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September 29, 2016

Ms. Kit Soo, P.G.
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **FIRST 2016 SEMI-ANNUAL GROUNDWATER MONITORING AND SAMPLING, PLUME DELINEATION, AND DATA COLLECTION FOR REMEDIAL EVALUATION REPORT**
Former Francis Plating Site
785 7th Street, Oakland, California

Dear Ms. Soo:

Enclosed please find the First 2016 Semi-Annual Groundwater Monitoring and Sampling, Plume Delineation, and Data Collection for Remedial Evaluation Report for the Former Francis Plating Site.

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 Adam Brown McIver at (530) 272-4200.

Sincerely,

Tom McCoy
Property Owner

Enclosure

FIRST 2016 SEMI-ANNUAL GROUNDWATER MONITORING AND SAMPLING, PLUME DELINEATION, AND DATA COLLECTION FOR REMEDIAL EVALUATION REPORT

Former Francis Plating Site
789 7th Street, Oakland, California

06-FP-004

Prepared For:

Seventh Street Group, LLC
1155 Third Street, Suite 230
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Prepared By:

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August 3, 2016

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CERTIFICATION

All hydrogeologic and geologic information in this document regarding the 789 7th Street Site have been prepared under the supervision of and reviewed by the certified professional whose signature appears below.

Jing Heisler, P.G.
Professional Geologist
The Source Group, Inc.
A division of APEX Companies, LLC

1.0 INTRODUCTION

On behalf of The Seventh Street Group, LLC (Seventh Street Group), The Source Group, Inc. (SGI) has prepared this *First 2016 Semi-Annual Groundwater Monitoring and Sampling, Plume Delineation, and Data Collection for Remedial Evalution Report* (Report) for the parcel at 789 7th Street, Oakland, California (Parcel 1), the western parcel that make up the Former Francis Plating Site (the Site, Figures 1 and 2). The Site is currently under the regulatory oversight of the Alameda County Environmental Health Services (ACEH) (Alameda County SLIC Case No.RO0002586).

The data presented in this Report was collected in accordance with SGI's November 20, 2015 *Revised Plume Delineation and Data Collection for Evaluation of Remedial Alternatives Work Plan* (Work Plan) (SGI, 2015), which was conditionally approved in ACEH correspondence dated January 13, 2016 (Appendix A). The objective of this scope of work was to;

1) Define the extent of VOC and Hexavalent Chromium contamination in shallow groundwater;
2) Define the extent of VOCs, metals, and Hexavalent Chromium in source area soil; and
3) Collect additional soil properties data for remedial evaluation.

1.1 Site Location and Description

The Site is located at 789 7th Street, in a light industrial area of Oakland. The Site is bounded by 7th Street to the north, Parcel 2 and Brush Street to the east, a Shell service station to the west, and a commercial building and lot to the south (Figure 2).

The Site is vacant and paved, and is used for parking. An approximately 2,227-square-foot building occupies the northeast corner of the adjacent Parcel 2. The property is covered by concrete or asphalt, with the exception of an exposed strip of soil along the western property line.

2.0 SITE BACKGROUND

This section provides background information, subsurface conditions, and previous remediation activities at the Site.

2.1 Site Operational History

A review of Sanborn Fire Insurance maps by BASELINE Environmental Consulting (BASELINE) identified the Site use in the late 1940s and early 1950s as an auto and truck sales and service shop (BASELINE, 2005). The Site was operated as a plating facility from approximately 1957 to 1998. A building occupied the western portion (Parcel 1) of the Site from the late 1940s until it was destroyed by fire in 1992. The building currently on the adjacent parcel (Parcel 2) was constructed in 1970. Plating operations were conducted in both the former and current buildings on the two parcels.

In 1998, the property was found abandoned with chemicals and equipment remaining on Site. As part of an emergency response action, the U.S. Environmental Protection Agency (USEPA) removed the abandoned chemicals and equipment, and excavated shallow soil in areas without asphalt or concrete surfaces. In 2003, the current owner, The Seventh Street Group, acquired the property.

2.2 Hydrogeologic Setting

Past investigations indicate that the lithology is consistent across the Site. Soil from the surface to 3 to 5 feet below ground surface (bgs) consists of silty sand/sand fill with some brick and concrete debris. Very fine- to fine-grained sands (Merritt Sands) of the San Antonio Formation underlie the fill and extend to approximately 60 feet bgs (BASELINE, 2010). The Merritt Sands are underlain by plastic clay (Old Bay Mud).

Regional groundwater flow direction in the San Antonio Formation is southwesterly toward the Oakland Inner Harbor, located approximately 2,300 feet south of the Site. Based on groundwater monitoring conducted by BASELINE in 2003, 2005, and 2010, the depth to the shallow unconfined groundwater at the Site has ranged from approximately 12 to 16 feet bgs. Groundwater monitoring performed by BASELINE in 2010, and groundwater monitoring reports from the adjacent Shell Service Station, indicate that the local shallow unconfined groundwater flows in a south/southwesterly direction (BASELINE, 2010; CRA, 2009). The Old Bay Mud is the confining layer for the deeper water-bearing formation.

2.3 Summary of Remedial Actions and Current Environmental Conditions

The USEPA response action, conducted from 1998 through 2000, involved characterization of stored liquids, sludge, and sediments contained in tanks, pits, and ponds, all located above the concrete pavement. All of these materials were subsequently removed from the Site, and soil samples were collected and analyzed for selected metals and total cyanide (BASELINE, 2005).

Surface soils were removed as part of the emergency response action to ensure that remaining surface soils did not contain cadmium, chromium, nickel, and lead concentrations above USEPA Industrial Preliminary Remedial Goals. During the removal actions, shallow soil was excavated and removed from areas that were not capped with asphalt or concrete. These are the same areas (along the western boundary) not currently capped by asphalt or concrete.

Numerous investigations between 2000 and 2010 have identified metals, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and petroleum hydrocarbons in soil, groundwater, and/or soil vapor samples. Compounds detected in Site soil, groundwater, soil vapor and indoor air include:

- Lead, nickel, zinc, cadmium, total chromium, hexavalent chromium (Cr-VI), copper, antimony, PAHs, and cyanide have been detected in one or more soil samples at concentrations exceeding environmental screening levels (ESLs) established by the California Regional Water Quality Control Board – San Francisco Bay Region (CRWQCB) for land uses where groundwater is a drinking water resource;
- Dissolved total chromium, Cr-VI, cobalt, copper, lead, mercury, nickel, silver, thallium, vanadium, total petroleum hydrocarbons as diesel (TPHd), cis-1,2-dichloroethene (cis-1,2-DCE) and trichloroethene (TCE) have been detected in one or more groundwater samples at concentrations exceeding residential or commercial ESLs; and
- TCE has been detected in one or more shallow soil gas samples at concentrations exceeding ESLs.

Results of a 2006 investigation suggested that a subsurface containment vault on the southwestern portion of the Site referred to as the "Frog Pond," was a significant source of the subsurface contamination at the Site. As a result, the Frog Pond was removed in two phases, beginning in May 2007, and completed in December 2007. The Frog Pond removal activities are described in a BASELINE report dated February 2008 (BASELINE, 2008).

In April, 2010, BASELINE completed a soil and groundwater investigation which concluded groundwater impacts were confined to the Merritt Sand and chemical of primary concern for groundwater was Cr-VI detected in shallow and deep wells extending 120 feet down gradient of the Site. In addition, select dissolved metals detected in groundwater exceeded ESLs, no VOCs were reported in groundwater exceeding ESLs. Complete results are presented in BASELINE's *Phase IV Soil and Groundwater Investigation,* dated May 2010, (BASELINE, 2010).

During the most recent first quarter 2016 sampling event Cr-VI and TCE were detected at maximum concentrations of 200,000 µg/L and 93 µg/L, respectively, from well MW-FP4A. Groundwater flow direction was observed to the south/southwest gradient of 0.04 feet per foot (ft/ft). Groundwater concentrations and flow direction/gradient were generally consistent with historical conditions. Furthermore, groundwater measurements, including analytical results and groundwater parameters continue to indicate a non-reductive and aerobic subsurface environment. A non-reducing aerobic subsurface environment is not supportive of natural dechlorination or Cr-VI degradation.

In addition to first quarter monitoring and sampling activities on- and off-Site soil borings were advanced for the collection of soil samples, grab groundwater and remedial evaluation parameters. Cr-VI was not detected above respective ESLs in shallow source area soil and appears impacted shallow soil is limited to the former Frog Pond area and directly adjacent. The lateral extent of CrVI in groundwater extends approximately 160 feet down-gradient of the Site. Site lithology and remedial evaluation parameters indicate silts and clays of low permeability at the Site. Details regarding first quarter monitoring and sampling activities and delineation/remedial evaluation are presented in the following sections.

3.0 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

Groundwater monitoring and sampling activities were conducted on March 4 and 30, 2016. The first monitoring and sampling event was conducted on March 4, 2016. However, samples were received by the analytical laboratory out of hold time for Cr-VI analysis. SGI returned to the Site on March 30, 2016, to resample groundwater from wells for Cr-VI analysis.

3.1 Groundwater Monitoring

Groundwater levels measured on March 4, 2016, in seven shallow wells (MW-FP1, MW-FP2, MW-FP3, MW-FP4A, MW-FP5, MW-FP6 and MW-9) and two deeper screened on-Site wells (MW-FP4B and MW-FP7B) were used to develop groundwater potentiometric map. Well locations are presented on Figure 2. Groundwater levels were gauged from the top of the well casings using an electronic water level indicator graduated to 0.01-foot.

3.2 Groundwater Sampling

Groundwater samples were collected using low-flow techniques via peristaltic pump and dedicated tubing. During well purging, water quality parameters (dissolved oxygen [DO], oxidation reduction potential [ORP], temperature, electrical conductivity, and pH) were measured and recorded to ensure the groundwater samples were representative of aquifer conditions. Samples were transferred directly into laboratory-supplied containers and placed on ice for transport to Curtis & Tompkins Laboratory of Berkeley, California under chain-of-custody control. All groundwater samples collected during the 1Q16 event were analyzed for VOCs by EPA Method 8260B, dissolved metals (CAM 17 Metals) by EPA 6010B/7470A (field filtered with 0.45-micron filter), and total and dissolved Cr-VI by EPA Method 7196A (field filtered with 0.45 micron filter for dissolved Cr-VI).

3.3 Investigation Derived Waste

Decontamination and purge water generated from groundwater sampling activities was containerized in a 55-gallon steel drum, labeled, and temporarily staged on-Site pending analytic profiling and disposal at an approved facility.

3.4 Monitoring and Sampling Results

1Q16 groundwater monitoring and sampling was conducted on March 4 and March 30, 2016. Results are presented in the following sections.

3.4.1 Groundwater Elevations

Depth to water measurements ranged from 12.36 to 16.56 feet below top of casing (btoc) in wells screened in shallow zone; and from 11.88 to 16.43 feet btoc in wells screened in deeper zone. Corresponding groundwater elevations ranged from 8.65 to 9.33 feet above mean sea level (amsl) in wells screened in shallow zone; and from 8.63 to 9.01 feet amsl in wells screened in deeper zone.

A review of elevation data and the potentiometric surface map (Figure 3) indicates a south southwest gradient in shallow groundwater at rate of approximately 0.004 ft/ft, similar to previous findings. A potentiometric surface map for 1Q16 was generated from the groundwater elevation data and is presented as Figure 3. Groundwater elevation measurements are presented in Table 1.

The vertical potentiometric head difference between wells pairs MW-FP4A/4B and MW-9/MW-FP7B presented in Table 2. A review of the data indicates the vertical hydraulic gradients are flat at 0.00 ft/ft in wells MW-FP4A/4B and flat at 0.00 ft/ft in wells MW-9/MW-FP7B. Field form are included in Appendix B.

3.4.2 Groundwater Analytical Results

A summary of VOC results is provided in the table below:

Analyte	Detection Frequency	Minimum Detected Concentration / Sample Location	Maximum Detected Concentration / Sample Location
PCE	0 / 9	--	--
TCE	4 / 9	2.2 MW-FP5	93 MW-FP4A
cis-1,2-DCE	2 / 9	1.7 MW-9	71 MW-FP4A
1,1-DCE	1 / 9	1.0 MW-FP4A	1.0 MW-FP4A
Vinyl Chloride	0 / 9	--	--

Note:
Results presented in µg/L.
-- = Not Applicable

TCE and cis-1,2-DCE have been detected in one or more groundwater samples at concentrations exceeding ESLs for protection of drinking water as a resource. TCE was detected at a maximum concentration from on-Site monitoring well MW-FP4A at a concentration of 93 µg/L. TCE was detected at a lesser extent of 9.9 µg/L in monitoring well MW-FP6, approximately 130 feet south of the Site. VOC results are summarized in Table 3 and displayed on Figure 4. Laboratory analytical report is included in Appendix C.

A summary of dissolved metals and Cr-VI in provided in the table below:

Analyte	Detection Frequency	Minimum Detected Concentration / Sample Location	Maximum Detected Concentration / Sample Location
Barium	9 / 9	27 MW-FP7B	99 MW-FP4A
Total Chromium	9 / 9	9.2 MW-FP4B	16,000 MW-FP5
Cr-VI	9/ 9	10 MW-FP4B	200,000 MW-FP4A
Cobalt	1 / 9	9.2 MW-FP4A	9.2 MW-FP4A
Copper	1 / 9	19 MW-FP4A	19 MW-FP4A
Molybdenum	4 / 9	5.5 MW-FP6 and MW-9	34 MW-FP4A
Nickel	6 / 9	8.4 MW-9	130 MW-FP4A
Vanadium	2 / 9	11 MW-FP4B	12 MW-FP7B
Zinc	1 / 9	4 MW-FP4A	4 MW-FP4A

Notes: Results presented in µg/L.

Dissolved total chromium, Cr-VI, cobalt, copper, nickel, and zinc have been detected in one or more groundwater samples at concentrations exceeding ESLs. Results indicate that Cr-VI concentrations remain elevated and extend approximately 160 feet south of the Site to 6th Street. An isoconcentration map is included as Figure 5.

Cr-VI was detected at a concentration of 20 µg/L and 4,300 µg/L in shallow zone well MW-9 and deep zone well MW-FP7B, respectively. These values are not consistent with historic values and appear sampling containers were misidentified or mislabeled. For decision making purposes, SGI interprets MW-FP7B results as MW-9 results and MW-9 results as MW-FP7B results. Results will be confirmed during the third quarter sampling event. Results are summarized in Table 4 and Cr-VI results are displayed on Figure 5. Laboratory analytical reports are included in Appendix C.

3.4.3 Groundwater Parameters

All monitoring wells with the exception of MW-FP1, MW-FP4A, and MW-FP4B oxidation reduction potential (ORP) and dissolved oxygen (D.O.) parameters were recorded positive and greater than 1 milligram per liter (mg/L). These results indicate an aerobic groundwater environment. D.O. levels recorded in MW-FP1, MW-FP4A, and MW-FP4B were recorded at values less than 1.0 mg/L.

4.0 INVESTIGATION ACTIVITIES

SGI completed an investigation on May 19, 2016. The purpose of the investigation was to delineate the lateral extent of VOCs and Cr-VI in shallow groundwater downgradient of the Site and to further delineate impact of VOCs, metals and Cr-VI to soil in the vicinity of the Former Frog Pond for evaluation of source reduction options. The investigation included the collection of two grab groundwater samples collected from SB-FP4 and SB-FP5 located to the south of the Site and 11 soil samples collected from SB-FP1 through SB-FP3, located on-Site. Soil boring locations are illustrated on Figure 2. The investigation and results are detailed below.

4.1 Pre-Mobilization Activities

This section provides a brief overview of the activities that were completed prior to the initiation of the field investigation.

4.1.1 Utility Clearances / Survey

SGI notified Underground Service Alert (USA) of Northern California to alert public utility providers of the proposed drilling locations prior to conducting any subsurface work. On May 16, 2016, a private utility locator, Cruz Brothers Utility Locating (Cruz) of Santa Cruz, California located and delineated potential subsurface utilities and\or subsurface obstructions on-Site.

4.1.2 Permits

Soil boring permits were procured from Alameda County Public Works Agency (ACPWA). An additional Caltrans encroachment permit was obtained for off-Site soil borings. Copies of the permits procured are included as Appendix D.

4.2 Completion of Soil Borings

On May 19, 2016, SGI supervised Cascade Drilling, Inc. (Cascade) of Richmond, California as they completed five soil borings SB-FP1 through SB-FP5, at the locations shown on Figure 2. Soil borings SB-FP1 through SB-FP3 were advanced on-Site to 12 feet bgs each for the collection of soil samples. Soil borings SB-FP4 and SB-FP5 were advanced off-Site to 20 feet bgs for the collection of grab groundwater samples.

