0.500	ND					
Styrene		0.16	0.500	ND					
Bromoform		0.11	0.500	ND					
1,1,2,2-Tetrachlor	oethane	0.10	0.500	ND					
4-Ethyl Toluene		0.17	0.500	ND					
1,3,5-Trimethylbe	nzene	0.15	0.500	ND					
1,2,4-Trimethylbe	nzene	0.14	0.500	ND					
1,4-Dichlorobenze	ene	0.11	0.500	ND					
1,3-Dichlorobenze	ene	0.14	0.500	ND					
1,2-Dichlorobenze	ene	0.15	0.500	ND					
Hexachlorobutadi	ene	0.22	0.500	ND					
1,2,4-Trichlorober	nzene	0.46	1.00	ND					
Naphthalene		0.28	1.00	ND					
(S) 4-Bromofluoro	benzene			102					
Work Order:	1305039	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		D1946	Anal	yzed Date:	05/14/13	Analytical	415451
Units:	%	Metho	)d:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Helium		0.0050	0.0050	ND	•				



### LCS/LCSD Summary Report

Raw values are used in quality control assessment. Work Order: 1305039 Prep Method: NA Prep Date: NA Prep Batch: NA Matrix: ETO15 05/13/13 415441 Analytical Analyzed Date: Analytical Air Method: Batch: Units: ppbv LCS % LCSD % LCS/LCSD Method Spike % Parameters MDL PQL Blank Conc. Recovery Recovery % RPD Recovery % RPD Lab Conc. Limits Limits Qualifier 1,1-Dichloroethene 0.15 0.500 ND 20 97.5 98.2 65 - 135 0.716 30 0.500 ND 92.2 90.2 65 - 135 30 Benzene 0.21 20 2 14 Trichloroethylene 0.26 1.00 ND 20 96.6 96.1 0.467 65 - 135 30 Toluene 0.25 0.500 ND 20 98.0 101 2.67 65 - 135 30 88.9 Chlorobenzene 0.15 0.500 ND 20 88.0 0.961 65 - 135 30 (S) 4-Bromofluorobenzene ND 20 70.0 90.0 65 - 135 Work Order: 1305039 Prep Method: NA Prep Date: NA Prep Batch: NA Matrix: Air Analytical ETO15 Analyzed Date: 05/09/13 Analytical 415444 Method: Batch: Units: ppbv LCS % Method Spike LCSD % LCS/LCSD % MDL PQL Recovery Recovery **Parameters** Blank % RPD % RPD Conc. Recovery Lab Conc. Limits Limits Qualifier 1,1-Dichloroethene 0.15 0.500 ND 20 112 102 9.47 65 - 135 30 98.1 Benzene 0.21 0.500 ND 20 107 8.26 65 - 135 30 Trichloroethylene 0.26 1.00 ND 20 115 119 3.42 65 - 135 30 0.25 0.500 20 109 114 4.58 65 - 135 30 Toluene ND 0.500 100 97.5 65 - 135 30 Chlorobenzene 0.15 ND 20 2.63 (S) 4-Bromofluorobenzene ND 20 90.0 90.0 65 - 135 Work Order: 1305039 Prep Method: NA Prep Date: NA Prep Batch: NA Matrix: D1946 05/14/13 Analytical 415451 Air Analytical Analyzed Date: Method: Batch: Units: % Method Spike LCS % LCSD % LCS/LCSD % MDL PQL % RPD Parameters Blank % RPD Recovery Conc. Recovery Recovery Lab Conc. Limits Limits Qualifier Helium 0.0050 0.0050 ND 1000 84.1 103 19.8 65 - 135 30



## Laboratory Qualifiers and Definitions

#### **DEFINITIONS:**

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.

Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.

**Duplicate** - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)

Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.

Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)

Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.

Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero

**Practical Quantitation Limit (PQL)** - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.

Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates

Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis

Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.

Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/M3, mg.m3, ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

### LABORATORY QUALIFIERS:

**B** - Indicates when the anlayte is found in the associated method or preparation blank

 ${\bf D}$  - Surrogate is not recoverable due to the necessary dilution of the sample

**E** - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.

H- Indicates that the recommended holding time for the analyte or compound has been exceeded

J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative

NA - Not Analyzed

N/A - Not Applicable

**NR** - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added

R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts

S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative

X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards.

Further explanation may or may not be provided within the sample footnote and/or the case narrative.



# Sample Receipt Checklist

Client Name: The Source Group, Inc	Date and Time Received:	<u>5/8/2013</u> <u>16:50</u>
Project Name:	Received By: LDI	
Work Order No.: <u>1305039</u>	Physically Logged By: LDI	
	Checklist Completed By: L	<u>DI</u>
	Carrier Name: First Courie	<u>r</u>
Chain of Custody	COC) Information	
Chain of custody present?	Yes	
Chain of custody signed when relinquished and received?	Yes	
Chain of custody agrees with sample labels?	Yes	
Custody seals intact on sample bottles?	Not Present	
Sample Recei	t Information	
Custody seals intact on shipping container/cooler?	Not Present	
Shipping Container/Cooler In Good Condition?	Yes	
Samples in proper container/bottle?	Yes	
Samples containers intact?	Yes	
Sufficient sample volume for indicated test?	Yes	
Sample Preservation and	old Time (HT) Information	
All samples received within holding time?	Yes	
Container/Temp Blank temperature in compliance?	Yes Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted	
Water-pH acceptable upon receipt?	<u>N/A</u>	
pH Checked by: <u>N/A</u>	pH Adjusted by: <u>N/A</u>	

Air samples received at ambient temperature.