Prior to mechanical advancement each borehole was cleared for utilities with hand tools to a minimum of five feet bgs. Borings were advanced beyond five feet bgs using direct push technologies (DPT) equipped with a 2.25-inch diameter drilling rod at four-foot intervals. Soil samples for potential chemical analysis, field screening, geotechnical parameters, and lithologic logging purposes were collected continuously from all borings. Soil cuttings and/or soil retained in acetate liners were classified using ASTM and Unified Soil Classification System (USCS) methodology. Descriptions of soil samples included the following information:

- percentage of sample recovery;
- depth to first encountered groundwater;
- color (Munsell color chart);
- density;
- degree of moisture; and
- grain size classification (USCS; percentages of gravel, sand, silt, and clay).

A calibrated photo ionization detector (PID) was utilized to preliminarily screen encountered soils for the presence of VOCs to identify those horizons best suited for laboratory analysis. Soil samples were vacated from the sampling equipment and placed in zip lock bags. Approximately 10 to 20 minutes later, a PID measurement was collected from inside the zip lock bag. Lithologic characterization and other pertinent information (e.g., PID screening) were used to create detailed boring logs included in Appendix E. Daily field forms are included in Appendix B.

4.3 Soil Sampling

A total of nine soil samples were collected that were submitted for chemical analysis at depths ranging from 4 to 11.5 feet bgs from SB-FP1 through SB-FP3. Retrieved sample containers were capped with Teflon™ liners, labeled, sealed in a zip lock bag, and immediately placed in a chilled cooler for delivery to Curtis and Tompkins, Inc. of Berkeley, California.

Soil samples collected for chemical analysis were analyzed as follows:

- A total of nine discrete soil samples were analyzed for VOCs by USEPA Method 8260B, Metals by USEPA Method 6010B/7470A, and Hexavalent Chromium by USEPA Method 7196A.

Two additional soil samples were collected from SB-FP1 and SB-FP2 at a depth of 11 feet bgs for analysis of physical properties. Retrieved sample containers were capped with Teflon™ liners, labeled, sealed in a zip lock bag, and immediately placed in a chilled cooler for delivery to PTS Laboratories, Inc. of Santa Fe Springs, California.

Soil samples collected for physical properties analysis were analyzed as follows:

- A total of 2 discrete soil samples were analyzed for permeability/hydraulic conductivity, total porosity, air-filled porosity, dry bulk density, volumetric moisture content, and fraction organic carbon.

Upon completion, borings were backfilled with Portland cement and completed to match surface conditions.

4.4 Soil Sampling Results

A total of 11 soil samples were collected from SB-FP-1 through SB-FP-3 advanced in the vicinity of the Former Fog Pond. Results of the soil samples submitted for analysis on May 19, 2016 are summarized below:

Analyte	Detection Frequency	Background* or ESL** as Indicated by Asterisk	Minimum Detected Concentration / Sample Location	Maximum Detected Concentration / Sample Location
Arsenic	9 / 9	5.5*	**1.5** / SB-FP1 and SB-FP3	**3.1** / SB-FP2 and SB-FP3
Total Chromium	9 / 9	58*	**32** / SB-FP2	**260** / SB-FP1
Cr-VI	3 / 9	6.2**	**0.44** / SB-FP1	**4.6** / SB-FP3
Cobalt	9 / 9	3,500**	**2.3** / SB-FP1	**7.3** / SB-FP2
Lead	9 / 9	320**	**2.6** / SB-FP3	**12** / SB-FP1
Mercury	7 / 9	190**	**0.004** / SB-FP1	**0.12** / SB-FP1
Nickel	9 / 9	11,000**	**16** / SB-FP2	**140** / SB-FP2
Vanadium	9 / 9	5,800**	**17** / SB-FP1	**32** / SB-FP2

Notes:
Detections shown in **Bold**.
bgs – below ground surface
mg/kg – micrograms per kilogram
ESL – environmental screening level, CRWQCB, February 2016.

No metals were detected above the respective ESL with the exception of arsenic; however, it is well documented background concentrations of metals in the San Francisco Bay region often occur above ESLs. Therefore, concentrations of arsenic were evaluated against established background levels presented in *Analysis of Background Distribution of Metals in the Soil at Lawrence Berkeley National Laboratory*, revision dated April 2009 (Diamond et al., 2009, Table 2). The maximum concentration of arsenic of 3.1 mg/kg detected in soil borings SB-FP2 and SB-FP3 is below the arithmetic mean for arsenic of 5.5 mg/kg for background level. No VOCs were detected above the laboratory reporting limits in soil samples collected from SB-FP1 through SB-FP3.

Based on soil boring investigation results, shallow soil impact of Cr-VI is limited to the Former Frog Pond area and the area directly adjacent. Soil results are detailed in Tables 5 and 6 and shown on Figure 6. Laboratory analytical results are included in Appendix C.

4.4.1 Soil Boring Lithology

Soil encountered at the Site consist of relatively uniform units of silty/clayey sand and poorly graded sand (Merritt Sand deposits) at the surface to approximately 20 feet bgs, the maximum depth explored. Groundwater was not encountered in on-Site soil borings (SB-FP1 through SB-FP3). Groundwater was encountered in off-Site borings, SB-FP4 and SB-FP5, at approximately

19.5 and 14.5 feet bgs, respectively. Groundwater quickly infiltrated each boring with a static level ranging between 12 and 15 feet bgs.

4.4.2 Physical Properties Analysis Results

Soil sample analysis was performed appropriately as requested on the chain-of-custody. The data are considered valid, representative, and adequate for decision making purposes. Soil properties results are summarized in the following table.

Location	Water-Filled Porosity (%Vb)	Effective Permeability to Water (millidarcy)	Hydraulic Conductivity (cm/s)	Intrinsic Permeability to Water (cm^2)	Total Organic Carbon (mg/kg)
SB-FP1 at 11 ft bgs	28.4	0.053	5.37E-08	5.24E-13	1400
SB-FP2 at 11 ft bgs	23.7	0.117	1.18E-07	1.16E-12	300

Notes:
%Vb = Percent Bulk Volume.
Cm/s = centimeters per second.
Cm^2 = centimeters squared.
Mg/kg = milligrams per kilogram.

Soil properties results indicate that shallow source area soil consist of clays and silts with low permeability. In-situ remediation techniques would likely have a limited success in reduction of unsaturated source material. Laboratory analytical report is included in Appendix C.

4.5 Grab Groundwater Sampling Results

Two grab groundwater samples were collected from SB-FP4 and SB-FP5 advanced south of the Site. Results of the grab groundwater samples submitted for analysis on May 19, 2016 are summarized below and shown on Figures 3 and 4:

Analyte	Detection Frequency	ESL	Minimum Detected Concentration / Sample Location	Maximum Detected Concentration / Sample Location
PCE	0 / 2	5	--	--
TCE	2 / 2	5	**19** / SB-FP4	**41 /** SB-FP5
Cis-1,2-DCE	2 / 2	6	**8.3** / SB-FP4	**14** / SB-FP5
Trans-1,2-DCE	1 / 2	10	--	**2.2 /** SB-FP5
Vinyl Chloride	0 / 2	0.5	--	--
Cr-VI	0 / 2	0.02	--	--

Notes:
Detections shown in **Bold**.
-- indicates field is not applicable
bgs – below ground surface
µg/L – milligrams per liter
PCE = Tetrachloroethylene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
MTBE = methyl tert-butyl ether
ESL – environmental screening level, CRWQCB, February 2016.

PCE was not detected in grab groundwater samples collected from SB-FP4 and SB-FP5. TCE was detected in both samples at concentrations ranging from 19 µg/L to 41 µg/L. Cis-1,2-DCE was detected in both samples at concentration ranging from 8.3 µg/L to 14 µg/L. Although trans-1,2-DCE was detected (2.2 µg/L), concentrations were not above the ESL. Hexavalent Chromium was not detected in SB-FP4 and SB-FP5 at concentrations above the laboratory reporting limits.

The results indicate the Cr-VI plume in shallow groundwater is limited to the Site and the adjacent property to the south. The shallow groundwater plumes are vertically and laterally characterized. Results are summarized on Table 2 and 3, and shown on Figure 5. Laboratory analytical reports are included in Appendix C.

4.6 Quality Assurance/Quality Control

Soil sample analysis was performed appropriately as requested on the chain-of-custody. The data are considered valid, representative, and adequate for decision making purposes.

4.7 Waste Management

All investigation-derived residuals were managed consistent with applicable laws and regulations. Two 55-gallon drums were generated during investigation and monitoring and sampling activities. The drum is being stored on-Site pending characterization

5.0 FINDINGS AND RECOMMENDATIONS

A summary of investigation results is provided below:

- During the 1Q16 shallow groundwater beneath the Site flowed toward the south/southwest at a gradient of approximately 0.004 ft/ft, consistent with historical groundwater conditions;
- Groundwater parameters and results continue to indicate a non-reductive aerobic subsurface groundwater environment;
- Cr-VI was detected at concentrations below respective ESLs from soil borings SB-FP1 through SB-FP-3 and is lateral and vertically defined within the Former Frog Pond and directly adjacent;
- The maximum Cr-VI concentration in groundwater was detected in shallow zoned monitoring well MW-FP4A at 200,000 µg/L. Non-detectable concentrations of Cr-VI in grab groundwater samples collected from SB-FP4 and SB-FP5 indicate the lateral extent of Cr-VI impact to shallow groundwater has been defined. As shown on Figure 5 the groundwater plume is estimated to extend approximately 180 feet to the south of the Site;
- TCE was detected in 4 of 7 groundwater samples from shallow screened wells, two of which (MW-FP4 and MW-FP6) were at concentrations greater than the ESL (5 µg/L) for protection of drinking water resources. In addition, TCE was detected in shallow soil borings SB-FP4 and SB-FP5 at concentrations above the ESL; and
- Soil properties data indicate low permeability conditions on-Site.

The first 2016 semi-annual groundwater monitoring and sampling results indicated that groundwater concentrations and conditions (anaerobic) are generally consistent with historical findings. Investigation results indicated the extent of Cr-VI is defined laterally in soil and groundwater. SGI is scheduled to complete the second semi-annual monitoring and sampling event during the third quarter 2016. The second semi-annual monitoring and sampling report will include a feasibility study to evaluate remedial alternatives.

6.0 LIMITATIONS

This Report was prepared for the exclusive use of The Brush Street Group for the express purpose of complying with regulatory directives for environmental investigation, in accordance with the scope of work, methodologies, and assumptions outlined in SGI's contract with The Brush Street Group and as applicable to the location of the proposed investigation. Any re-use of this work product, in whole or in part, for a different purpose, or by others must be approved by SGI and The Brush Street Group in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to SGI. To the extent that this Report is based on information provided to SGI by third parties, including The Brush Street Group, their direct-contractors, previous workers, and other stakeholders, SGI cannot guarantee the completeness or accuracy of this information, even where efforts were made to verify third-party information. SGI has exercised professional judgment to collect and present a scope of work and opinions of a scientific and technical nature. The opinions expressed are based on the conditions of the Site existing at the time of this Report preparation, current regulatory requirements, and any specified assumptions. Findings or conclusions presented in this Report are intended to be taken in their entirety to assist The Brush Street Group and regulatory personnel in applying their own professional judgment in making decisions related to the property. SGI cannot provide conclusions on environmental conditions outside the completed scope of work. SGI cannot guarantee that future conditions will not change and affect the validity of the presented scope of work and any conclusions presented. No warranty or guarantee, whether expressed or implied, is made with respect to the data, observations, recommendations, and conclusions.

7.0 REFERENCES

BASELINE Environmental Consulting (BASELINE). 2005. Site History and Data Summary Report, 785 7th Street, Oakland, California. January 10.

BASELINE. 2008. Documentation of Frog Pond Removal Activities, 751-785 Seventh Street, Oakland, California. February 29.

BASELINE. 2010. Phase IV Soil and Groundwater Investigation, 751-785 Seventh Street, Oakland, California. May 28.

Conestoga-Rovers & Associates (CRA). 2009. Groundwater Monitoring Report – Third Quarter 2009, Shell-Branded Service Station, 601 Market Street, Oakland, California. October 28.

The Source Group, Inc. (SGI), 2015. Revised Plume Delineation and Data Collection for Evaluation of Remedial Alternatives Work Plan. November 20.

FIGURES

C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 1. Site Location Map - 05/05/2016

LEGEND

Site Location

REFERENCE LOCATION

Map Source:
USGS 7.5 Minute
Topographic Quadrangle Map,
Oakland West, CA - 1993, Photorevised 1997

SITE LOCATION MAP

FORMER FRANCIS PLATING
789 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
01-FP-004	05/05/2016	CM	GM

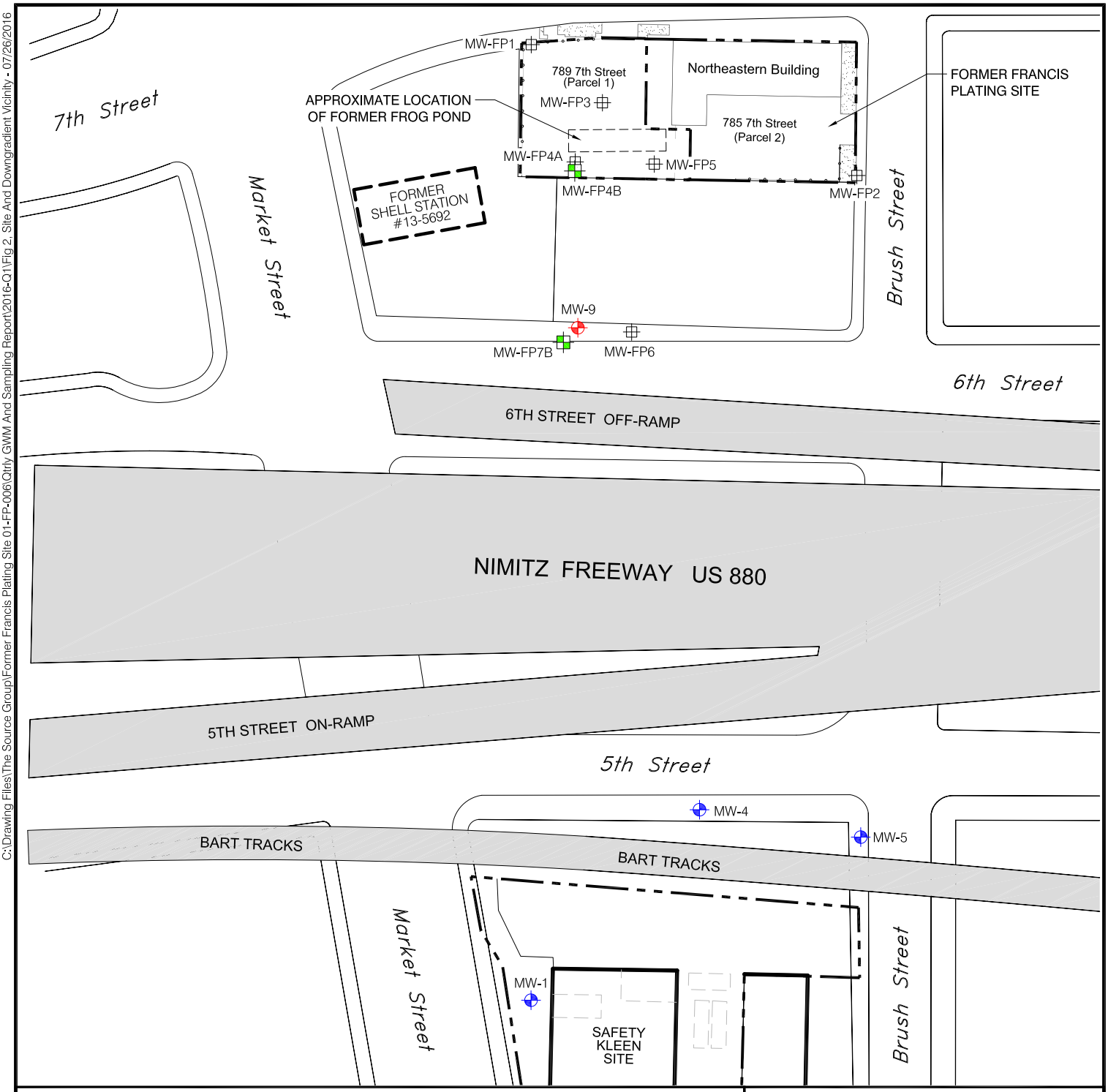
0 0.75 1.5
APPROXIMATE SCALE IN MILES

SGI environmental
APEX
944 McCOURTNEY ROAD SUITE H
GRASS VALLEY, CALIFORNIA 95949

N

FIGURE
1

C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 2. Site And Downgradient Vicinity - 07/26/2016



LEGEND

- MW-FP6 — Shallow Groundwater Monitoring Well
- MW-FP7B — Deep Groundwater Monitoring Well
- MW-9 — Shell Shallow Groundwater Monitoring Well
- MW-5 — Safety Kleen Site Shallow Monitoring Well
- Fence
- Site Boundary

NOTE:

Base Map Sources:
- Google Earth, Image Date 05/31/2007

SITE AND DOWNGRADIENT VICINITY

FORMER FRANCIS PLATING
789 7TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.:	DATE:	DRAWN BY:	APP. BY:
01-FP-004	07/26/2016	CM	GM

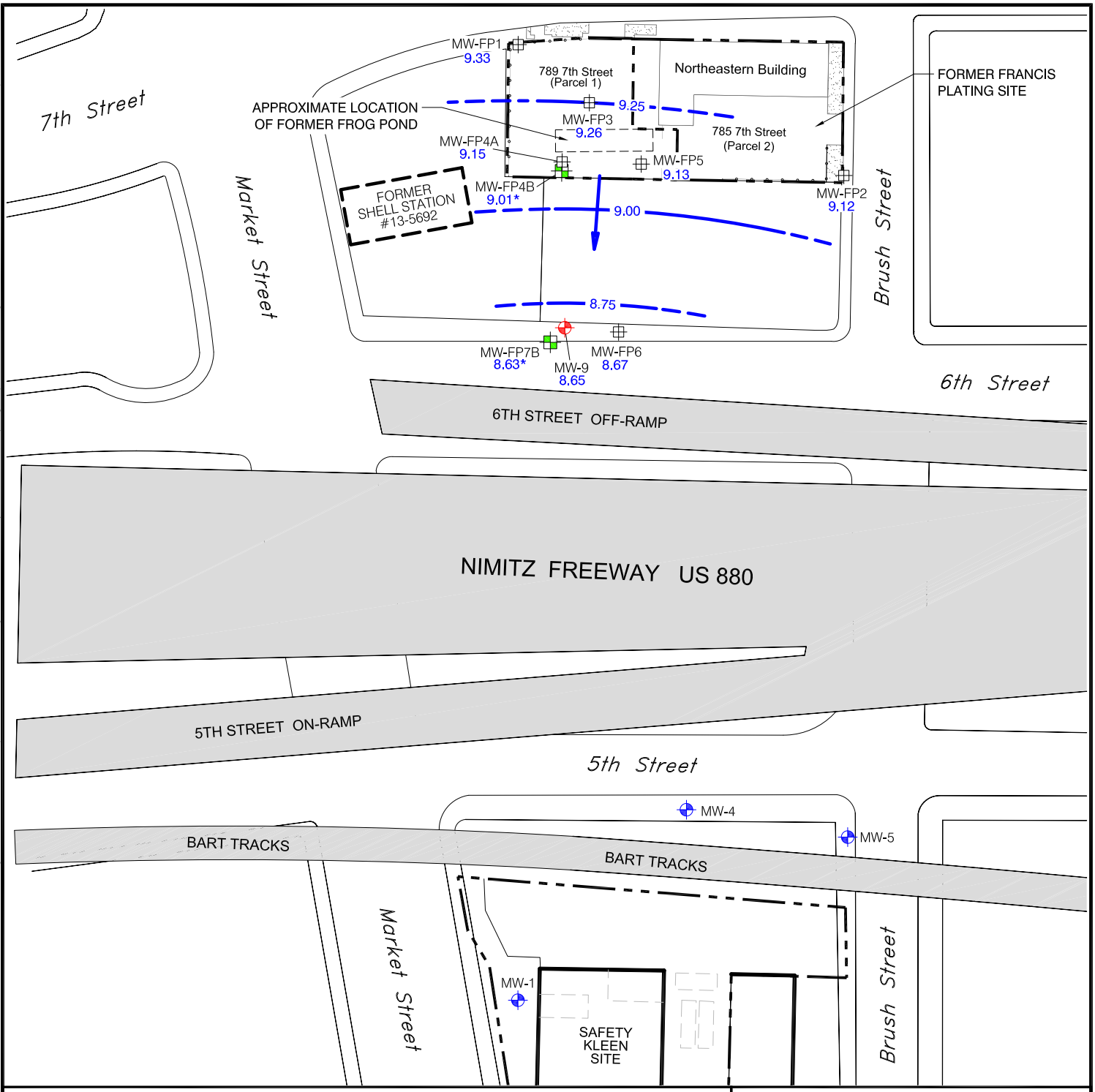
0 100 200
APPROXIMATE SCALE IN FEET

SGI environmental
APEX
944 McCOURTNEY ROAD SUITE H
GRASS VALLEY, CALIFORNIA 95949

N

FIGURE 2

C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 3, GW Elev And Potentiometric Surface Map - 07/26/2016



LEGEND

- MW-FP6 — Shallow Groundwater Monitoring Well
- MW-FP7B — Deep Groundwater Monitoring Well
- MW-9 — Shell Shallow Groundwater Monitoring Well
- MW-5 — Safety Kleen Site Shallow Monitoring Well
- 9.25 — Groundwater Elevation Contour in Feet Above Mean Sea Level (Dashed Where Inferred)
- Approximate Groundwater Flow Direction
- Fence
- Site Boundary

NOTE:

* - Not Included in Contour (MW-FP4B and MW-FP7B are screened in a diffferent zone)

GROUNDWATER ELEVATION AND POTENTIOMETRIC SURFACE MAP SHALLOW ZONE MARCH 4, 2016

FORMER FRANCIS PLATING
789 7TH STREET
OAKLAND, CALIFORNIA

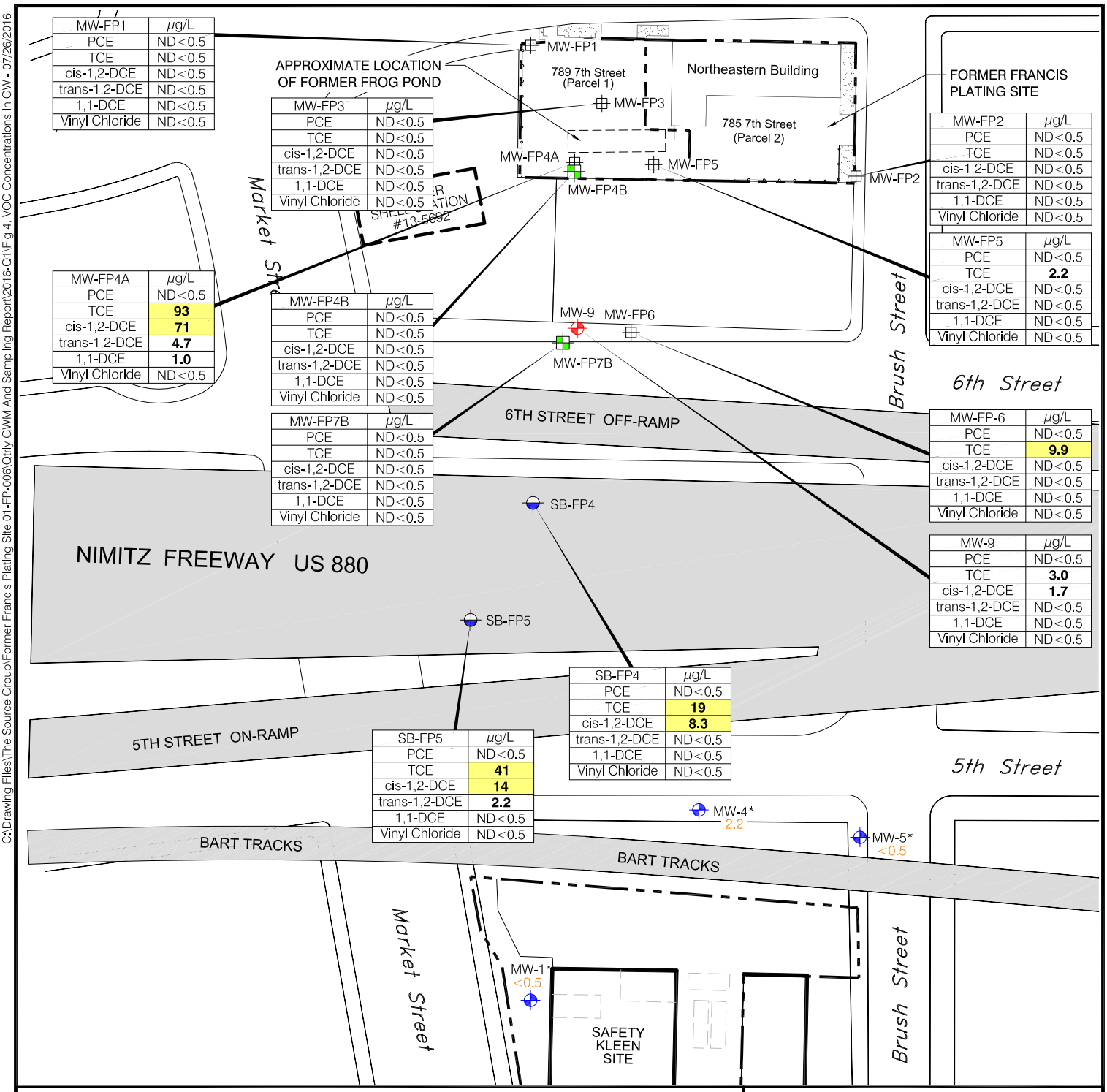
PROJECT NO.:	DATE:	DRAWN BY:	APP. BY:
01-FP-004	07/26/2016	CM	GM

0 100 200
APPROXIMATE SCALE IN FEET

SGI environmental
APEX
944 McCOURTNEY ROAD SUITE H
GRASS VALLEY, CALIFORNIA 95949

N

FIGURE 3



LEGEND

- SB-FP5 — Grab Groundwater Sample Location
- MW-FP6 — Shallow Groundwater Monitoring Well
- MW-FP7B — Deep Groundwater Monitoring Well
- MW-9 — Shell Shallow Groundwater Monitoring Well
- MW-5 — Safety Kleen Site Shallow Monitoring Well
- Fence
- Site Boundary

Sample Location

SB-FP5	µg/L
PCE	ND<0.5
TCE	41
cis-1,2-DCE	14
trans-1,2-DCE	2.2
1,1-DCE	ND<0.5
Vinyl Chloride	ND<0.5

Analyte

Concentrations in Micrograms per Liter (µg/L) - Yellow Background Indicates Detections Above the Environmental Screening Level

NOTE:

PCE - Tetrachloroethylene
TCE - Trichloroethene
cis-1,2-DCE - cis-1,2-Dichloroethene
trans-1,2-DCE - trans-1,2-Dichloroethene
1,1-DCE - 1,1-Dichloroethene
ND<0.5 - Not Detected Above Labratory Reporting Limit
* - Well Not Sampled 1Q16
µg/L - Micrograms per Liter
<0.5 - TCE data shown sampled on January 6, 2015

VOC CONCENTRATIONS IN GROUNDWATER - Q1-2016

FORMER FRANCIS PLATING
789 7TH STREET
OAKLAND, CALIFORNIA

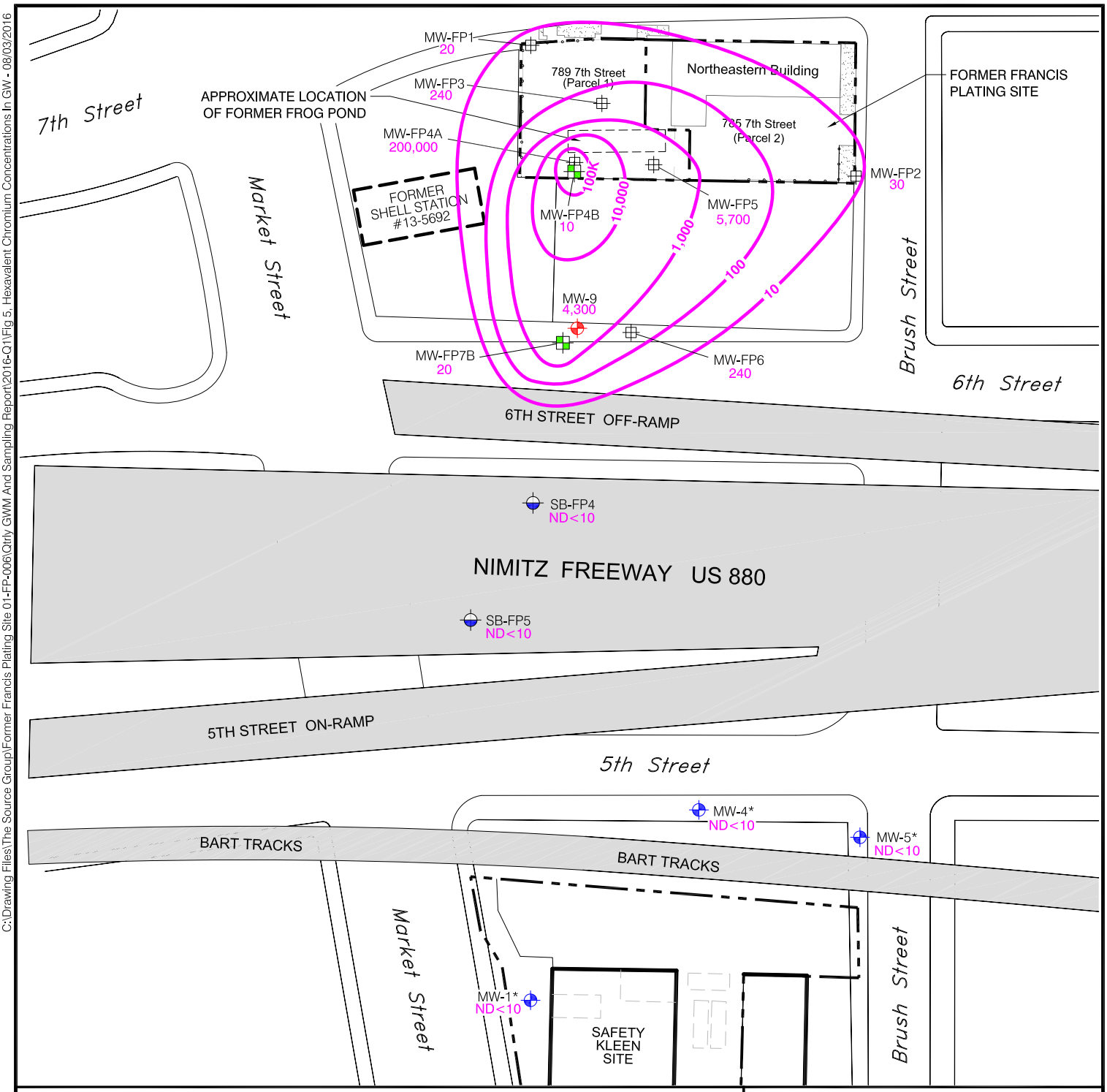
PROJECT NO.:	DATE:	DRAWN BY:	APP. BY:
01-FP-004	07/26/2016	CM	GM

0 100 200
APPROXIMATE SCALE IN FEET

SGI environmental
APEX
944 McCOURTNEY ROAD SUITE H
GRASS VALLEY, CALIFORNIA 95949

FIGURE 4

C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 4, VOC Concentrations In GW - 07/26/2016



C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 5, Hexavalent Chromium Concentrations In GW - 08/03/2016

LEGEND

- SB-FP5 — Grab Groundwater Sample Location
- MW-FP6 — Shallow Groundwater Monitoring Well
- MW-FP7B — Deep Groundwater Monitoring Well
- MW-9 — Shell Shallow Groundwater Monitoring Well
- MW-5 — Safety Kleen Site Shallow Monitoring Well
- 1,000 — Concentration of Hexavalent Chromium in Shallow Groundwater Zone (µg/L)
- Fence
- Site Boundary

NOTE:

ND<10 - Not Detected Above Laboratory Reporting Limit

10 - Hexavalent Chromium Concentration in Micrograms per Liter (µg/L)

HEXAVALENT CHROMIUM CONCENTRATIONS IN SHALLOW GROUNDWATER ZONE - 1Q-2016

FORMER FRANCIS PLATING
789 7TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.:	DATE:	DRAWN BY:	APP. BY:
01-FP-004	08/03/2016	CM	GM

0 100 200
APPROXIMATE SCALE IN FEET

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APEX
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GRASS VALLEY, CALIFORNIA 95949