	rrent 🖁	33 Sinclair Frontag ilpitas, CA 95035 hone: 408.263.525 AX: 408.263.8293 ww.torrentlab.com	8	• NO	MARK N MARK					TOD		1 x y	AB WORK ORDER NO 05039	
Company Name:	The Saurce Grou	p, Inc				) H 🚺	Food	Special	Location o	f Sampling	:			
Address: 3470	Bustink Ave	Suite 100					Purpo	se:						
City: Plearan		State: CA	Zip (	Code:	9452	3	Specia	al Instruc	tions / Cor	nments:				_
		AX: 925-9	44-28	59			0	1-FP	-001					_
REPORT TO: M	st sutton s	AMPLER: M Cu		am			P.O. #	#: 			EMAIL	msut	on e the raircegi	nup. net
TURNAROUND TIME	:	SAMPLE TYPE:	J		FORMAT:			و						
7 Work Days	4 Work Days 🔲 1 Work Day 3 Work Days 🔲 Noon - Nxt Da 2 Work Days 📮 2 - 8 Hours	ay Storm Water Waste Water Ground Water Soil	Air Other	EDF Excel			TD-15 (NOCI)	ASTM D1946			v		ANALYSIS REQUESTED	_
LAB ID CANISTER	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE		F	He AS					REMARKS	
001 A A7552	substab2	5/9/13 1/623 5/9/13 0856 5/9/13	Voper	1	il Junma		V	$\checkmark$				1		<b>B</b>
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-003777 7481	subslab 3	5 9/13 0939	V	A	4		$\checkmark$	$\checkmark$		_		3		TORRENT
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2 Relinquisted By:	Print:	Date:	2/13	Time	:50		ved By:	1 L-1	Prir		Date:	-8-13	Time: 16 SD	a K
	ved in Good Condition?	Yes NOA S	amples on lite of receipt	ce? DY unless oth	es 🔲 NO		d of Ship ts are m		F	Temp Date:		seals intact?	☐ Yes ☐ NO ☐ N/ C 」f	A

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Matthew C. Sutton The Source Group, Inc 3478 Buskirk Avenue, Suite 100 Pleasant Hill, California 94523 Tel: 925.951.6386 Fax: 925.944.2859 Email: msutton@thesourcegroup.net RE:

Work Order No.: 1305039 Rev: 1

Dear Matthew Sutton:

Torrent Laboratory, Inc. received 3 sample(s) on May 08, 2013 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

atton

June 28, 2013

Date

Patti Sandrock QA Officer



Client: The Source Group, Inc Project: Work Order: 1305039

### CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

#### **REVISIONS:**

Per client request, an investigation into conflicting results between two sample events was initiated. After a thorough investigation it was determined that an error regarding sample volume analyzed was reported for samples -001 and -003. Dilution factors of 50X were applied to samples that were actually analyzed at no dilution resulting in elevated detections of reported compounds. A Corrective Action has been generated to determine root cause and to provide QC steps to ensure the same error does not re-occur. The report will be made available upon client request.

The reported is revised to reflect the correct detections, reporting limits and dilution factors.

Rev 1 (6/28/13)



### Sample Result Summary

Report prepared for:	Matthew Sutton				Date R	Received: 05/08/13
	The Source Group, Inc				Date R	Reported: 06/28/13
Subslab 2						1305039-001A
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	<u>PQL</u>	<u>Results</u> ug/m3
Helium		D1946	2.5	0.013	0.013	2.3
1,1-Dichloroethene		ETO15	1	0.61	2.0	44.0
Acetone		ETO15	1	0.88	19	36.2
Hexane		ETO15	1	0.53	1.8	153
tert-Butanol		ETO15	1	0.91	8.4	51.2
Carbon Tetrachloride		ETO15	1	0.86	3.2	11.1
1,1,1-Trichloroethane		ETO15	1	0.85	2.8	84.1
Benzene		ETO15	1	0.69	1.6	56.1
Toluene		ETO15	1	0.95	1.9	58.6
Tetrachloroethylene		ETO15	1	0.91	3.4	17.0
Ethyl Benzene		ETO15	1	0.99	2.2	51.9
m,p-Xylene		ETO15	1	1.6	4.3	12.2
o-Xylene		ETO15	1	0.81	2.2	105
Styrene		ETO15	1	0.69	2.2	4.09
4-Ethyl Toluene		ETO15	1	0.82	2.5	79.2
1,3,5-Trimethylbenzene		ETO15	1	0.76	2.5	152
1,2,4-Trimethylbenzene		ETO15	1	0.69	2.5	40.0
Subslab 1						1305039-002A

Parameters:	<u>Analysis</u> <u>Method</u>	DF	MDL	<u>PQL</u>	<u>Results</u> ug/m3
Acetone	ETO15	1.5	1.3	29	5.22
2-Butanone (MEK)	ETO15	1.5	0.94	2.3	1.17
Ethyl Acetate	ETO15	1.5	1.1	2.7	1.40
Helium	D1946	6	0.030	0.030	4.0



### Sample Result Summary

Report prepared for:	Matthew Sutton The Source Group, Inc					Received: 05/08/13 Reported: 06/28/13 1305039-003A
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u> ug/m3
1,1,1-Trichloroethane		ETO15	1	0.85	2.8	94.9
2-Butanone (MEK)		ETO15	1	0.63	1.5	1.68
Ethyl Acetate		ETO15	1	0.74	1.8	2.02
Trichloroethylene		ETO15	1	1.4	5.4	103
Tetrachloroethylene		ETO15	1	0.91	3.4	27.2
4-Ethyl Toluene		ETO15	1	0.82	2.5	3.82
1,3,5-Trimethylbenzene		ETO15	1	0.76	2.5	9.31
1,2,4-Trimethylbenzene		ETO15	1	0.69	2.5	3.23
Helium		D1946	75	0.38	0.38	29