N

FIGURE 5

C:\Drawing Files\The Source Group\Former Francis Plating Site 01-FP-006\Qtrly GWM And Sampling Report\2016-Q1\Fig 6. Hexavalent Chromium Concentrations In Soil - 08/02/2016

7th Street

Brush Street

MW-FP3 - 3/30/10	
Depth	mg/kg
5.5'	<0.40

B-FP17 - 11/28/05	
Depth	mg/kg
0.5'	<0.05
3.5'	<0.05

B-FP16 - 11/28/05	
Depth	mg/kg
0.5'	**0.06**
3.5'	**0.09**

B-FP29 - 6/1/07	
Depth	mg/kg
7.0'	**0.31**

B-FP07 - 2/5/03	
Depth	mg/kg
2.5'	<0.05
5.0'	**0.09**

B-FP08 - 11/22/05	
Depth	mg/kg
2.5'	<0.05
4.5'	<0.05

B-FP09 - 11/22/05	
Depth	mg/kg
2.0'	<0.05
4.5'	**0.09**

B-FP01 - 2/5/03	
Depth	mg/kg
2.5'	<0.05
5.5'	**0.59**

MW-FP1

B-FP01

789 7th Street
(Parcel 1)

B-FP17

FORMER
SUMP

B-FP07

B-FP08

B-FP09

Northeastern Building

B-FP06 - 2/5/03	
Depth	mg/kg
2.0'	<0.05
5.0'	<0.05

B-FP02 - 2/5/03	
Depth	mg/kg
2.5'	<0.05
5.5'	<0.05

B-FP13 - 11/28/05	
Depth	mg/kg
0.5'	<0.05
3.5'	<0.05

MW-FP3

B-FP02

B-FP13

NORTHERN
VAULT A

B-FP24 - 5/31/07	
Depth	mg/kg
4.5'	**33**
9.5'	**67**

B-FP16

B-FP06

B-FP10

B-FP10 - 11/28/05	
Depth	mg/kg
0.5'	<0.05
3.5'	<0.05

B-FP11

B-FP11 - 11/28/05	
Depth	mg/kg
0.5'	<0.05
3.5'	<0.05

785 7th Street
(Parcel 2)

B-FP28 - 6/1/07	
Depth	mg/kg
4.5'	**3.8**

B-FP27 - 6/1/07	
Depth	mg/kg
4.5'	**0.77**
9.5'	**3.7**

B-FP31 - 6/1/07	
Depth	mg/kg
11.5'	<0.05
18.5'	<0.05

B-FP03 - 2/4/03	
Depth	mg/kg
1.5'	<0.05
5.0'	<0.05

B-FP14 - 11/29/05	
Depth	mg/kg
0.5'	**19**
3.5'	**22**

B-FP28

B-FP27

WEST
VAULT

APPROXIMATE LOCATION OF
FORMER FROG POND

B-FP26

B-FP25

B-FP24

B-FP29

B-FP03

B-FP30

B-FP31

B-FP14

B-FP15

MW-FP5

B-FP23

MW-FP4A

SB-FP1

SB-FP2

MW-FP4B

B-FP04

SB-FP3

SB-FP3 - 5/19/16	
Depth	mg/kg
4'	ND<0.4
8'	**4.6**
11.5'	**3.6**

FORMER FRANCIS
PLATING SITE

B-FP12

B-FP05

MW-FP2

SB-FP1 - 5/19/16	
Depth	mg/kg
4'	**0.44**
8'	ND<0.4
11.5'	ND<0.4

MW-FP4A - 3/3/10	
Depth	mg/kg
5.0'	**92**
10.0'	**310**
15.0'	**19**
20.0'	**460**

B-FP30 - 6/1/07	
Depth	mg/kg
7.0'	<0.05

SB-FP2 - 5/19/16	
Depth	mg/kg
4'	ND<0.4
8'	ND<0.4
11.5'	ND<0.4

B-FP15 - 11/29/05	
Depth	mg/kg
0.5'	<0.05
3.0'	<0.05

B-FP25 - 6/1/07	
Depth	mg/kg
4.5'	**10**
9.5'	**6.5**

B-FP05 - 2/4/03	
Depth	mg/kg
2.0'	**0.09**
5.0'	**1.9**

B-FP12 - 11/29/05	
Depth	mg/kg
0.5'	**0.18**
3.5'	**0.06**

FORMER
SHELL STATION
#13-5692

B-FP23 - 3/30/06	
Depth	mg/kg
6.0'	**30**

B-FP04 - 2/4/03	
Depth	mg/kg
2.0'	<0.05
5.0'	<0.05

B-FP26 - 6/1/07	
Depth	mg/kg
4.5'	<0.05
9.5'	<0.05

MW-FP5 - 3/3/10	
Depth	mg/kg
5.0'	**1.0**
10.0'	**5.3**
15.0'	**11**
20.0'	**21**

SGI environmental
APEX
944 McCOURTNEY ROAD, SUITE H
GRASS VALLEY, CALIFORNIA 95949

0 20 40
APPROXIMATE SCALE IN FEET

LEGEND

- SB-FP5 — Soil Borings (5/19/2016)
- B-FP01 — Soil Boring Location
- MW-FP6 — Shallow Groundwater Monitoring Well
- MW-FP4B — Deep Groundwater Monitoring Well
- Fence
- Site Boundary
- Approximate Area of Excavation 12/2007

Sample Location

Depth of Sample Below Ground Surface (bgs) in Feet

MW-FP4A - 3/3/10	
Depth	mg/kg
5.0'	**92**
10.0'	**310**
15.0'	**19**
20.0'	**460**

Hexavalent Chromium Concentration in milligrams per kilogram (mg/kg)
Detections are Shown in Bold

CrVI Concentration Above Commercial Environmental Screening Level - Direct Exposure (6.2 mg/kg)

HEXAVALENT CHROMIUM CONCENTRATIONS IN SOIL

FORMER FRANCIS PLATING
789 7TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.:	DATE:	DRAWN BY:	APP. BY:	FIGURE
01-FP-004	08/02/2016	CM	GM	6

TABLES

Table 1
Groundwater Level Measurements
Former Francis Plating
Oakland, California

Groundwater Zone Screened	Well ID	Sample Date	TOC[1]	Depth to Water (ft btoc)	GW Elevation (ft msl)
ON-SITE					
Shallow	MW-FP1	1/5/2015	25.77	14.95	10.82
		8/25/2015		16.94	8.83
		3/4/2016		16.44	9.33
	MW-FP2	1/6/2015	23.81	13.04	10.77
		8/25/2015		15.41	8.40
		3/4/2016		14.69	9.12
	MW-FP3	1/5/2015	25.66	14.88	10.78
		8/25/2015		16.96	8.70
		3/4/2016		16.40	9.26
	MW-FP4A	1/5/2015	25.64	15.11	10.53
		8/25/2015		17.26	8.38
		3/4/2016		16.49	9.15
	MW-FP5	1/5/2015	25.69	15.04	10.65
		8/25/2015		17.27	8.42
		3/4/2016		16.56	9.13
	MW-FP6	1/5/2015	21.03	10.98	10.05
		8/25/2015		13.12	7.91
		3/4/2016		12.36	8.67
	MW-9	9/1/2015	21.03	13.16	7.87
		3/4/2016		12.38	8.65
Deep	MW-FP4B	1/5/2015	25.44	15.12	10.32
		8/25/2015		17.08	8.36
		3/4/2016		16.43	9.01
	MW-FP7B	1/5/2015	20.51	10.53	9.98
		8/25/2015		12.53	7.98
		3/4/2016		11.88	8.63
OFF-SITE					
Shallow	MW-1	1/6/2015	7.99	5.55	2.44
	MW-4	1/6/2015	10.32	7.23	3.09
	MW-5	1/6/2015	10.28	7.08	3.20

Notes:
TOC = Top of casing (feet above mean sea level)
ft btoc = feet below top of casing
ft msl = feet above mean sea level
[1] = Elevation datum is North American Vertical Datum of 1988 (NAVD88).

Table 2
Vertical Groundwater Potentiometric Head Differences
Former Francis Plating
Oakland, California

Water Bearing Zone	Well Pairs	Vertical Distance Between Center of Screened Intervals (feet)	Groundwater Elevation (feet amsl)	Hydraulic Head Difference (feet)	Vertical Gradient (ft/ft)[a]	Vertical Gradient Direction
			First Quarter 2016 (3/4/2016)			
Shallow Zone	MW-FP4A	32.5	9.15	0.14	0.00	flat
Deep Zone	MW-FP4B		9.01			
Shallow Zone	MW-9	31.50	8.65	0.02	0.00	flat
Deep Zone	MW-FP7B		8.63			

Notes:
ft/ft = feet per foot.
amsl = above mean sea level.
[a] Vertical gradient measurement based on mid-point of well screens.

Table 3
Groundwater Analytical Results - Volatile Organic Compounds
Former Francis Plating
Oakland, California

Groundwater Zone Screened	Sample ID	Sample Date	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)
ON-SITE									
Shallow	MW-FP1	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	MW-FP2	1/6/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	MW-FP3	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	MW-FP4A	1/5/2015	ND<0.5	**52**	**37**	**2.6**	**0.6**	ND<0.5	-
		8/25/2015	ND<0.5	**91**	**91**	**5.4**	**1.1**	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	**93**	**71**	**4.7**	**1.0**	ND<0.5	ND<0.5
	MW-FP5	1/5/2015	ND<0.5	**1.4**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	**3.2**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	**2.2**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	MW-FP6	1/5/2015	ND<0.5	**6.6**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	**9.6**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	**9.9**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	MW-9	1/5/2015	-	-	-	-	-	-	-
		9/1/2015	ND<0.5	**20**	**8.2**	ND<0.5	ND<0.5	ND<0.5	ND<0.5
		3/4/2016	ND<0.5	**3.0**	**1.7**	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Deep	MW-FP4B	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**7**
		3/4/2016	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**1.8**
	MW-FP7B	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
		8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**17**
		3/4/2016	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**15**
OFF-SITE									
Shallow	MW-1	1/6/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
	MW-4	1/6/2015	ND<0.5	**2.2**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
	MW-5	1/6/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-
QA/QC	TB-1	8/25/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	TRIP BLANK	9/1/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
GRAB GROUNDWATER									
Shallow	SB-FP4	5/19/2016	ND<0.5	**19**	**8.3**	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	SB-FP5	5/19/2016	ND<0.5	**41**	**14**	**2.2**	ND<0.5	ND<0.5	ND<0.5
ESLs			***5***	***5***	***6***	***10***	***6***	***0.5***	***80***

Notes:
Detections shown in Bold.
= Greater than ESL
µg/L = Micrograms per liter
PCE = Tetrachloroethylene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
ND<0.50 = Not detected above laboratory's reporting limit
- = Not sampled
ESLs = CRWQCB Environmental Screening Levels - groundwater is a potenitial drinking water resource. (values above shaded)

Table 4
Groundwater Analytical Results - Dissolved Metals and Hexavalent Chromium
Former Francis Plating
Oakland, California

Groundwater Zone Screened	Well ID	Sample Date	Chromium (Hexavalent)	Antimony	Arsenic	Barium	Chromium (Total)	Cobalt	Copper	Mercury	Molybdenum	Nickel	Vanadium	Zinc
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
ON-SITE														
Shallow	MW-FP1	1/5/15	**10**	ND<10	ND<5.0	**44**	**5.2**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**31**	ND<5.0	ND<20
		8/25/15	ND<10	ND<10	ND<5.0	**46**	**21**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**35**	ND<5.0	ND<20
		3/4/16	**20***	ND<10	ND<5.0	**42**	**11**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**12**	ND<5.0	ND<20
	MW-FP2	1/6/15	**10**	ND<10	ND<5.0	**32**	**16**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
		8/25/15	**10**	ND<10	ND<5.0	**29**	**25**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
		3/4/16	**30***	ND<10	ND<5.0	**32**	**19**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
	MW-FP3	1/5/15	**280**	ND<10	ND<5.0	**45**	**270**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**19**	**5.2**	ND<20
		8/25/15	**250**	ND<10	ND<5.0	**56**	**290**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**20**	ND<5.0	ND<20
		3/4/16	**240***	ND<10	ND<5.0	**55**	**300**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**29**	ND<5.0	ND<20
	MW-FP4A	1/5/15	**37,000**	**44**	ND<5.0	**38**	**38,000**	**9.7**	**38**	ND<0.20	**14**	**330**	ND<5.0	**59**
		8/25/15	**8,400**	ND<10	ND<5.0	**83**	**10,000**	**11**	**12**	ND<0.20	**22**	**120**	ND<5.0	**85**
		3/4/16	**200,000***	ND<10	ND<5.0	**99**	**10,000**	**9.2**	**19**	ND<0.20	**34**	**130**	ND<5.0	**4**
	MW-FP5	1/5/15	**11,000**	**16**	ND<5.0	**55**	**14,000**	ND<5.0	ND<5.0	ND<0.20	**6.0**	**12**	ND<5.0	ND<20
		8/25/15	**19,000**	ND<10	ND<5.0	**40**	**24,000**	ND<5.0	ND<5.0	ND<0.20	**6.2**	**24**	ND<5.0	ND<20
		3/4/16	**5,700***	ND<10	ND<5.0	**61**	**16,000**	ND<5.0	ND<5.0	ND<0.20	**6.7**	**18**	ND<5.0	ND<20
	MW-FP6	1/5/15	**5,300**	ND<10	ND<5.0	**44**	**5,400**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**15**	ND<5.0	ND<20
		8/25/15	**19,000**	ND<10	ND<5.0	**31**	**23,000**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**38**	ND<5.0	ND<20
		3/4/16	**240***	ND<10	ND<5.0	**54**	**13,000**	ND<5.0	ND<5.0	ND<0.20	**5.5**	**27**	ND<5.0	ND<20
	MW-9	1/5/15	-	-	-	-	-	-	-	-	-	-	-	-
		9/1/15	**12,000**	ND<10	ND<5.0	**120**	**12,000**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	**98**	ND<5.0	ND<20
		3/4/16	**4,300***	ND<10	ND<5.0	**40**	**930**	ND<5.0	ND<5.0	ND<0.20	**5.5**	**8.4**	ND<5.0	ND<20
Deep	MW-FP4B	1/5/15	**10**	ND<10	ND<5.0	**24**	**11**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**8.9**	ND<20
		8/25/15	ND<10	ND<10	ND<5.0	**25**	**40**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**7.3**	ND<20
		3/4/16	**10***	ND<10	ND<5.0	**29**	**9.2**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**11.0**	ND<20
	MW-FP7B	1/5/15	**20**	ND<10	ND<5.0	**16**	**20**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**12**	ND<20
		8/25/15	**20**	ND<10	ND<5.0	**20**	**26**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**12**	ND<20
		3/4/16	**20***	ND<10	ND<5.0	**27**	**23**	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	**12**	ND<20
OFF-SITE														
Shallow	MW-1	1/6/2015	ND<10	ND<10	**6.4**	**52**	ND<5.0	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
	MW-4	1/6/2015	ND<10	ND<10	**5.2**	**35**	ND<5.0	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
	MW-5	1/6/2015	ND<10	ND<10	ND<5.0	**48**	ND<5.0	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
GRAB GROUNDWATER														
Shallow	SB-FP4	5/19/16	ND<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SB-FP5	5/19/16	ND<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Blank	5/19/16	ND<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ESLs			***0.02***	***6***	***10***	***1,000***	***50***	***3***	***3.1***	***0.025***	***78***	***8.2***	***19***	***81***

Notes:
Detections shown in Bold.
= Greater than ESL
µg/L = Micrograms per liter
ND<10 =Analyte not detected above laboratory reporting limit
- = Not sampled
NA = Not analyzed
ESLs = CRWQCB Environmental Screening Levels - groundwater is a potenitial drinking water resource. (values above shaded)
VALUE* = Indicates hexavalent chromium sample was collected on March 30, 2016.

Table 5
Soil Analytical Results - Volatile Organic Compounds
Former Francis Plating
Oakland, California

Sample ID	Sample Depth	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Chloroform
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-FB1	4	5/19/2016	ND<0.0046	ND<0.0046	ND<0.0046	ND<0.0046	ND<0.0046	ND<0.0093	ND<0.0046
	8		ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0095	ND<0.0048
	11.5		ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0098	ND<0.0049
SB-FB2	4	5/19/2016	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0098	ND<0.0049
	8		ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0099	ND<0.0049
	11.5		ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.0099	ND<0.005
SB-FB3	4	5/19/2016	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0095	ND<0.0047
	8		ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005
	11.5		ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0098	ND<0.0049
ESL (Commercial - Direct Exposure)			***2.7***	***8***	***90***	***730***	***400***	***0.15***	***1.3***

= indicates concentrations over the ESL
ESL = Environmental Screening Level
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
ND<0.50 = Not detected above laboratory's reporting limit
- = Not sampled
ESLs = CRWQCB Environmental Screening Levels - Soil, Commercial - Direct Exposure

Table 6
Soil Analytical Results - Metals and Hexavalent Chromium
Former Francis Plating
Oakland, California

Well ID	Sample Depth	Sample Date	Arsenic	Barium	Beryllium	Cadmium	Chromium (Total)	Chromium (Hexavalent)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
	(mg/kg)		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-FP1	4	5/19/2016	**1.9**	**37**	**0.13**	**0.48**	**260**	**0.44**	**2.3**	**9.1**	**12**	**0.12**	ND<0.25	**57**	**17**	**17**
	8		**3.0**	**49**	**0.3**	ND<0.26	**41**	ND<0.4	**6.2**	**6.8**	**3.1**	ND<0.17	ND<0.26	**120**	**31**	**23**
	11.5		**2.7**	**41**	**0.27**	ND<0.24	**55**	ND<0.4	**6.0**	**7.1**	**3.00**	**0.04**	ND<0.24	**140**	**33**	**25**
SB-FP2	4	5/19/2016	**1.5**	**30**	**0.18**	ND<0.23	**32**	ND<0.4	**4.0**	**5.2**	**3.2**	**0.029**	ND<0.23	**16**	**19**	**18**
	8		**3.1**	**46**	**0.28**	ND<0.23	**37**	ND<0.4	**7.3**	**7.2**	**3.0**	**0.035**	ND<0.23	**33**	**32**	**23**
	11.5		**2.4**	**59**	**0.24**	ND<0.25	**46**	ND<0.4	**6.2**	**8.6**	**2.9**	**0.032**	ND<0.25	**33**	**31**	**23**
SB-FP3	4	5/19/2016	**1.9**	**47**	**0.19**	ND<0.24	**36**	ND<0.4	**3.7**	**5.7**	**4.0**	ND<0.016	ND<0.31	**18**	**22**	**15**
	8		**3.1**	**63**	**0.28**	ND<0.23	**67**	**4.6**	**7.2**	**7.0**	**2.9**	**0.037**	**0.29**	**36**	**31**	**23**
	11.5		**1.5**	**59**	**0.17**	ND<0.26	**57**	**3.6**	**3.7**	**7.0**	**2.6**	**0.035**	ND<0.26	**26**	**21**	**19**
ESL (Commercial - Direct Exposure)			***0.31***	***220,000***	***2,200***	***580***	***--***	***6.2***	***3,500***	***47,000***	***320***	***190***	***5,800***	***11,000***	***5,800***	***350,000***
Background Levels (Diamond et al., 2009)			***5.5***	***130***	***--***	***--***	***58***	***--***	***14***	***32***	***7.0***	***--***	***--***	***68***	***46***	***64***

= indicates concentrations over the ESL
Background arsenic levels were found in *Analysis of Background Distribution of Metals in the Soil at Lawerence Berkeley National Laboratory* , Diamond et al., April 2009.
ND<0.23 = Not detected above laboratory's reporting limit
- = Not sampled
ESLs = CRWQCB Environmental Screening Levels - Soil, Commerial, Direct Exposure

APPENDIX A

REGULATORY CORRESPONDENCE

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

January 13, 2016

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

Subject: Conditional Work Plan Approval for SLIC Case RO0002586 and GeoTracker Global ID SL0600130797, Francis Plating Frog Pond, 789 7th Street, Oakland, CA 94607

Dear Mr. McCoy:

Alameda County Environmental Health (ACEH) staff has reviewed the Site Cleanup Program (SCP) case file for the above referenced site including the recently submitted document entitled, "*Revised Plume Delineation and Data Collection for Evaluation of Remedial Alternatives Work Plan, Former Francis Plating – Frog Pond Site, 789 Seventh Street, Oakland, California,*" dated February 23, 2015 (Work Plan). The Work Plan proposes three on-site borings to collect data to help evaluate source area remedial options and two off-site borings for plume delineation.

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

TECHNICAL COMMENTS

1. **Depth of Off-site Borings and Grab Groundwater Sampling.** The Scope of Work section on page 4 of the Work Plan indicates that off-site borings will be advanced to depth of approximately 20 and 50 feet bgs for the collection of grab groundwater samples. Table 1 – Proposed Sampling Plan indicates that the proposed sample depths for the off-site borings will be 30 feet bgs. Since the depth to groundwater at the site ranges from approximately 11 to 17 feet bgs, the collection of grab groundwater samples from a depth of 30 feet bgs is not acceptable to define the shallow groundwater plume. We request that the grab groundwater samples be collected less than 10 feet below first-encountered groundwater. In no case should the grab groundwater samples be collected below a depth of 25 feet bgs. Please present the sampling results in the Plume Delineation and Data Collection for Evaluation of Remedial Alternatives Report requested below.

2. **Clarification of Laboratory Analysis.** We generally concur with the proposed laboratory analyses presented in Table 1. However, the soil samples from the on-site borings will be analyzed for metals and not dissolved metals. We request that the two grab groundwater samples be analyzed for both total and dissolved hexavalent chromium.

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:

- **March 25, 2016** – Semi-annual Groundwater Monitoring Report
  File to be named: GWM_R_yyyy-mm-dd RO2586

- **May 8, 2016** – Plume Delineation and Data Collection for Evaluation of Remedial Alternatives Report
  File to be named: SWI_R_yyyy-mm-dd RO2586

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

Sincerely,

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

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: 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: MPrado@oaklandnet.com*)

Adam Brown, The Source Group, Inc., 944 McCourtney Road, Suite H, Grass Valley, CA 95949 (*Sent via E-mail to: abrown@thesourcegroup.net*)

Markus Niebanck, Amicus, 580 Second Street, Suite 260, Oakland, CA 94607 (*Sent via E-mail to: markus@amicusenv.com*)

Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)
GeoTracker, eFile

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). 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, 6835, 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, later 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 Oversight Programs (LOP and SLIC)	**REVISION DATE:** May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) 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 do not 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.**
- **Do not 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 will not 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 deh.loptoxic@acgov.org
   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 ftp://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 deh.loptoxic@acgov.org 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

FIELD FORMS

Former Francis Plating

Name Jordan Lewis
Date 3/4/16
Weather Overcast, misting

Water Level Survey

Well ID	Casing Diameter	Top of Casing (ft above msl)	TD (ft bgs) (from well log)	Top of Screen (ft bgs)	TD Actual Guaged (bgs)	Time (24hr)	Depth to Free Product	Depth to Water	Decon Equipment	Comments
MW-FP2						0805	—	14.69	DI water	
MW-FP7B						0850	—	11.88	DI	
MW-FP6						0900	—	12.36	DI	
MW-9						0910	—	12.38	DI	
MW-FP5						0940	—	16.56	DI	
MW-FP4A						0945	—	16.49	DI water	
MW-FP4B						0950	—	16.43	DI water	
MW-FP3						1000	—	16.40	DI	
MW-FP1						1020	—	16.44	DI	~~Not Accessible~~

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating
PROJECT NO.: 06-FP
WELL ID: MW-FP1

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 16.44
DEPTH TO BOTTOM (ft):
WELL DIAM. (in):
3 VOLUMES (gals):
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16
SAMPLE TIME: 1420
SAMPLE DATE: 3/4/16
PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :
TUBING SIZE: Other (specify):
METER TYPE: Horriba U22 Hanna Other (specify)
FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1400	initial							16.55	
1403	720							16.58	
1406	1440								
1409	2160								
1412	2880								
1415	3,600								

Total Volume Purged: 3.75 L
Purge Rate: 240 mL/min
80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

dedicated tubing

WELL SAMPLING:

DTW at Time of Sampling: 16.65

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP1

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):
New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify):

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating
PROJECT NO.: 06-FP
WELL ID: MW-FP2

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 14.67
DEPTH TO BOTTOM (ft):
WELL DIAM. (in):
3 VOLUMES (gals):
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :
TUBING SIZE: Other (specify):
METER TYPE: Horriba U22 Hanna Other (specify)
FLOW THROUGH CELL?: Yes No

PURGE DATE: 3/4/16
SAMPLE TIME: 1750
SAMPLE DATE: 3/4/16
PERSONNEL: J. Lewis

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1729	initial	12.22	0.304	345	18.79	-98.0	2.58	14.68	
1732	720	12.09	0.301	340	19.08	-118.8	2.84	14.70	
1735	1440	12.28	0.301	339	19.22	-136.2	2.72	14.81	
1738	2160	12.65	0.302	339	19.27	-125.2	2.62	14.81	
1741	2880	12.66	0.302	339	[illegible]	[illegible]	[illegible]	[illegible]	
1744	3600	12.69	0.302	339	19.33	-129.4	2.61	14.83	

Total Volume Purged: 3.75L
Purge Rate: 240 mL/min
80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra
dedicated tubing

WELL SAMPLING:

DTW at Time of Sampling: 14.83

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP2

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID:
TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):
New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify):

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating

PROJECT NO.: 06-FP

WELL ID: MW-FP3

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 16.40

DEPTH TO BOTTOM (ft):

WELL DIAM. (in):

3 VOLUMES (gals):
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16

SAMPLE TIME: 1345

SAMPLE DATE: 3/4/16

PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :

TUBING SIZE: Other (specify):

METER TYPE: Horriba U22 Hanna Other (specify)

FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1327	initial	11.60	[illegible]	[illegible]	[illegible]	-23.9	[illegible]	[illegible]	
1330	720	11.53	0.809	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
1333	1440	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.72	
1336	2160	11.61	0.807	888	20.22	-18.4	4.07	16.73	

Total Volume Purged: 2.25 L **Purge Rate:** 240 mL/min **80% Rechage =**

Purging Method 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

dedicated tubing

WELL SAMPLING:

DTW at Time of Sampling: 16.73

Sampling Method 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP3

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: **TYPE:** Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):
New lock ☐ New Bolts ☐racked or Damaged PVC ☐ Other (specify):

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Former Francis Plating

PROJECT NO.: 06-FP

WELL ID: MW-~~FP3~~ FP4A

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 16.49

DEPTH TO BOTTOM (ft): _____

WELL DIAM. (in): _____

3 VOLUMES (gals): _____

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16

SAMPLE TIME: 1140

SAMPLE DATE: 3/4/16

PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) : _____

TUBING SIZE: _____ Other (specify): _____

METER TYPE: Horriba U22 Hanna Other (specify) _____

FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. 3% (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1105	initial	6.28	2003	1.780	19.18	-27.7	0.74	16.56	
1108	720	6.27	2006	1.752	18.38	-13.6	0.36	16.65	
1111	1440	6.24	2006	1.779	19.06	-12.4	0.28	16.67	
1114	2160	6.28	2008	1.789	19.29	-11.3	0.24	16.67	
1117	2880	6.29	2010	1.792	19.32	-10.6	0.22	16.68	
1120	3600	6.29	2010	1.795	19.30	-10.1	0.23	16.68	

Total Volume Purged: 3.75 L

Purge Rate: 240 mL/min

80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

DTW at Time of Sampling: 16.68

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP4A

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: _____ TYPE: Rinsate Blank MS/MSD Duplicate Ambient Blank

COMMENTS:

Well Repair (check if needed):

New lock ☐ New Bolts ☐ Cracked or Damaged PVC ☐ Other (specify): _____

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating
PROJECT NO.: 06-FP
WELL ID: MW-FP4B

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
✓	DI water rinse	

INITIAL DTW (ft): 16.43
DEPTH TO BOTTOM (ft):
WELL DIAM. (in):
3 VOLUMES (gals):
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16
SAMPLE TIME: 1235
SAMPLE DATE: 3/4/16
PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :
TUBING SIZE: Other (specify):
METER TYPE: Horriba U22 Hanna Other (specify)
FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1218	initial	11.63	644	0.569	18.98	-115.6	1.18	16.83	
1221	720	11.63	631	0.533	18.60	-148.3	0.68	16.86	
1224	1440	11.93	616	0.543	18.81	-131.5	0.57	16.95	
1227	2160	7.09	6.15	0.543	18.87	-119.8	0.51	17.08	
1230	2880	11.81	615	0.542	18.86	-[illegible]	0.57	17.08	

Total Volume Purged: 3L
Purge Rate: 240 mL/min
80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

dedicated tubing

WELL SAMPLING:

DTW at Time of Sampling: 17.08

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP4B

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID:
TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):
New lock ☐ New Bolts ☐racked or Damaged PVC ☐ Other (specify):

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating

PROJECT NO.: OG-FP

WELL ID: MW-FP5

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 16.56

DEPTH TO BOTTOM (ft):

WELL DIAM. (in):

3 VOLUMES (gals):

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16

SAMPLE TIME: 1445

SAMPLE DATE: 3/4/16

PERSONNEL: J Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :

TUBING SIZE: Other (specify):

METER TYPE: Horriba U22 Hanna Other (specify)

FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1432	initial	11.85	0.596	[illegible]	17.20	60.[illegible]	[illegible]	16.72	
1435	720	[illegible]	0.589	613	18.56	[illegible]	[illegible]	[illegible]	
1438	1440	[illegible]	0.530	[illegible]	[illegible]	[illegible]	[illegible]	16.85	
[illegible]	2160	[illegible]	[illegible]	606	[illegible]	[illegible]	[illegible]	16.88	
1444	2880	12.08	0.530	607	18.83	-22.3	4.50	16.90	

Total Volume Purged: 3L

Purge Rate: 240mL/min

80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | Peristaltic Pump | Bailer | Waterra — dedicated tubing

WELL SAMPLING:

DTW at Time of Sampling: 16.90

Sampling Method: 2" Submersible Pump | 12 Volt Pump | Peristaltic Pump | Bailer | Waterra

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP5

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID:

TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):

New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify):

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating

PROJECT NO.: 06-FP

WELL ID: MW-FP6

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 12.36

DEPTH TO BOTTOM (ft):

WELL DIAM. (in):

3 VOLUMES (gals):
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16

SAMPLE TIME: 1625

SAMPLE DATE: 3/4/16

PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) :

TUBING SIZE: Other (specify):

METER TYPE: Horriba U22 Hanna Other (specify)

FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1600	initial	12.90	0.991	1107	19.51	-138.8	2.5	12.70	
1603	720	12.89	0.980	1100	19.31	-153.2	2.22	12.74	
1606	1440	12.98	0.982	1093	19.67	-168.7	1.92	12.78	
1609	2160	12.91	0.981	1090	19.73	-178.6	1.87	12.79	
1612	2880	12.91	0.977	1087	19.69	-183.2	1.83	12.80	

Total Volume Purged: 4L

Purge Rate: 240 mL/min

80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | Peristaltic Pump | Bailer | Waterra

WELL SAMPLING:

DTW at Time of Sampling: 12.80

Sampling Method: 2" Submersible Pump | 12 Volt Pump | Peristaltic Pump | Bailer | Waterra | dedicated tubing

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP6

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):

New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify):

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Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Platin

PROJECT NO.: 06-FP

WELL ID: MW-FP7B

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 12.24

DEPTH TO BOTTOM (ft): _____

WELL DIAM. (in): _____

3 VOLUMES (gals): _____

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16

SAMPLE TIME: 1700

SAMPLE DATE: 3/4/16

PERSONNEL: J. Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) : _____

TUBING SIZE: _____ Other (specify): _____

METER TYPE: Horriba U22 Hanna Other (specify) _____

FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1640	initial	11.83	0.404	463	15.24	50.1	2.31	12.24	
1643	720	12.19	0.366	415	15.73	-60.1	1.16	12.19	
1646	1440	11.62	0.372	423	15.75	-71.2	0.97	12.20	
1649	2160	11.55	0.376	425	15.79	-80.1	0.92	12.22	
1652	2880	11.64	0.378	426	15.82	-79.5	0.90	12.20	

Total Volume Purged: 3L

Purge Rate: 240 mL/min

80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

DTW at Time of Sampling: 12.25

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra — dedicated tubing

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP7B

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: _____ TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):

New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify): _____

THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

PROJECT NAME: Francis Plating
PROJECT NO.: 06-FP
WELL ID: ~~MW-EPA~~ MW-9

Equipment Decon		
Sounder		Footvalve
	Soap water wash	
	Tap water rinse	
X	DI water rinse	

INITIAL DTW (ft): 12.44
DEPTH TO BOTTOM (ft): _____
WELL DIAM. (in): _____
3 VOLUMES (gals): _____
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65 (4"); h*3*1.5 (6"); h*3*0.83 (4.5')