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/08 rted: 06/28	
Client Sample ID:	Subslab 2				Lab Sa	ample ID:	1;	305039-001A			
Project Name/Location:						e Matrix:	A				
Project Number:					p-	•					
Date/Time Sampled:	05/08/13 / 8:2	3			Certifi	ed Clean \	NO # ·				
Canister/Tube ID:	A7552	.0				ed PSI :	<i>wo #</i> .	13.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Dichlorodifluoromethane	ETO15	NA	05/09/13	1	1.5	5.0	ND	ND		415444	NA
1,1-Difluoroethane	ETO15	NA	05/09/13	1	0.50	1.4	ND	ND		415444	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/09/13	1	4.9	14	ND	ND		415444	NA
Chloromethane	ETO15	NA	05/09/13	1	0.32	1.1	ND	ND		415444	NA
Vinyl Chloride	ETO15	NA	05/09/13	1	0.67	2.6	ND	ND		415444	NA
1,3-Butadiene	ETO15	NA	05/09/13	1	0.45	1.1	ND	ND		415444	NA
Bromomethane	ETO15	NA	05/09/13	1	0.72	2.0	ND	ND		415444	NA
Chloroethane	ETO15	NA	05/09/13	1	0.50	1.3	ND	ND		415444	NA
Trichlorofluoromethane	ETO15	NA	05/09/13	1	1.8	5.6	ND	ND		415444	NA
1,1-Dichloroethene	ETO15	NA	05/09/13	1	0.61	2.0	44.0	11.00		415444	NA
Freon 113	ETO15	NA	05/09/13	1	0.85	3.9	ND	ND		415444	NA
Carbon Disulfide	ETO15	NA	05/09/13	1	0.81	3.1	ND	ND		415444	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/09/13	1	0.97	20	ND	ND		415444	NA
Methylene Chloride	ETO15	NA	05/09/13	1	0.58	28	ND	ND		415444	NA
Acetone	ETO15	NA	05/09/13	1	0.88	19	36.2	15.08		415444	NA
trans-1,2-Dichloroethene	ETO15	NA	05/09/13	1	0.64	2.0	ND	ND		415444	NA
Hexane	ETO15	NA	05/09/13	1	0.53	1.8	153	43.71		415444	NA
MTBE	ETO15	NA	05/09/13	1	0.87	1.8	ND	ND		415444	NA
tert-Butanol	ETO15	NA	05/09/13	1	0.91	8.4	51.2	12.19		415444	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/09/13	1	0.88	2.1	ND	ND		415444	NA
1,1-Dichloroethane	ETO15	NA	05/09/13	1	0.75	2.1	ND	ND		415444	NA
ETBE	ETO15	NA	05/09/13	1	0.68	2.1	ND	ND		415444	NA
cis-1,2-Dichloroethene	ETO15	NA	05/09/13	1	0.54	2.0	ND	ND		415444	NA
Chloroform	ETO15	NA	05/09/13	1	1.2	4.9	ND	ND		415444	NA
Vinyl Acetate	ETO15	NA	05/09/13	1	0.57	1.8	ND	ND		415444	NA
Carbon Tetrachloride	ETO15	NA	05/09/13	1	0.86	3.2	11.1	1.76		415444	NA
1,1,1-Trichloroethane	ETO15	NA	05/09/13	1	0.85	2.8	84.1	15.29		415444	NA
2-Butanone (MEK)	ETO15	NA	05/09/13	1	0.63	1.5	ND	ND		415444	NA
Ethyl Acetate	ETO15	NA	05/09/13	1	0.74	1.8	ND	ND		415444	NA
Tetrahydrofuran	ETO15	NA	05/09/13	1	0.30	1.5	ND	ND		415444	NA
Benzene	ETO15	NA	05/09/13	1	0.69	1.6	56.1	17.53		415444	NA
TAME	ETO15	NA	05/09/13	1	0.36	2.1	ND	ND		415444	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/09/13	1	0.99	2.1	ND	ND		415444	NA
Trichloroethylene	ETO15	NA	05/09/13	1	1.4	5.4	ND	ND		415444	NA
1,2-Dichloropropane	ETO15	NA	05/09/13	1	1.3	4.6	ND	ND		415444	NA
Bromodichloromethane	ETO15	NA	05/09/13	1	0.89	3.4	ND	ND		415444	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 06/28	
Client Sample ID: Project Name/Location:	Subslab 2					ample ID: le Matrix:	13 Ai	805039-001A r			
Project Number: Date/Time Sampled:	05/08/13 / 8:23	k			Cortifie	ed Clean \	NO # ·				
Canister/Tube ID:	A7552	,				ed Clean ved PSI :	-	13.5			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15	NA	05/09/13	1	1.2	3.6	ND	ND		415444	NA
trans-1,3-Dichloropropene	ETO15	NA	05/09/13	1	0.87	2.3	ND	ND		415444	NA
Toluene	ETO15	NA	05/09/13	1	0.95	1.9	58.6	15.42		415444	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/09/13	1	0.85	2.1	ND	ND		415444	NA
cis-1,3-Dichloropropene	ETO15	NA	05/09/13	1	1.1	2.3	ND	ND		415444	NA
Tetrachloroethylene	ETO15	NA	05/09/13	1	0.91	3.4	17.0	2.50		415444	NA
1,1,2-Trichloroethane	ETO15	NA	05/09/13	1	0.93	2.8	ND	ND		415444	NA
Dibromochloromethane	ETO15	NA	05/09/13	1	1.7	4.3	ND	ND		415444	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/09/13	1	2.0	7.7	ND	ND		415444	NA
2-Hexanone	ETO15	NA	05/09/13	1	1.1	4.1	ND	ND		415444	NA
Ethyl Benzene	ETO15	NA	05/09/13	1	0.99	2.2	51.9	12.07		415444	NA
Chlorobenzene	ETO15	NA	05/09/13	1	0.71	2.3	ND	ND		415444	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/09/13	1	1.0	3.5	ND	ND		415444	NA
m,p-Xylene	ETO15	NA	05/09/13	1	1.6	4.3	12.2	2.84		415444	NA
o-Xylene	ETO15	NA	05/09/13	1	0.81	2.2	105	24.42		415444	NA
Styrene	ETO15	NA	05/09/13	1	0.69	2.2	4.09	0.93		415444	NA
Bromoform	ETO15	NA	05/09/13	1	1.1	5.0	ND	ND		415444	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/09/13	1	0.70	3.5	ND	ND		415444	NA
4-Ethyl Toluene	ETO15	NA	05/09/13	1	0.82	2.5	79.2	16.16		415444	NA
1,3,5-Trimethylbenzene	ETO15	NA	05/09/13	1	0.76	2.5	152	31.02		415444	NA
1,2,4-Trimethylbenzene	ETO15	NA	05/09/13	1	0.69	2.5	40.0	8.16		415444	NA
1,4-Dichlorobenzene	ETO15	NA	05/09/13	1	0.65	3.0	ND	ND		415444	NA
1,3-Dichlorobenzene	ETO15	NA	05/09/13	1	0.84	3.0	ND	ND		415444	NA
1,2-Dichlorobenzene	ETO15	NA	05/09/13	1	0.91	3.0	ND	ND		415444	NA
Hexachlorobutadiene	ETO15	NA	05/09/13	1	2.4	5.5	ND	ND		415444	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/09/13	1	3.4	7.4	ND	ND		415444	NA
Naphthalene	ETO15	NA	05/09/13	1	1.5	5.2	ND	ND		415444	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/09/13	1	65	135	94.4 %			415444	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/14/13	2.5	0.013	0.013	2.3	-		415451	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc								i <b>ved:</b> 05/08 rted: 06/28	
Client Sample ID:	Subslab 1				Lab Sa	ample ID:	13	305039-002/	4		
Project Name/Location:						e Matrix:	Ai				
Project Number:					oumpi	e matrix.					
Date/Time Sampled:	05/08/13 / 8:5	6			Cortifie	ed Clean \	NO # ·				
•		.0					-	<b>C</b> O			
Canister/Tube ID:	6337					ed PSI :		6.9			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
The results shown below a	are reported using	their MD	L.								
Dichlorodifluoromethane	ETO15	NA	05/13/13	1.5	2.3	7.5	ND	ND		415441	NA
1,1-Difluoroethane	ETO15	NA	05/13/13	1.5	0.75	2.0	ND	ND		415441	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/13/13	1.5	7.4	21	ND	ND		415441	NA
Chloromethane	ETO15	NA	05/13/13	1.5	0.48	1.6	ND	ND		415441	NA
Vinyl Chloride	ETO15	NA	05/13/13	1.5	1.0	3.9	ND	ND		415441	NA
1,3-Butadiene	ETO15	NA	05/13/13	1.5	0.67	1.7	ND	ND		415441	NA
Bromomethane	ETO15	NA	05/13/13	1.5	1.1	2.9	ND	ND		415441	NA
Chloroethane	ETO15	NA	05/13/13	1.5	0.75	2.0	ND	ND		415441	NA
Trichlorofluoromethane	ETO15	NA	05/13/13	1.5	2.7	8.4	ND	ND		415441	NA
1,1-Dichloroethene	ETO15	NA	05/13/13	1.5	0.92	3.0	ND	ND		415441	NA
Freon 113	ETO15	NA	05/13/13	1.5	1.3	5.8	ND	ND		415441	NA
Carbon Disulfide	ETO15	NA	05/13/13	1.5	1.2	4.7	ND	ND		415441	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/13/13	1.5	1.5	30	ND	ND		415441	NA
Methylene Chloride	ETO15	NA	05/13/13	1.5	0.88	42	ND	ND		415441	NA
Acetone	ETO15	NA	05/13/13	1.5	1.3	29	5.22	2.18	J	415441	NA
trans-1,2-Dichloroethene	ETO15	NA	05/13/13	1.5	0.96	3.0	ND	ND		415441	NA
Hexane	ETO15	NA	05/13/13	1.5	0.79	2.6	ND	ND		415441	NA
МТВЕ	ETO15	NA	05/13/13	1.5	1.3	2.7	ND	ND		415441	NA
tert-Butanol	ETO15	NA	05/13/13	1.5	1.4	13	ND	ND		415441	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/13/13	1.5	1.3	3.2	ND	ND		415441	NA
1,1-Dichloroethane	ETO15	NA	05/13/13	1.5	1.1	3.1	ND	ND		415441	NA
ETBE	ETO15	NA	05/13/13	1.5	1.0	3.2	ND	ND		415441	NA
cis-1,2-Dichloroethene	ETO15	NA	05/13/13	1.5	0.81	3.0	ND	ND		415441	NA
Chloroform	ETO15	NA	05/13/13	1.5	1.8	7.4	ND	ND		415441	NA
Vinyl Acetate	ETO15	NA	05/13/13	1.5	0.85	2.6	ND	ND		415441	NA
Carbon Tetrachloride	ETO15	NA	05/13/13	1.5	1.3	4.7	ND	ND		415441	NA
1,1,1-Trichloroethane	ETO15	NA	05/13/13	1.5	1.3	4.1	ND	ND		415441	NA
2-Butanone (MEK)	ETO15	NA	05/13/13	1.5	0.94	2.3	1.17	0.39	J	415441	NA
Ethyl Acetate	ETO15	NA	05/13/13	1.5	1.1	2.7	1.40	0.39	J	415441	NA
Tetrahydrofuran	ETO15	NA	05/13/13	1.5	0.45	2.3	ND	ND		415441	NA
Benzene	ETO15	NA	05/13/13	1.5	1.0	2.4	ND	ND		415441	NA
ТАМЕ	ETO15	NA	05/13/13	1.5	0.54	3.2	ND	ND		415441	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/13/13	1.5	1.5	3.1	ND	ND		415441	NA
Trichloroethylene	ETO15	NA	05/13/13	1.5	2.1	8.1	ND	ND		415441	NA
1,2-Dichloropropane	ETO15	NA	05/13/13	1.5	2.0	6.9	ND	ND		415441	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 06/28	
Client Sample ID: Project Name/Location: Project Number:	Subslab 1					ample ID: le Matrix:	13 Ai	305039-002 <i>i</i> ir	Ą		
Date/Time Sampled:	05/08/13 / 8:56	6			Certifie	ed Clean \	NO # :				
Canister/Tube ID:	6337				Receiv	ed PSI :	-	6.9			
Collection Volume (L):	0.00					ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
Bromodichloromethane	ETO15	NA	05/13/13	1.5	1.3	5.0	ND	ND		415441	NA
1,4-Dioxane	ETO15	NA	05/13/13	1.5	1.9	5.4	ND	ND		415441	NA
trans-1,3-Dichloropropene	ETO15	NA	05/13/13	1.5	1.3	3.4	ND	ND		415441	NA
Toluene	ETO15	NA	05/13/13	1.5	1.4	2.9	ND	ND		415441	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/13/13	1.5	1.3	3.1	ND	ND		415441	NA
cis-1,3-Dichloropropene	ETO15	NA	05/13/13	1.5	1.7	3.4	ND	ND		415441	NA
Tetrachloroethylene	ETO15	NA	05/13/13	1.5	1.4	5.1	ND	ND		415441	NA
1,1,2-Trichloroethane	ETO15	NA	05/13/13	1.5	1.4	4.1	ND	ND		415441	NA
Dibromochloromethane	ETO15	NA	05/13/13	1.5	2.6	6.4	ND	ND		415441	NA
1,2-Dibromoethane (EDB)	ETO15	NA	05/13/13	1.5	3.1	12	ND	ND		415441	NA
	eased due to low initial p	ressure i	n canister.								
The results shown below	are reported using	their ML	DL.								
2-Hexanone	ETO15	NA	05/13/13	1.5	1.7	6.2	ND	ND		415441	NA
Ethyl Benzene	ETO15	NA	05/13/13	1.5	1.5	3.2	ND	ND		415441	NA
Chlorobenzene	ETO15	NA	05/13/13	1.5	1.1	3.5	ND	ND		415441	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/13/13	1.5	1.6	5.2	ND	ND		415441	NA
m,p-Xylene	ETO15	NA	05/13/13	1.5	2.4	6.5	ND	ND		415441	NA
o-Xylene	ETO15	NA	05/13/13	1.5	1.2	3.2	ND	ND		415441	NA
Styrene	ETO15	NA	05/13/13	1.5	1.0	3.3	ND	ND		415441	NA
Bromoform	ETO15	NA	05/13/13	1.5	1.7	7.5	ND	ND		415441	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/13/13	1.5	1.1	5.2	ND	ND		415441	NA
4-Ethyl Toluene	ETO15	NA	05/13/13	1.5	1.2	3.7	ND	ND		415441	NA
1,3,5-Trimethylbenzene	ETO15	NA	05/13/13	1.5	1.1	3.7	ND	ND		415441	NA
1,2,4-Trimethylbenzene	ETO15	NA	05/13/13	1.5	1.0	3.7	ND	ND		415441	NA
1,4-Dichlorobenzene	ETO15	NA	05/13/13	1.5	0.97	4.5	ND	ND		415441	NA
1,3-Dichlorobenzene	ETO15	NA	05/13/13	1.5	1.3	4.5	ND	ND		415441	NA
1,2-Dichlorobenzene	ETO15	NA	05/13/13	1.5	1.4	4.5	ND	ND		415441	NA
Hexachlorobutadiene	ETO15	NA	05/13/13	1.5	3.6	8.3	ND	ND		415441	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/13/13	1.5	5.1	11	ND	ND		415441	NA
Naphthalene	ETO15	NA	05/13/13	1.5	2.2	7.8	ND	ND		415441	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/13/13	1.5	65	135	95.7 %			415441	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/08 rted: 06/28	
Client Sample ID:	Subslab 1				Lab Sa	ample ID:		1305039-002/	Ą		
Project Name/Location:					Sampl	le Matrix:		Air			
Project Number:											
Date/Time Sampled:	05/08/13 / 8:5	6			Certifie	ed Clean	WO # :				
Canister/Tube ID:	6337				Receiv	ed PSI :		6.9			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/14/13	6	0.030	0.030	4.0		8	415451	NA