PURGE DATE: 3/4/16
SAMPLE TIME: 1540
SAMPLE DATE: 3/4/16
PERSONNEL: J Lewis

PUMP/TUBING INTAKE: near top near middle near bottom Custom(ft) : _____
TUBING SIZE: _____ Other (specify): _____
METER TYPE: Horriba U22 Hanna Other (specify) _____
FLOW THROUGH CELL?: Yes No

PURGE LOG

Time (24 hr)	Volume (mL/ Gal.)	pH	EC (µS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, Odor, Sheen, ...)
1510	initial	13.38	0.610	612	19.32	-78.6	1.16	12.48	
1513	720	13.07	0.473	527	19.55	-192.5	0.58	12.54	
1516	1440	12.40	0.482	540	19.37	-199.8	0.351	12.58	
1519	2160	12.56	0.300	558	19.51	-199.2	0.35	12.60	
1522	2880	14.50	0.511	560	19.53	-199.8	0.34	12.61	

Total Volume Purged: 3.0 L
Purge Rate: 240 mL/min
80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

DTW at Time of Sampling: 12.61

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

dedicated tubing

ANALYTES:	VOC's	dissolved metals	Hexavalent Chromium		
EPA Method:	8260B	6010B/ 7470A	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500ml	1 500ml		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-9

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: _____ TYPE: Rinsate Blank MS/MSD Duplicate nbient Blank

COMMENTS:

Well Repair (check if needed):
New lock ☐ New Bolts ☐ racked or Damaged PVC ☐ Other (specify): _____

Gauging Sheet

Name H Newton
Date 3-30-16
Weather rainy

Water Level Survey Francis Plating - Frog Pond Site

Well ID	Casing Diameter	Top of Casing (ft above msl)	TD (ft bgs) (from well log)	Top of Screen (ft bgs)	TD Actual Guaged (bgs)	Time (24hr)	Depth to Water Trial 1	Depth to Water Trial 2	Decon Equipment	Comments
MW-FP1	2	15.30	—	—	—	0903	15.30	15.30	SP Liquinox	
MW-FP2	2	13.70	—	—	—	0835	13.70	13.70	SP Liquinox	
MW-FP3	2	15.31	—	—	—	0855	15.31	15.31		
MW-FP4A	2	15.43	—	—	—	0845	15.43	15.43		
MW-FP4B	2	15.62	—	—	—	0843	15.62	15.62		
MW-FP5	2	15.50	—	—	—	0842	15.50	15.50		
MW-FP6	2	11.20	—	—	—	0908	11.20	11.20		
MW-FP7B	2	10.90	—	—	—	0912	10.90	10.90		
MW-9	2	11.33	—	—	—	0915	11.33	11.33		

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Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP1

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 15.30

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1025

SAMPLE DATE: 3-30-16

PERSONNEL: H. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume (mL/m Gal.)	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1005	150mL/m	7.39	.364		17.36	56.5	3.64	15.38	
1010	150mL/m	7.01	.372		18.64	50.0	0.55	15.41	
1015	150mL/m	6.89	.375		18.52	47.2	0.46	15.43	
1020	150mL/m	6.87	.376		18.45	46.4	0.44	15.46	
1025	150mL/m	6.85	.375		18.38	47.0	0.43	15.49	

:Total Volume Purged 3000mL Purge Rate: 150mL/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 15.49

Sampling Method: 2" Submersible Pump | 12 Volt Pump (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	CrVI		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP1

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID — TYPE: Rinsate Blank MS/MSD Duplicate Ambient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify):

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP2

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 13.70

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 0955

SAMPLE DATE: 3-30-16

PERSONNEL: H. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume mL/m ~~Gal~~	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
0920	150mL/m	8.34	.232		16.03	-19.1	6.01	13.70	
0925	150mL/m	8.40	.228		17.75	-38.5	3.36	13.70	
0930	200mL/m	7.87	.229		18.26	-14.5	3.30	13.74	
0935	200mL/m	7.77	.228		18.24	-6.9	3.22	13.74	
0940	200mL/m	7.58	.229		18.37	2.9	3.23	13.74	
0945	200mL/m	7.55	.228		18.27	4.6	3.22	13.74	
0950	200mL/m	7.51	.228		18.25	4.9	3.20	13.74	
0955	200mL/m	7.50	.228		18.24	5.1	3.18	13.74	

:Total Volume Purged 5,750 mL Purge Rate: 200 mL/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 13.74

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP2

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate mbient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify): _____

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP3

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 15.31

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1055

SAMPLE DATE: 3-30-16

PERSONNEL: N. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume ~~Gal.~~ ml/m	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1035	150 ml/m	7.72	.700		19.83	-13.6	3.39	15.48	
1040	150 ml/m	7.00	.710		19.64	28.4	2.64	15.54	
1045	150 ml/m	6.94	.711		19.67	35.7	2.56	15.59	
1050	150 ml/m	6.92	.712		19.88	38.7	2.50	15.63	
1055	150 ml/m	6.91	.714		19.91	39.3	2.48	15.66	

:Total Volume Purged 3,000 ml Purge Rate: 150 ml/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 15.66

Sampling Method: 2" Submersible Pump | 12 Volt Pump (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP3

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate mbient Blank

COMMENTS:

Well Repair (check if needed):			
New lock	New Bolts	Cracked or Damaged PVC	Other (specify):

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond
:.PROJECT NO 06-FP-002
:WELL ID ~~MW-FP4A~~ FP4A

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 15.42
:DEPTH TO BOTTOM (ft) —
:WELL DIAM. (in) 2"
:VOLUMES (gals) 3 low flow
h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16
SAMPLE TIME: 1240
SAMPLE DATE: 3-30-16
PERSONNEL: H. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :
TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):
:METER TYPE YSI
:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume ml/m ~~Gal.~~	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, (
1220	150ml/m	7.20	1.468		19.56	125.3	2.97	15.53	Yellow ~~[illegible]~~
1225	150ml/m	6.54	1.438		19.45	170.3	0.79	15.53	" "
1230	150ml/m	6.40	1.428		19.50	176.9	0.72	15.53	" "
1235	150ml/m	6.38	1.432		19.58	178.2	0.76	15.53	" "
1240	150ml/m	6.37	1.433		19.66	178.3	0.75	15.53	" "
					~~19.64~~				

:Total Volume Purged 3000 mL Purge Rate: 150ml/m 80% Rechage =

Purging Method: 2" Submersible Pump 12 Volt Pump (Peristaltic Pump) Bailer Waterra

WELL SAMPLING:

:DTW at Time of Sampling 15.53

Sampling Method: 2" Submersible Pump 12 Volt Pump (Peristaltic Pump) Bailer Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP4A

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / (NO)

:IF SO, SAMPLE ID ____ TYPE: Rinsate Blank MS/MSD Duplicate Ambient Blank

COMMENTS:

Well Repair (check if needed):
New lock New Bolts Cracked or Damaged PVC Other (specify):

THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP4B

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 15.62

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1203

SAMPLE DATE: 3-30-16

PERSONNEL: A. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume (~~Gal~~ ml/m)	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1138	150 ml/m	8.15	.394		17.94	-8.8	4.08	15.68	
1143	150 ml/m	7.90	.420		18.60	-6.4	0.38	15.77	
1148	150 ml/m	7.67	.450		18.58	14.7	0.21	15.85	
1153	150 ml/m	7.61	.450		18.77	10.2	0.21	15.91	
1158	150 ml/m	7.61	.449		18.66	10.6	0.21	16.01	
1203	150 ml/m	7.61	.450		18.68	10.9	0.21	16.05	
~~FP~~									

:Total Volume Purged 3,750 ml Purge Rate: 150 ml/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 16.05

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP4B

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate Ambient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify): _____

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP5

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 15.50

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1120

SAMPLE DATE: 3-30-16

PERSONNEL: D. Newman

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume ~~Gal~~ mL/m	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color, (
1105	200 mL/m	7.19	.370		17.83	42.1	6.97	15.54	
1110	150 mL/m	7.34	.367		18.01	52.9	5.50	15.69	
1115	150 mL/m	7.41	.363		17.93	52.1	5.57	15.69	
1120	150 mL/m	7.42	.365		17.97	52.0	5.59	15.69	

:Total Volume Purged 2,500 mL Purge Rate: 150 mL/m 80% Rechage =

Purging Method: 2" Submersible Pump, 12 Volt Pump, (Peristaltic Pump), Bailer, Waterra

WELL SAMPLING:

:DTW at Time of Sampling 15.69

Sampling Method: 2" Submersible Pump, 12 Volt Pump, (Peristaltic Pump), Bailer, Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO3	none		

SAMPLE ID: MW-FP5

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID ____ TYPE: Rinsate Blank MS/MSD Duplicate ,mbient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify):

THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP6

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 11.20

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1410

SAMPLE DATE: 3-30-16

PERSONNEL: N. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume ~~Gal.~~ mL/m	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1350	150 mL/m	6.92	1.032		26.87	137.3	4.45	11.34	
1355	150 mL/m	7.02	.894		22.73	137.3	3.32	11.34	
1400	150 mL/m	7.00	.854		22.70	132.3	3.55	11.34	
1405	150 mL/m	6.99	.857		22.66	130.7	3.53	11.34	
1410	150 mL/m	7.00	.858		22.64	129.8	3.51	11.34	

:Total Volume Purged 3000 mL

Purge Rate: 150 mL/m

80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 11.34

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP6

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate mbient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify): _____

THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-FP 7B

Equipment Decon		
Sounder		Footvalve
✓	Soap water wash	
✓	Tap water rinse	
✓	DI water rinse	

:INITIAL DTW (ft) 10.90

:DEPTH TO BOTTOM (ft) —

:WELL DIAM. (in) 2"

:VOLUMES (gals) 3 No flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3-30-16

SAMPLE TIME: 1315

SAMPLE DATE: 3-30-16

PERSONNEL: H. Newton

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume (mL/min Gal.)	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1255	150mL/m	7.41	0.351		20.56	85.7	2.50	11.03	
1300	150mL/m	7.33	.360		20.66	84.2	2.58	11.03	
1305	150mL/m	7.30	.361		20.57	80.3	2.03	11.03	
1310	150mL/m	7.31	.362		20.59	79.7	2.01	11.03	
1315	150mL/m	7.30	.361		20.51	80.1	2.00	11.03	

:Total Volume Purged 3000mL Purge Rate: 150mL/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 11.03

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	(CrVI)		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-FP 7B

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate mbient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify): _____

SGI environmental THE SOURCE GROUP, INC.

Groundwater Monitoring Well
Field Sampling Form

:PROJECT NAME Francis Plating - Frog Pond

:.PROJECT NO 06-FP-002

:WELL ID MW-9

Equipment Decon		
Sounder		Footvalve
X	Soap water wash	
X	Tap water rinse	
X	DI water rinse	

:INITIAL DTW (ft) 11.33

:DEPTH TO BOTTOM (ft) ——

:WELL DIAM. (in) 4"

:VOLUMES (gals) 3 low flow

h*3*0.04 (1"); h*3*0.064 (1.25"); h*3*0.16 (2"); h*3*0.26 (2.5"); h*3*0.38 (3"); h*3*0.65

PURGE DATE: 3.30-16

SAMPLE TIME: 1340

SAMPLE DATE: 3.30-16

PERSONNEL: W. Nelson

:PUMP/TUBING INTAKE near top near middle (near bottom) Custom(ft) :

TUBING SIZE: (1/4" X 3/8") 3/8" X 1/2" Other (specify):

:METER TYPE YSI

:?FLOW THROUGH CELL (Yes) No

PURGE LOG

Time (24 hr)	Volume ~~Gal.~~	pH	EC (mS/cm)	Turbidity (ntu)	Temp. (°C)	ORP (mV)	D.O. (mg/L)	DTW (ft)	Other Observations (Color,
1320	150mL/m	7.45	.311		22.02	44.9	1.61	11.38	
1325	150mL/m	7.13	.307		21.73	56.1	1.14	11.43	
1330	150mL/m	7.02	.306		21.90	60.0	1.21	11.45	
1335	150mL/m	7.01	.307		22.00	61.4	1.19	11.47	
1340	150mL/m	7.01	.307		22.17	61.7	1.17	11.49	

:Total Volume Purged 3000mL Purge Rate: 150mL/m 80% Rechage =

Purging Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

WELL SAMPLING:

:DTW at Time of Sampling 11.49

Sampling Method: 2" Submersible Pump | 12 Volt Pump | (Peristaltic Pump) | Bailer | Waterra

ANALYTES:	VOCs	Metals	CrVI		
EPA Method:	8260	6010B	7196A		
Field Filter?	no	yes	no		
Bottles:	3 voas	1 500 poly	1 250 ml poly		
Preservative:	HCl	HNO_3	none		

SAMPLE ID: MW-9

QA/QC SAMPLING:

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES (NO)

:IF SO, SAMPLE ID _____ TYPE: Rinsate Blank MS/MSD Duplicate Ambient Blank

COMMENTS:

Well Repair (check if needed):

New lock New Bolts Cracked or Damaged PVC Other (specify): _____

FIELD REPORT **The Source Group, Inc.**

Project Name: Francis Plating	**Job No.** 06-FP
Location: Oakland (769 7th St.)	**Date:** 5/19/16
Client: Brush St Group	**Contractor:** Cascade Drilling
Weather Notations: (Sun) Cloudy Rain Snow Temperature 60 °F	**Drum Log:** 3 Total 1 Soil, 1 purge water, 1 unknown sludge

Time	Comments
0740	J. Lewis arrives at the off-site locations.
0811	Drillers arrive at off-site locations
0825	Conduct morning Health and Safety meeting.
0840	Begin setting up on off-site location SB-FP5
1031	Stop at 20' and pull up 4' to see if water comes in at SB-FP5.
1045	Collect grab groundwater sample at SB-FP5
1105	Move to SB-FP4.
1115	Begin on SB-FP4.
1210	Reach a clayey sand layer at 18' and wait for water while
~~1230~~	we break for lunch
1236	Resume pushing after lunch, no water in hole @ 18'.
1255	Collect grab groundwater sample at SB-FP4, pack up
	to move on-Site.
1325	Move on Site and setup on SB-FP3
1340	Begin on SB-FP3
1400	Begin on SB-FP2
1430	Begin on SB-FP1
1445	Drillers are off-Site
1515	J. Lewis is off-site and heads for Curtis and Tompkins Lab.

Equipment used:		
Mileage:		
Staff Hours:	**Signature:**	**Office No.**

APPENDIX C

LABORATORY ANALYTICAL DATA


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 274913
ANALYTICAL REPORT

The Source Group, Inc.	Project : STANDARD
3478 Buskirk Ave	Location : Former Francis Plating
Pleasant Hill, CA 94523	Level : II

Sample ID	Lab ID
MW-FP4A	274913-001
MW-FP4B	274913-002
MW-FP7B	274913-003
MW-FP2	274913-004
MW-9	274913-005
MW-FP6	274913-006
MW-FP5	274913-007
MW-FP1	274913-008
MW-FP3	274913-009
TB	274913-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Will Rice Date: 04/04/2016

Will Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**274913**
Client:	**The Source Group, Inc.**
Location:	**Former Francis Plating**
Request Date:	**03/08/16**
Samples Received:	**03/08/16**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/08/16. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Low recoveries were observed for chromium and lead in the MS/MSD for batch 232935; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. No other analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 274913

Project No: Former Francis Plating
Project Name:
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Jordan Lewis
Report To: Adam Brown
Company: The Source Group
Telephone: 530.272.4200
Email: Adam.Brown@qpcxcos.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST		
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	EPA 8260B	EPA 7196A	EPA 6010B/7470A
1	MW-FP4A	3/4/16	1140	X				5	X		X		X	X	X	X
2	MW-FP4B		1235	X				5	X		X		X	X	X	X
3	MW-FP7B		1700	X				5	X		X		X	X	X	X
4	MW-FP2		1750	X				5	3		1		1	X	X	X
5	MW-9		1540	X				5	3		1		1	X	X	X
6	MW-FP6		1625	X				5	3		1		1	X	X	X
7	MW-FP5		1445	X				5	3		1		1	X	X	X
8	MW-FP1		1420	X				5	3		1		1	X	X	X
9	MW-FP3	3/4/16	1345	X				5	3		1		1	X	X	X

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
John Lewis DATE: 3/5 TIME: 0100
DATE: TIME:
DATE: TIME:

RECEIVED BY:
Fedex DATE: 3/5 TIME: 100
DATE: 3/8 TIME: 1500
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 274913 Date Received 3/8/16 Number of coolers 1
Client The Source Group Project Former Francis Plating

Date Opened 3/8 By (print) CN (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) Fed Ex YES ~~NO~~ CN
Shipping info 7825 2798 7657

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.1

☒ Temperature blank(s) included? ☒ Thermometer# 4 ☐ IR Gun# _____

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? (pH strip lot# HC412308) YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS
10 Received 3 TB samples not listed on the COC
20 1/3 VOAs received w/ bubble >6mm for sample 2 and 9
2/3 " " " " sample 5
Samples Received out of hold

Rev 12, 12/01/15

Curtis & Tompkins Sample Preservation for 274913

Sample	pH: <2	>9	>12	Other
-001a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-002a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-003a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-004a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-005a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-006a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[x]	[ ]	[ ]	_____
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-008a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
-009a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[x]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____

Analyst: GN

Date: 3/8/16

Curtis & Tompkins, Ltd.