Report prepared for:	Matthew Sutton The Source Group	o, Inc								ived: 05/08 rted: 06/28	
Client Sample ID:	Subslab 3				Lab Sa	ample ID:	1:	305039-003/	4		
Project Name/Location:						le Matrix:	A				
Project Number:					Camp						
Date/Time Sampled:	05/08/13 / 9:3	8			Cortifi	ed Clean \	NO # ·				
•		0					NO # .	10.0			
Canister/Tube ID:	A7481				Receiv	ed PSI :		12.2			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Paramotors:	Analysis Method	Prep	Date	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results	Lab Qualifier	Analytical Batch	Prep
Parameters:	wethod	Date	Analyzed		ug/ms	ug/ms	ug/ms	ppbv	Quaimer	Batch	Batch
Dichlorodifluoromethane	ETO15	NA	05/09/13	1	1.5	5.0	ND	ND		415444	NA
1,1-Difluoroethane	ETO15	NA	05/09/13	1	0.50	1.4	ND	ND		415444	NA
1,2-Dichlorotetrafluoroethane	ETO15	NA	05/09/13	1	4.9	14	ND	ND		415444	NA
Chloromethane	ETO15	NA	05/09/13	1	0.32	1.1	ND	ND		415444	NA
Vinyl Chloride	ETO15	NA	05/09/13	1	0.67	2.6	ND	ND		415444	NA
1,3-Butadiene	ETO15	NA	05/09/13	1	0.45	1.1	ND	ND		415444	NA
Bromomethane	ETO15	NA	05/09/13	1	0.72	2.0	ND	ND		415444	NA
Chloroethane	ETO15	NA	05/09/13	1	0.50	1.3	ND	ND		415444	NA
Trichlorofluoromethane	ETO15	NA	05/09/13	1	1.8	5.6	ND	ND		415444	NA
1,1-Dichloroethene	ETO15	NA	05/09/13	1	0.61	2.0	ND	ND		415444	NA
Freon 113	ETO15	NA	05/09/13	1	0.85	3.9	ND	ND		415444	NA
Carbon Disulfide	ETO15	NA	05/09/13	1	0.81	3.1	ND	ND		415444	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	05/09/13	1	0.97	20	ND	ND		415444	NA
Methylene Chloride	ETO15	NA	05/09/13	1	0.58	28	ND	ND		415444	NA
Acetone	ETO15	NA	05/09/13	1	0.88	19	ND	ND		415444	NA
trans-1,2-Dichloroethene	ETO15	NA	05/09/13	1	0.64	2.0	ND	ND		415444	NA
Hexane	ETO15	NA	05/09/13	1	0.53	1.8	ND	ND		415444	NA
МТВЕ	ETO15	NA	05/09/13	1	0.87	1.8	ND	ND		415444	NA
tert-Butanol	ETO15	NA	05/09/13	1	0.91	8.4	ND	ND		415444	NA
Diisopropyl ether (DIPE)	ETO15	NA	05/09/13	1	0.88	2.1	ND	ND		415444	NA
1,1-Dichloroethane	ETO15	NA	05/09/13	1	0.75	2.1	ND	ND		415444	NA
ETBE	ETO15	NA	05/09/13	1	0.68	2.1	ND	ND		415444	NA
cis-1,2-Dichloroethene	ETO15	NA	05/09/13	1	0.54	2.0	ND	ND		415444	NA
Chloroform	ETO15	NA	05/09/13	1	1.2	4.9	ND	ND		415444	NA
Vinyl Acetate	ETO15	NA	05/09/13	1	0.57	1.8	ND	ND		415444	NA
Carbon Tetrachloride	ETO15	NA	05/09/13	1	0.86	3.2	ND	ND		415444	NA
1,1,1-Trichloroethane	ETO15	NA	05/09/13	1	0.85	2.8	94.9	17.25		415444	NA
2-Butanone (MEK)	ETO15	NA	05/09/13	1	0.63	1.5	1.68	0.56		415444	NA
Ethyl Acetate	ETO15	NA	05/09/13	1	0.74	1.8	2.02	0.56		415444	NA
Tetrahydrofuran	ETO15	NA	05/09/13	1	0.30	1.5	ND	ND		415444	NA
Benzene	ETO15	NA	05/09/13	1	0.69	1.6	ND	ND		415444	NA
TAME	ETO15	NA	05/09/13	1	0.36	2.1	ND	ND		415444	NA
1,2-Dichloroethane (EDC)	ETO15	NA	05/09/13	1	0.99	2.1	ND	ND		415444	NA
Trichloroethylene	ETO15	NA	05/09/13	1	1.4	5.4	103	19.07		415444	NA
1,2-Dichloropropane	ETO15	NA	05/09/13	1	1.3	4.6	ND	ND		415444	NA
Bromodichloromethane	ETO15	NA	05/09/13	1	0.89	3.4	ND	ND		415444	NA



Report prepared for:	Matthew Sutton The Source Group	, Inc								ived: 05/08 rted: 06/28	
Client Sample ID: Project Name/Location:	Subslab 3					ample ID: e Matrix:	13 Ai	805039-003A r			
Project Number: Date/Time Sampled:	05/08/13 / 9:3	3			Cortific	ed Clean V	NO # ·				
Canister/Tube ID:	A7481	5				ed PSI :	-	12.2			
	0.00							0.0			
Collection Volume (L):	0.00				Correc	ted PSI :		0.0			
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,4-Dioxane	ETO15	NA	05/09/13	1	1.2	3.6	ND	ND	•	415444	NA
trans-1,3-Dichloropropene	ETO15	NA	05/09/13	1	0.87	2.3	ND	ND		415444	NA
Toluene	ETO15	NA	05/09/13	1	0.95	1.9	ND	ND		415444	NA
4-Methyl-2-Pentanone (MIBK)	ETO15	NA	05/09/13	1	0.85	2.1	ND	ND		415444	NA
cis-1,3-Dichloropropene	ETO15	NA	05/09/13	1	1.1	2.3	ND	ND		415444	NA
Tetrachloroethylene	ETO15	NA	05/09/13	1	0.91	3.4	27.2	4.00		415444	NA
1,1,2-Trichloroethane	ETO15	NA	05/09/13	1	0.93	2.8	ND	ND		415444	NA
Dibromochloromethane	ETO15 ETO15	NA NA	05/09/13 05/09/13	1 1	1.7 2.0	4.3 7.7	ND ND	ND ND		415444 415444	NA NA
1,2-Dibromoethane (EDB)	EIOIS	INA	05/09/15		2.0	1.1	ND	ND		410444	INA
2-Hexanone	ETO15	NA	05/09/13	1	1.1	4.1	ND	ND		415444	NA
Ethyl Benzene	ETO15	NA	05/09/13	1	0.99	2.2	ND	ND		415444	NA
Chlorobenzene	ETO15	NA	05/09/13	1	0.71	2.3	ND	ND		415444	NA
1,1,1,2-Tetrachloroethane	ETO15	NA	05/09/13	1	1.0	3.5	ND	ND		415444	NA
m,p-Xylene	ETO15	NA	05/09/13	1	1.6	4.3	ND	ND		415444	NA
o-Xylene	ETO15	NA	05/09/13	1	0.81	2.2	ND	ND		415444	NA
Styrene	ETO15	NA	05/09/13	1	0.69	2.2	ND	ND		415444	NA
Bromoform	ETO15	NA	05/09/13	1	1.1	5.0	ND	ND		415444	NA
1,1,2,2-Tetrachloroethane	ETO15	NA	05/09/13	1	0.70	3.5	ND	ND		415444	NA
4-Ethyl Toluene	ETO15	NA	05/09/13	1	0.82	2.5	3.82	0.78		415444	NA
1,3,5-Trimethylbenzene	ETO15	NA NA	05/09/13 05/09/13	1 1	0.76	2.5 2.5	9.31	1.90 0.66		415444	NA NA
1,2,4-Trimethylbenzene 1,4-Dichlorobenzene	ETO15 ETO15	NA NA	05/09/13	1	0.69 0.65	2.5 3.0	3.23 ND	0.66 ND		415444 415444	NA NA
1.3-Dichlorobenzene	ETO15 ETO15	NA	05/09/13	1	0.85	3.0 3.0	ND	ND		415444	NA
1.2-Dichlorobenzene	ETO15	NA	05/09/13	1	0.84	3.0 3.0	ND	ND		415444	NA
Hexachlorobutadiene	ETO15	NA	05/09/13	1	2.4	5.5	ND	ND		415444	NA
1,2,4-Trichlorobenzene	ETO15	NA	05/09/13	1	3.4	5.5 7.4	ND	ND		415444	NA
Naphthalene	ETO15	NA	05/09/13	1	1.5	5.2	ND	ND		415444	NA
(S) 4-Bromofluorobenzene	ETO15	NA	05/09/13	1	65	135	97.4 %			415444	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL %	Results %	Results ppmv	Lab Qualifier	Analytical Batch	Prep Batch
Helium	D1946	NA	05/14/13	75	0.38	0.38	29			415451	NA