Detections Summary for 274913

Results for any subcontracted analyses are not included in this summary.

Client : The Source Group, Inc.
Project : STANDARD
Location : Former Francis Plating

Client Sample ID : MW-FP4A Laboratory Sample ID : 274913-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	1.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	4.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	71		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	93		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	99		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	10,000		500	ug/L	TOTAL	100.0	EPA 6010B	EPA 3010A
Cobalt	9.2		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Copper	19		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Molybdenum	34		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	130		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Selenium	27		10	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Zinc	89		20	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	1.1	b	0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-FP4B Laboratory Sample ID : 274913-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Chloroform	1.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	29		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	9.2		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Selenium	11		10	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Vanadium	11		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.01	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP7B Laboratory Sample ID : 274913-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Chloroform	15		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	27		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	23		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Vanadium	12		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.02	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : MW-FP2 Laboratory Sample ID : 274913-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	32		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	19		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.02	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-9 Laboratory Sample ID : 274913-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	1.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	3.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	40		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	930		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Molybdenum	5.5		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	8.4		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.32	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP6 Laboratory Sample ID : 274913-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Trichloroethene	9.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	54		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	13,000		500	ug/L	TOTAL	100.0	EPA 6010B	EPA 3010A
Molybdenum	5.5		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	27		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Selenium	17		10	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	1.4	b	0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-FP5 Laboratory Sample ID : 274913-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Trichloroethene	2.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	61		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	16,000		500	ug/L	TOTAL	100.0	EPA 6010B	EPA 3010A
Molybdenum	6.7		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	18		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	1.8	b	0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-FP1 Laboratory Sample ID : 274913-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	42		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	11		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	12		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.02	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : MW-FP3 Laboratory Sample ID : 274913-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	55		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Chromium	300		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Nickel	29		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Selenium	14		10	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Hexavalent Chromium	0.29	b	0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

b = See narrative

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP4A	Batch#:	232880
Lab ID:	274913-001	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	1.0	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	4.7	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	71	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	93	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP4A	Batch#:	232880
Lab ID:	274913-001	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	127	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP4B	Batch#:	232880
Lab ID:	274913-002	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	1.8	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP4B	Batch#:	232880
Lab ID:	274913-002	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	131	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP7B	Batch#:	232880
Lab ID:	274913-003	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	15	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP7B	Batch#:	232880
Lab ID:	274913-003	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	133	75-139
Toluene-d8	106	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP2	Diln Fac:	1.000
Lab ID:	274913-004	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	ND	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	ND	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP2	Diln Fac:	1.000
Lab ID:	274913-004	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	99	80-128	232904	03/10/16
1,2-Dichloroethane-d4	116	75-139	232904	03/10/16
Toluene-d8	105	80-120	232904	03/10/16
Bromofluorobenzene	101	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-9	Diln Fac:	1.000
Lab ID:	274913-005	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	1.7	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	3.0	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-9	Diln Fac:	1.000
Lab ID:	274913-005	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	101	80-128	232904	03/10/16
1,2-Dichloroethane-d4	117	75-139	232904	03/10/16
Toluene-d8	100	80-120	232904	03/10/16
Bromofluorobenzene	100	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP6	Diln Fac:	1.000
Lab ID:	274913-006	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	ND	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	9.9	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP6	Diln Fac:	1.000
Lab ID:	274913-006	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	100	80-128	232904	03/10/16
1,2-Dichloroethane-d4	116	75-139	232904	03/10/16
Toluene-d8	101	80-120	232904	03/10/16
Bromofluorobenzene	101	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP5	Diln Fac:	1.000
Lab ID:	274913-007	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	ND	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	2.2	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP5	Diln Fac:	1.000
Lab ID:	274913-007	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	97	80-128	232904	03/10/16
1,2-Dichloroethane-d4	113	75-139	232904	03/10/16
Toluene-d8	102	80-120	232904	03/10/16
Bromofluorobenzene	98	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP1	Diln Fac:	1.000
Lab ID:	274913-008	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	ND	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	ND	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP1	Diln Fac:	1.000
Lab ID:	274913-008	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	99	80-128	232904	03/10/16
1,2-Dichloroethane-d4	121	75-139	232904	03/10/16
Toluene-d8	106	80-120	232904	03/10/16
Bromofluorobenzene	104	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP3	Diln Fac:	1.000
Lab ID:	274913-009	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Freon 12	ND	1.0	232904	03/10/16
Chloromethane	ND	1.0	232904	03/10/16
Vinyl Chloride	ND	0.5	232904	03/10/16
Bromomethane	ND	1.0	232904	03/10/16
Chloroethane	ND	1.0	232904	03/10/16
Trichlorofluoromethane	ND	1.0	232904	03/10/16
Acetone	ND	10	232904	03/10/16
Freon 113	ND	5.0	232904	03/10/16
1,1-Dichloroethene	ND	0.5	232904	03/10/16
Methylene Chloride	ND	10	232904	03/10/16
Carbon Disulfide	ND	0.5	232904	03/10/16
MTBE	ND	0.5	232904	03/10/16
trans-1,2-Dichloroethene	ND	0.5	232904	03/10/16
Vinyl Acetate	ND	10	232904	03/10/16
1,1-Dichloroethane	ND	0.5	232904	03/10/16
2-Butanone	ND	10	232904	03/10/16
cis-1,2-Dichloroethene	ND	0.5	232904	03/10/16
2,2-Dichloropropane	ND	0.5	232904	03/10/16
Chloroform	ND	0.5	232904	03/10/16
Bromochloromethane	ND	0.5	232904	03/10/16
1,1,1-Trichloroethane	ND	0.5	232904	03/10/16
1,1-Dichloropropene	ND	0.5	232904	03/10/16
Carbon Tetrachloride	ND	0.5	232904	03/10/16
1,2-Dichloroethane	ND	0.5	232904	03/10/16
Benzene	ND	0.5	232904	03/10/16
Trichloroethene	ND	0.5	232904	03/10/16
1,2-Dichloropropane	ND	0.5	232904	03/10/16
Bromodichloromethane	ND	0.5	232904	03/10/16
Dibromomethane	ND	0.5	232904	03/10/16
4-Methyl-2-Pentanone	ND	10	232904	03/10/16
cis-1,3-Dichloropropene	ND	0.5	232904	03/10/16
Toluene	ND	0.5	232904	03/10/16
trans-1,3-Dichloropropene	ND	0.5	232904	03/10/16
1,1,2-Trichloroethane	ND	0.5	232904	03/10/16
2-Hexanone	ND	10	232904	03/10/16
1,3-Dichloropropane	ND	0.5	232904	03/10/16
Tetrachloroethene	ND	0.5	232904	03/10/16
Dibromochloromethane	ND	0.5	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-FP3	Diln Fac:	1.000
Lab ID:	274913-009	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
1,2-Dibromoethane	ND	0.5	232904	03/10/16
Chlorobenzene	ND	0.5	232904	03/10/16
1,1,1,2-Tetrachloroethane	ND	0.5	232904	03/10/16
Ethylbenzene	ND	0.5	232904	03/10/16
m,p-Xylenes	ND	0.5	232904	03/10/16
o-Xylene	ND	0.5	232904	03/10/16
Styrene	ND	0.5	232904	03/10/16
Bromoform	ND	1.0	232904	03/10/16
Isopropylbenzene	ND	0.5	232904	03/10/16
1,1,2,2-Tetrachloroethane	ND	0.5	232904	03/10/16
1,2,3-Trichloropropane	ND	0.5	232904	03/10/16
Propylbenzene	ND	0.5	232904	03/10/16
Bromobenzene	ND	0.5	232904	03/10/16
1,3,5-Trimethylbenzene	ND	0.5	232904	03/10/16
2-Chlorotoluene	ND	0.5	232904	03/10/16
4-Chlorotoluene	ND	0.5	232904	03/10/16
tert-Butylbenzene	ND	0.5	232904	03/10/16
1,2,4-Trimethylbenzene	ND	0.5	232904	03/10/16
sec-Butylbenzene	ND	0.5	232904	03/10/16
para-Isopropyl Toluene	ND	0.5	232904	03/10/16
1,3-Dichlorobenzene	ND	0.5	232904	03/10/16
1,4-Dichlorobenzene	ND	0.5	232904	03/10/16
n-Butylbenzene	ND	0.5	232904	03/10/16
1,2-Dichlorobenzene	ND	0.5	232904	03/10/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232904	03/10/16
1,2,4-Trichlorobenzene	ND	0.5	232904	03/10/16
Hexachlorobutadiene	ND	0.5	232904	03/10/16
Naphthalene	ND	0.5	232956	03/11/16
1,2,3-Trichlorobenzene	ND	0.5	232904	03/10/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	98	80-128	232904	03/10/16
1,2-Dichloroethane-d4	118	75-139	232904	03/10/16
Toluene-d8	101	80-120	232904	03/10/16
Bromofluorobenzene	102	80-120	232904	03/10/16

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232880
Units:	ug/L	Analyzed:	03/09/16
Diln Fac:	1.000		

Type: BS Lab ID: QC826643

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	10.51	84	66-135
Benzene	12.50	12.62	101	80-123
Trichloroethene	12.50	13.45	108	80-123
Toluene	12.50	12.61	101	80-121
Chlorobenzene	12.50	12.82	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	131	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

Type: BSD Lab ID: QC826644

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	10.64	85	66-135	1	24
Benzene	12.50	11.50	92	80-123	9	20
Trichloroethene	12.50	13.39	107	80-123	0	20
Toluene	12.50	12.78	102	80-121	1	20
Chlorobenzene	12.50	12.85	103	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	125	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826645	Batch#:	232880
Matrix:	Water	Analyzed:	03/09/16
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826645	Batch#:	232880
Matrix:	Water	Analyzed:	03/09/16
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	139	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232904
Units:	ug/L	Analyzed:	03/10/16
Diln Fac:	1.000		

Type: BS Lab ID: QC826743

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.93	95	66-135
Benzene	12.50	13.62	109	80-123
Trichloroethene	12.50	12.69	102	80-123
Toluene	12.50	12.88	103	80-121
Chlorobenzene	12.50	12.81	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	113	75-139
Toluene-d8	105	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC826744

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.03	88	66-135	8	24
Benzene	12.50	13.19	106	80-123	3	20
Trichloroethene	12.50	12.63	101	80-123	0	20
Toluene	12.50	12.51	100	80-121	3	20
Chlorobenzene	12.50	12.75	102	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-128
1,2-Dichloroethane-d4	108	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826745	Batch#:	232904
Matrix:	Water	Analyzed:	03/10/16
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826745	Batch#:	232904
Matrix:	Water	Analyzed:	03/10/16
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-128
1,2-Dichloroethane-d4	114	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232956
Units:	ug/L	Analyzed:	03/11/16
Diln Fac:	1.000		

Type: BS Lab ID: QC826949

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.14	89	66-135
Benzene	12.50	11.89	95	80-123
Trichloroethene	12.50	11.64	93	80-123
Toluene	12.50	12.07	97	80-121
Chlorobenzene	12.50	12.22	98	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC826950

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.04	88	66-135	1	24
Benzene	12.50	11.87	95	80-123	0	20
Trichloroethene	12.50	11.69	94	80-123	0	20
Toluene	12.50	11.98	96	80-121	1	20
Chlorobenzene	12.50	12.06	96	80-123	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826951	Batch#:	232956
Matrix:	Water	Analyzed:	03/11/16
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826951	Batch#:	232956
Matrix:	Water	Analyzed:	03/11/16
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.8
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP4A	Units:	ug/L
Lab ID:	274913-001	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	99	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	10,000	500	100.0	232935	03/10/16	04/03/16	EPA 3010A	EPA 6010B
Cobalt	9.2	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	19	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	1.000	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	34	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	130	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	27	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	89	20	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP4B	Diln Fac:	1.000
Lab ID:	274913-002	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	29	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	9.2	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	11	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	11	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP7B	Diln Fac:	1.000
Lab ID:	274913-003	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	27	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	23	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	12	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP2	Diln Fac:	1.000
Lab ID:	274913-004	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	32	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	19	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-9	Diln Fac:	1.000
Lab ID:	274913-005	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	40	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	930	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	5.5	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	8.4	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP6	Units:	ug/L
Lab ID:	274913-006	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	54	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	13,000	500	100.0	232935	03/10/16	03/27/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	1.000	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	5.5	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	27	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	17	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP5	Units:	ug/L
Lab ID:	274913-007	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	61	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	16,000	500	100.0	232935	03/10/16	03/27/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	1.000	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	6.7	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	18	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	1.000	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP1	Diln Fac:	1.000
Lab ID:	274913-008	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	42	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	11	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	12	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	274913	Project#:	STANDARD
Client:	The Source Group, Inc.	Location:	Former Francis Plating
Field ID:	MW-FP3	Diln Fac:	1.000
Lab ID:	274913-009	Sampled:	03/04/16
Matrix:	Water	Received:	03/08/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Barium	55	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Chromium	300	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Copper	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Lead	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Mercury	ND	0.20	233209	03/18/16	03/18/16	METHOD	EPA 7470A
Molybdenum	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Nickel	29	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Selenium	14	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Silver	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Thallium	ND	10	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B
Zinc	ND	20	232935	03/10/16	03/15/16	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC826862	Batch#:	232935
Matrix:	Water	Prepared:	03/10/16
Units:	ug/L	Analyzed:	03/15/16

Analyte	Result	RL
Antimony	ND	10
Arsenic	ND	5.0
Barium	ND	5.0
Beryllium	ND	2.0
Cadmium	ND	5.0
Chromium	ND	5.0
Cobalt	ND	5.0
Copper	ND	5.0
Lead	ND	5.0
Molybdenum	ND	5.0
Nickel	ND	5.0
Selenium	ND	10
Silver	ND	5.0
Thallium	ND	10
Vanadium	ND	5.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	232935
Units:	ug/L	Prepared:	03/10/16
Diln Fac:	1.000	Analyzed:	03/15/16

Type: BS Lab ID: QC826863

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	102.7	103	79-120
Arsenic	100.0	101.7	102	80-120
Barium	100.0	102.3	102	80-120
Beryllium	100.0	98.78	99	80-120
Cadmium	100.0	105.4	105	80-120
Chromium	100.0	100.3	100	80-120
Cobalt	100.0	97.99	98	80-120
Copper	100.0	100.3	100	80-120
Lead	100.0	98.80	99	80-120
Molybdenum	100.0	104.1	104	80-120
Nickel	100.0	96.97	97	80-120
Selenium	100.0	106.5	107	80-120
Silver	100.0	100.4	100	77-120
Thallium	50.00	50.14	100	80-121
Vanadium	100.0	104.8	105	80-120
Zinc	100.0	99.20	99	80-120

Type: BSD Lab ID: QC826864

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	99.79	100	79-120	3	20
Arsenic	100.0	99.52	100	80-120	2	20
Barium	100.0	100.3	100	80-120	2	20
Beryllium	100.0	97.10	97	80-120	2	20
Cadmium	100.0	104.0	104	80-120	1	20
Chromium	100.0	98.03	98	80-120	2	20
Cobalt	100.0	96.82	97	80-120	1	20
Copper	100.0	98.40	98	80-120	2	20
Lead	100.0	97.20	97	80-120	2	20
Molybdenum	100.0	101.9	102	80-120	2	20
Nickel	100.0	95.56	96	80-120	1	20
Selenium	100.0	102.4	102	80-120	4	20
Silver	100.0	98.55	99	77-120	2	20
Thallium	50.00	50.63	101	80-121	1	20
Vanadium	100.0	102.7	103	80-120	2	20
Zinc	100.0	97.55	98	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	232935
MSS Lab ID:	274534-003	Sampled:	02/22/16
Matrix:	Water	Received:	02/25/16
Units:	ug/L	Prepared:	03/10/16
Diln Fac:	1.000	Analyzed:	03/15/16