Work Order:	1305039	Prep I	Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Air	Analy		ETO15	Analyzed Dat	te: 05/13/13	Analytical	415441
Units:	ppbv	Metho	od:				Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier			
Dichlorodifluorom	ethane	0.30	1.00	ND				
1,1-Difluoroethan	е	0.18	10.0	ND				
1,2-Dichlorotetraf	uoroethane	0.70	2.00	ND				
Chloromethane		0.15	0.500	ND				
Vinyl Chloride		0.26	1.00	ND				
1,3-Butadiene		0.20	0.500	ND				
Bromomethane		0.18	0.500	ND				
Chloroethane		0.19	0.500	ND				
Trichlorofluorome	thane	0.32	1.00	ND				
1,1-Dichloroethen	e	0.15	0.500	ND				
Freon 113		0.11	0.500	ND				
Carbon Disulfide		0.26	1.00	ND				
2-Propanol (Isopr	opyl Alcohol)	0.39	8.00	0.530				
Methylene Chloric	le	0.17	8.00	ND				
Acetone		0.37	8.00	0.450				
trans-1,2-Dichlord	ethene	0.16	0.500	ND				
Hexane		0.15	0.500	ND				
MTBE		0.24	0.500	ND				
tert-Butanol		0.22	2.00	ND				
Diisopropyl ether	(DIPE)	0.21	0.500	ND				
1,1-Dichloroethan	е	0.18	0.500	ND				
ETBE		0.16	0.500	ND				
cis-1,2-Dichloroet	hene	0.13	0.500	ND				
Chloroform		0.25	1.00	ND				
Vinyl Acetate		0.16	0.500	ND				
Carbon Tetrachlo	ride	0.14	0.500	ND				
1,1,1-Trichloroeth	ane	0.15	0.500	ND				
2-Butanone (MEK	.)	0.21	0.500	ND				
Ethyl Acetate		0.21	0.500	ND				
Tetrahydrofuran		0.10	0.500	ND				
Benzene		0.21	0.500	ND				
TAME		0.086	0.500	ND				
1,2-Dichloroethan	e (EDC)	0.24	0.500	ND				
Trichloroethylene		0.26	1.00	ND				
1,2-Dichloropropa		0.29	1.00	ND				
Bromodichlorome		0.13	0.500	ND				
1,4-Dioxane		0.35	1.00	ND				
trans-1,3-Dichlord	propene	0.19	0.500	ND				
Toluene		0.25	0.500	ND				
4-Methyl-2-Penta	none (MIBK)	0.21	0.500	ND				
cis-1,3-Dichloropr		0.25	0.500	ND				



Work Order:	1305039	Prep I	p Method: NA		Prep	Date:	NA	Prep Batch:	NA	
Matrix:	Air	Analytical Method:		ETO15	Anal	yzed Date:	05/13/13	Analytical Batch:	415441	
Units: ppbv		Method:						Balcii.		
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier					
Tetrachloroethylene		0.13	0.500	ND						
1,1,2-Trichloroeth	nane	0.17	0.500	ND						
Dibromochlorome	ethane	0.20	0.500	ND						
1,2-Dibromoethar	ne (EDB)	0.27	1.00	ND						
2-Hexanone		0.27	1.00	ND						
Ethyl Benzene		0.23	0.500	ND						
Chlorobenzene		0.15	0.500	ND						
1,1,1,2-Tetrachlo	roethane	0.15	0.500	ND						
m,p-Xylene		0.38	1.00	ND						
o-Xylene		0.19	0.500	ND						
Styrene		0.16	0.500	ND						
Bromoform		0.11	0.500	ND						
1,1,2,2-Tetrachlo	roethane	0.10	0.500	ND						
4-Ethyl Toluene		0.17	0.500	ND						
1,3,5-Trimethylbe	enzene	0.15	0.500	ND						
1,2,4-Trimethylbe	enzene	0.14	0.500	ND						
1,4-Dichlorobenz	ene	0.11	0.500	ND						
1,3-Dichlorobenzene 0.14		0.14	0.500	ND						
1,2-Dichlorobenzene 0.15 0.500		0.500	ND							
Hexachlorobutadiene 0.22 0.500		ND								
1,2,4-Trichlorobenzene 0.46 1.00		ND								
Naphthalene 0.28		1.00	ND							
(S) 4-Bromofluorobenzene				106						



Work Order:	1305039	Prep Method:		NA	Prep Dat	e:	NA	Prep Batch:	NA
Matrix: Air		Analytical		ETO15	Analyzed	d Date:	05/09/13	Analytical	415444
Units:	ppbv	Metho	od:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluorom	ethane	0.30	1.00	ND					
1,1-Difluoroethan	e	0.18	10.0	ND					
1,2-Dichlorotetraf	uoroethane	0.70	2.00	ND					
Chloromethane		0.15	0.500	ND					
Vinyl Chloride		0.26	1.00	ND					
1,3-Butadiene		0.20	0.500	ND					
Bromomethane		0.18	0.500	ND					
Chloroethane		0.19	0.500	ND					
Trichlorofluorome	thane	0.32	1.00	ND					
1,1-Dichloroethen	e	0.15	0.500	ND					
Freon 113		0.11	0.500	ND					
Carbon Disulfide		0.26	1.00	ND					
2-Propanol (Isopr	opyl Alcohol)	0.39	8.00	ND					
Methylene Chloric	le	0.17	8.00	ND					
Acetone		0.37	8.00	0.370					
trans-1,2-Dichlord	ethene	0.16	0.500	ND					
Hexane		0.15	0.500	ND					
MTBE		0.24	0.500	ND					
tert-Butanol		0.22	2.00	ND					
Diisopropyl ether	(DIPE)	0.21	0.500	ND					
1,1-Dichloroethan	е	0.18	0.500	ND					
ETBE		0.16	0.500	ND					
cis-1,2-Dichloroet	hene	0.13	0.500	ND					
Chloroform		0.25	1.00	ND					
Vinyl Acetate		0.16	0.500	ND					
Carbon Tetrachlo	ride	0.14	0.500	ND					
1,1,1-Trichloroeth	ane	0.15	0.500	ND					
2-Butanone (MEK		0.21	0.500	ND					
Ethyl Acetate		0.21	0.500	ND					
Tetrahydrofuran		0.10	0.500	ND					
Benzene		0.21	0.500	ND					
TAME		0.086	0.500	ND					
1,2-Dichloroethan	e (EDC)	0.24	0.500	ND					
Trichloroethylene		0.26	1.00	ND					
1,2-Dichloropropa		0.29	1.00	ND					
Bromodichloromethane		0.13	0.500	ND					
1,4-Dioxane		0.35	1.00	ND					
trans-1,3-Dichlord	propene	0.19	0.500	ND					
Toluene		0.25	0.500	ND					
4-Methyl-2-Penta	none (MIBK)	0.21	0.500	ND					
cis-1,3-Dichloropr		0.25	0.500	ND					



Work Order:	1305039	Prep I	Method:	NA	VA Prep Date:		NA	Prep Batch:	NA
Matrix:	Air	Analytical Method:		ETO15	Anal	yzed Date:	05/09/13	Analytical	415444
Units:	ppbv							Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Tetrachloroethyle	ne	0.13	0.500	ND					
1,1,2-Trichloroeth		0.17	0.500	ND					
Dibromochlorome	ethane	0.20	0.500	ND					
1,2-Dibromoethar	ne (EDB)	0.27	1.00	ND					
2-Hexanone		0.27	1.00	ND					
Ethyl Benzene		0.23	0.500	ND					
Chlorobenzene		0.15	0.500	ND					
1,1,1,2-Tetrachlo	roethane	0.15	0.500	ND					
m,p-Xylene		0.38	1.00	ND					
o-Xylene		0.19	0.500	ND					
Styrene		0.16	0.500	ND					
Bromoform		0.11	0.500	ND					
1,1,2,2-Tetrachlo	roethane	0.10	0.500	ND					
4-Ethyl Toluene		0.17	0.500	ND					
1,3,5-Trimethylbe	enzene	0.15	0.500	ND					
1,2,4-Trimethylbe	enzene	0.14	0.500	ND					
1,4-Dichlorobenz	ene	0.11	0.500	ND					
1,3-Dichlorobenz	ene	0.14	0.500	ND					
1,2-Dichlorobenz	ene	0.15	0.500	ND					
Hexachlorobutad	iene	0.22	0.500	ND					
1,2,4-Trichlorobe	nzene	0.46	1.00	ND					
Naphthalene		0.28	1.00	ND					
(S) 4-Bromofluor	obenzene			102					
Work Order:	1305039	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Air	Analytical		D1946	Anal	yzed Date:	05/14/13	Analytical	415451
Units:	%	Metho	)d:					Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Helium		0.0050	0.0050	ND	•				



### LCS/LCSD Summary Report

Raw values are used in quality control assessment. Work Order: 1305039 Prep Method: NA Prep Date: NA Prep Batch: NA Matrix: ETO15 05/13/13 415441 Analytical Analyzed Date: Analytical Air Method: Batch: Units: ppbv LCS % LCSD % LCS/LCSD Method Spike % Parameters MDL PQL Blank Conc. Recovery Recovery % RPD Recovery % RPD Lab Conc. Limits Limits Qualifier 1,1-Dichloroethene 0.15 0.500 ND 20 97.5 98.2 65 - 135 0.716 30 0.500 ND 92.2 90.2 2.14 65 - 135 30 Benzene 0.21 20 Trichloroethylene 0.26 1.00 ND 20 96.6 96.1 0.467 65 - 135 30 Toluene 0.25 0.500 ND 20 98.0 101 2.67 65 - 135 30 88.9 Chlorobenzene 0.15 0.500 ND 20 88.0 0.961 65 - 135 30 (S) 4-Bromofluorobenzene ND 20 70.0 90.0 65 - 135 Work Order: 1305039 Prep Method: NA Prep Date: NA Prep Batch: NA Matrix: Air Analytical ETO15 Analyzed Date: 05/09/13 Analytical 415444 Method: Batch: Units: ppbv LCS % Method Spike LCSD % LCS/LCSD % MDL PQL Recovery Recovery **Parameters** Blank Recovery % RPD % RPD Conc. Lab Conc. Limits Limits Qualifier 1,1-Dichloroethene 0.15 0.500 ND 20 112 102 9.47 65 - 135 30 98.1 Benzene 0.21 0.500 ND 20 107 8.26 65 - 135 30 Trichloroethylene 0.26 1.00 ND 20 115 119 3.42 65 - 135 30 Toluene 0.25 0.500 20 109 4.58 65 - 135 30 ND 114 0.500 100 97.5 65 - 135 30 Chlorobenzene 0.15 ND 20 2.63 (S) 4-Bromofluorobenzene ND 20 90.0 90.0 65 - 135 Work Order: 1305039 **Prep Method:** NA Prep Date: NA Prep Batch: NA Matrix: D1946 05/14/13 Analytical 415451 Air Analytical Analyzed Date: Method: Batch: Units: % Method Spike LCS % LCSD % LCS/LCSD % MDL PQL % RPD Parameters Blank % RPD Recovery Conc. Recovery Recovery Lab Conc. Limits Limits Qualifier Helium 0.0050 0.0050 ND 1000 84.1 103 19.8 65 - 135 30



## Laboratory Qualifiers and Definitions

#### **DEFINITIONS:**

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.

Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.

**Duplicate** - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)

Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.

Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)

**Matrix Spike (MS/MSD)** - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.

Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero

**Practical Quantitation Limit (PQL)** - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.

Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates

Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis

**Tentatively Identified Compound (TIC)** - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.

Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/M3, mg.m3, ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

### LABORATORY QUALIFIERS:

**B** - Indicates when the anlayte is found in the associated method or preparation blank

D - Surrogate is not recoverable due to the necessary dilution of the sample

**E** - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.

H- Indicates that the recommended holding time for the analyte or compound has been exceeded

J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative

NA - Not Analyzed

N/A - Not Applicable

**NR** - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added

R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts

S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative

X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards.

Further explanation may or may not be provided within the sample footnote and/or the case narrative.



# Sample Receipt Checklist

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Client Name: The Source Group, Inc		Date and Time Received: 5/8/2013 16:50									
Project Name:		Received By: LDI									
Work Order No.: <u>1305039</u>		Physically Logged By: LDI									
		Checklist Completed By: LDI									
		Carrier Name: First Courier									
Chain of Custody (COC) Information											
Chain of custody present?	Yes										
Chain of custody signed when relinquished and received?	Yes										
Chain of custody agrees with sample labels?	Yes										
Custody seals intact on sample bottles?	Not Present										
Sample Receipt Information											
Custody seals intact on shipping container/cooler?	Not Present										
Shipping Container/Cooler In Good Condition?	Yes										
Samples in proper container/bottle?	Yes										
Samples containers intact?	Yes										
Sufficient sample volume for indicated test?	Yes										
Sample Preservation and I	Hold Time (HT)	) Information									
All samples received within holding time?	<u>Yes</u>										
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: °C									
Water-VOA vials have zero headspace?	No VOA vials submitted										
Water-pH acceptable upon receipt?	<u>N/A</u>										
pH Checked by: <u>N/A</u>	pH Adjusted by: <u>N/A</u>										

Air samples received at ambient temperature.



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