Type: MS Lab ID: QC826865

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.000	100.0	99.07	99	74-120
Arsenic	<1.538	100.0	103.6	104	80-127
Barium	38.24	100.0	134.7	96	80-120
Beryllium	<0.4000	100.0	97.83	98	80-120
Cadmium	<1.000	100.0	103.9	104	80-120
Chromium	300.3	100.0	327.5	27 *	80-120
Cobalt	2.924	100.0	99.82	97	80-120
Copper	6.732	100.0	104.6	98	80-120
Lead	NA	100.0	94.84	-91 *	67-120
Molybdenum	7.309	100.0	106.6	99	80-120
Nickel	65.12	100.0	154.9	90	80-120
Selenium	36.40	100.0	133.4	97	73-132
Silver	1.740	100.0	100.4	99	67-120
Thallium	<2.000	50.00	46.92	94	76-121
Vanadium	13.88	100.0	114.6	101	80-120
Zinc	19.57	100.0	117.6	98	80-122

Type: MSD Lab ID: QC826866

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	105.8	106	74-120	7	24
Arsenic	100.0	108.8	109	80-127	5	25
Barium	100.0	140.9	103	80-120	4	20
Beryllium	100.0	105.3	105	80-120	7	20
Cadmium	100.0	108.7	109	80-120	5	20
Chromium	100.0	344.1	44 *	80-120	5	20
Cobalt	100.0	104.6	102	80-120	5	20
Copper	100.0	111.8	105	80-120	7	20
Lead	100.0	98.73	-87 *	67-120	4	23
Molybdenum	100.0	111.7	104	80-120	5	20
Nickel	100.0	163.0	98	80-120	5	20
Selenium	100.0	140.6	104	73-132	5	30
Silver	100.0	104.7	103	67-120	4	22
Thallium	50.00	50.24	100	76-121	7	20
Vanadium	100.0	122.3	108	80-120	7	20
Zinc	100.0	123.7	104	80-122	5	20

*= Value outside of QC limits; see narrative
NA= Not Analyzed
RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	233209
Lab ID:	QC827929	Prepared:	03/18/16
Matrix:	Water	Analyzed:	03/18/16
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	233209
Matrix:	Water	Prepared:	03/18/16
Units:	ug/L	Analyzed:	03/18/16
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC827930	2.500	2.625	105	80-120		
BSD	QC827931	2.500	2.544	102	80-120	3	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	274913	Location:	Former Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	233209
Field ID:	ZZZZZZZZZZ	Sampled:	03/02/16
MSS Lab ID:	274764-001	Received:	03/03/16
Matrix:	Water	Prepared:	03/18/16
Units:	ug/L	Analyzed:	03/18/16
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC827932	<0.02080	2.500	2.486	99	60-130		
MSD	QC827933		2.500	2.508	100	60-130	1	34

RPD= Relative Percent Difference


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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 275542
ANALYTICAL REPORT

The Source Group, Inc.	Project : 06-FP-002
3478 Buskirk Ave	Location : Francis Plating
Pleasant Hill, CA 94523	Level : II

Sample ID	Lab ID
MW-FP2	275542-001
MW-FP1	275542-002
MW-FP3	275542-003
MW-FP5	275542-004
MW-FP4B	275542-005
MW-FP4A	275542-006
MW-FP7B	275542-007
MW-9	275542-008
MW-FB6	275542-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Will Rice Date: 04/05/2016

Will Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**275542**
Client:	**The Source Group, Inc.**
Project:	**06-FP-002**
Location:	**Francis Plating**
Request Date:	**03/30/16**
Samples Received:	**03/30/16**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/30/16. The samples were received cold and intact.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 275542

Project No: 06-FP-003
Project Name: Francis Plating
Project P. O. No: 06-FP-003

Sampler: Harlow Newton
Report To: Adam Brown
Company: Source Group Inc
Telephone: 925-944-2856
Email: Adam.brown@apexcos.com

EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Cr VI 7196A
1	mw-FP2	3-30-16	0955	X				1					X	X
2	mw-FP1		1025											
3	mw-FP3		1055											
4	mw-FP5		1120											
5	mw-FP4B		1203											
6	mw-FP4A		1240											
7	mw-FP7B		1315											
8	mw-9		1340											
9	mw-FB6		1410											

Notes:

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:		RECEIVED BY:	
	DATE: 3-30-16 TIME: 1450		DATE: 3/30/16 TIME: 2145
	DATE: TIME:		DATE: TIME:
	DATE: TIME:		DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 275542 Date Received 3/30/16 Number of coolers 1
Client The Source Group, Inc. Project Francis Plating

Date Opened 3/30 By (print) SC (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)_____ YES (NO)
Shipping info_____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒NO
How many _____ Name_____ Date_____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received?_____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form)___ YES NO
6. Indicate the packing in cooler: (if other, describe)_____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.8°

☒ Temperature blank(s) included? ☒ Thermometer# 4 ☐ IR Gun#_____

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present?_____ YES (NO)
If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?_____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? (pH strip lot#_____) YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 12, 12/01/15

Curtis & Tompkins, Ltd.

Detections Summary for 275542

Results for any subcontracted analyses are not included in this summary.

Client : The Source Group, Inc.
Project : 06-FP-002
Location : Francis Plating

Client Sample ID : MW-FP2 Laboratory Sample ID : 275542-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.03		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP1 Laboratory Sample ID : 275542-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.02		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP3 Laboratory Sample ID : 275542-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.24		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP5 Laboratory Sample ID : 275542-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	5.7		0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-FP4B Laboratory Sample ID : 275542-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.01		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP4A Laboratory Sample ID : 275542-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	200		2.0	mg/L	TOTAL	200.0	EPA 7196A	METHOD

Client Sample ID : MW-FP7B Laboratory Sample ID : 275542-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	4.3		0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-9 Laboratory Sample ID : 275542-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.02		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FB6 Laboratory Sample ID : 275542-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Hexavalent Chromium	0.24		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	275542	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	06-FP-002	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	233585
Matrix:	Water	Received:	03/30/16
Units:	mg/L	Analyzed:	03/30/16 17:11

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled
MW-FP2	SAMPLE	275542-001	0.03	0.01	1.000	03/30/16 09:55
MW-FP1	SAMPLE	275542-002	0.02	0.01	1.000	03/30/16 10:25
MW-FP3	SAMPLE	275542-003	0.24	0.01	1.000	03/30/16 10:55
MW-FP5	SAMPLE	275542-004	5.7	0.10	10.00	03/30/16 11:20
MW-FP4B	SAMPLE	275542-005	0.01	0.01	1.000	03/30/16 12:03
MW-FP4A	SAMPLE	275542-006	200	2.0	200.0	03/30/16 12:40
MW-FP7B	SAMPLE	275542-007	4.3	0.10	10.00	03/30/16 13:15
MW-9	SAMPLE	275542-008	0.02	0.01	1.000	03/30/16 13:40
MW-FB6	SAMPLE	275542-009	0.24	0.01	1.000	03/30/16 14:10
	BLANK	QC829458	ND	0.01	1.000	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	275542	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	06-FP-002	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	MW-FP2	Batch#:	233585
MSS Lab ID:	275542-001	Sampled:	03/30/16 09:55
Matrix:	Water	Received:	03/30/16
Units:	mg/L	Analyzed:	03/30/16 17:11

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC829459		1.000	0.9620	96	90-110		
MS	QC829460	0.02500	1.000	0.9920	97	85-115		
MSD	QC829461		1.000	0.9950	97	85-115	0	23

RPD= Relative Percent Difference

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

June 17, 2016

Adam Brown
The Source Group, Inc.
944 McCourtney Rd. Ste H
Grass Valley, CA 95949

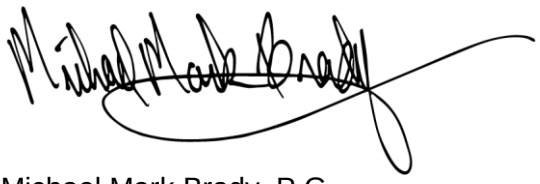
Re: PTS File No: 46322
Physical Properties Data
Former Francis Plating; 06-FP

Dear Mr. Brown:

Please find enclosed report for Physical Properties analyses conducted upon samples received from your Former Francis Plating; 06-FP project. All analyses were performed by applicable ASTM, EPA, or API methodologies. The samples are currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the samples will be disposed of at that time. You may contact me regarding storage, disposal, or return of the samples.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please give me a call at (562) 347-2502.

Sincerely,
PTS Laboratories, Inc.



Michael Mark Brady, P.G.
Laboratory Director

Encl.

Project Name: Former Francis Plating
Project Number: 06-FP

PTS File No: 46322
Client: The Source Group, Inc.

TEST PROGRAM - 20160524

CORE ID	Depth ft.	Core Recovery ft.	Hydraulic Conductivity API RP40/EPA 9100	Total/Air/Water Porosity API RP 40	Dry Bulk Density API RP40	Moisture Content ASTM D2216/API RP40	TOC/foc Walkley-Black	Comments
		Plugs:	Vert. 1.5"	Vert. 1.5"	Vert. 1.5"	Vert. 1" or Vert. 1.5"	Grab	
Date Received: 20160524								
SB-FP1	**11**	**0.60**	**X**	**X**	**X**	**X**	**X**	
SB-FP2	**11**	**0.60**	**X**	**X**	**X**	**X**	**X**	
TOTALS:	**2 Cores**	**1.20**	**2**	**2**	**2**	**2**	**2**	**2**

Laboratory Test Program Notes
Contaminant identification:
Standard TAT for basic analysis is 15 business days.

PTS Laboratories

PTS File No: 46322
Client: The Source Group, Inc.
Report Date: 06/17/16

PHYSICAL PROPERTIES DATA

Project Name: Former Francis Plating
Project No: 06-FP

		METHODS:	API RP 40 / ASTM D2216	API RP 40		API RP 40		
				DENSITY		POROSITY, %Vb (2)		
SAMPLE ID.	DEPTH, ft.	SAMPLE ORIENTATION (1)	MOISTURE CONTENT, % weight	DRY BULK, g/cc	GRAIN, g/cc	TOTAL	AIR-FILLED	WATER-FILLED
SB-FP1	11	V	17.0	1.67	- -	37.5	9.1	28.4
SB-FP2	11	V	13.7	1.73	- -	35.3	11.6	23.7

(1) Sample Orientation: H = horizontal; V = vertical; R = remold

(2) Total Porosity = all interconnected pore channels; Air Filled = pore channels not occupied by pore fluids.

Vb = Bulk Volume, cc; - - = Analysis not requested.

PTS Laboratories

PTS File No: 46322
Client: The Source Group, Inc.
Report Date: 06/17/16

PHYSICAL PROPERTIES DATA - HYDRAULIC CONDUCTIVITY

(Methodology: API RP 40; EPA 9100)

Project Name: Former Francis Plating
Project No: 06-FP

				25 PSI CONFINING STRESS		
SAMPLE ID.	DEPTH, ft.	SAMPLE ORIENTATION (1)	ANALYSIS DATE	EFFECTIVE PERMEABILITY TO WATER (2,3), millidarcy	HYDRAULIC CONDUCTIVITY (3), cm/s	INTRINSIC PERMEABILITY TO WATER (3), cm^2
SB-FP1	11	V	20160614	0.053	5.37E-08	5.24E-13
SB-FP2	11	V	20160614	0.117	1.18E-07	1.16E-12

(1) Sample Orientation: H = horizontal; V = vertical; R = remold

(2) Effective (Native) = With as-received pore fluids in place.

(3) Permeability to water and hydraulic conductivity measured at saturated conditions.
Water = filtered Laboratory Fresh (tap) or Site water.

PTS Laboratories

PTS File No: 46322
Client: The Source Group, Inc.
Report Date: 06/17/16

ORGANIC CARBON DATA - TOC (foc)

(Methodology: Walkley-Black)

Project Name: Former Francis Plating
Project No: 06-FP

SAMPLE ID.	DEPTH, ft.	ANALYSIS DATE	ANALYSIS TIME	SAMPLE MATRIX	TOTAL ORGANIC CARBON, mg/kg	FRACTION ORGANIC CARBON, g/g
SB-FP1	11	20160609	1250	SOIL	1400	1.40E-03
SB-FP2	11	20160609	1250	SOIL	300	3.00E-04
Blank	N/A	20160609	1250	BLANK	ND	ND
SRM D090-542	N/A	20160609	1250	SRM	6250	6.25E-03
				Reporting Limit:	100	1.00E-04

QC DATA

SRM ID/Lot No.	REC (%)	Control Limits	Certified Concentration mg/kg	QC Performance Acceptance Limits, mg/kg Lower	Upper
SRM D090-542	107	75-125	5820	4365	7275

ND = Not Detected

PTS Laboratories, Inc.

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

COMPANY	The Source Group
ADDRESS / CITY / ZIP CODE	944 McCourtney Rd, Suite H / Grass Valley, CA 95949
PROJECT MANAGER	Adam Brown
EMAIL	adam.brown@gpcxcos.com
PROJECT NAME	Former Francis Plating
PHONE NUMBER	530.272.4200
PROJECT NUMBER	06-FP
FAX NUMBER	530.272.4211
SITE LOCATION	789 7th Street, Oakland, CA
SAMPLER SIGNATURE	Jordan Lewis

PO#

TURNAROUND TIME
24 HOURS ☐ 5 DAYS ☐
48 HOURS ☐ NORMAL ☒
72 HOURS ☐
OTHER: _____

SAMPLE INTEGRITY (CHECK):
INTACT X ON ICE 42°F

PTS QUOTE NO.

PTS FILE: 46322

SAMPLE ID NUMBER	DATE	TIME	DEPTH, FT	NUMBER OF SAMPLES	SOIL PROPERTIES PACKAGE	HYDRAULIC CONDUCTIVITY PACKAGE	PORE FLUID SATURATIONS PACKAGE	TCEQ/TNRCC PROPERTIES PACKAGE	CAPILLARITY PACKAGE	FLUID PROPERTIES PACKAGE	PHOTOLOG: CORE PHOTOGRAPHY	MOISTURE CONTENT, ASTM D2216	POROSITY: TOTAL, API RP40	POROSITY: EFFECTIVE, ASTM D425M	SPECIFIC GRAVITY, ASTM D854	BULK DENSITY (DRY), API RP40 or ASTM D2937	AIR PERMEABILITY, API RP40	HYDRAULIC CONDUCTIVITY, EPA9100, API RP40, D5084	GRAIN SIZE DISTRIBUTION, ASTM D422/4464M	TOC: WALKLEY-BLACK	ATTERBERG LIMITS, ASTM D4318	Air-filled porosity	Fraction organic Carbon			COMMENTS
SB-FP1	5/19/16	1440	11'									X	X			X		X				X	X			
SB-FP2	5/19/16	1422	11'									X	X			X		X				X	X			

1. RELINQUISHED BY	2. RECEIVED BY	3. RELINQUISHED BY	4. RECEIVED BY
Jordan Lewis	Fedex		
COMPANY: The Source Group	COMPANY:	COMPANY:	COMPANY: PTS LABS
DATE: 5/20/16 TIME: 1030	DATE: TIME:	DATE: TIME:	DATE: 5/24/16 TIME: 13:45

APPENDIX D

PERMITS

DC

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV. 03/2015)

Please type or print clearly your answers. Complete ALL fields, write "N/A" if not applicable.
This application is not complete until all requirements have been approved.

Permission is requested to encroach on the State Highway right-of-way as follows:

FOR CALTRANS USE

PERMIT NO. 0416-6SY 0738

DIST/CO/RTE/PM 04/ALA/880/32.1

SIMPLEX STAMP APR 05 2016

0467N16 0738

DATE OF SIMPLEX STAMP

1. COUNTY	2. ROUTE	3. POSTMILE
Alameda	880	NA 32.1

4. ADDRESS OR STREET NAME	5. CITY
FLA04-ALA-880-34	Oakland

6. CROSS STREET (Distance and direction from project site)	7. PORTION OF RIGHT-OF-WAY
NA Under Rt 880 at 5th Street, Oakland	

8. WORK TO BE PERFORMED BY	9. ESTIMATED START DATE	10. ESTIMATED COMPLETION DATE
☐ OWN FORCES ☒ CONTRACTOR	April 4, 2016	April 4, 2016

11. EXCAVATION	MAX. DEPTH	AVG. DEPTH	AVG. WIDTH	LENGTH	SURFACE TYPE
	30'		3.0" dia		

12. ESTIMATED COST WITHIN STATE HIGHWAY RIGHT-OF-WAY	FUNDING SOURCE(S)
$ 2,500	☐ FEDERAL ☐ STATE ☐ LOCAL ☒ PRIVATE

13. PIPES	PRODUCT TYPE	DIAMETER	VOLTAGE / PSIG	14. CALTRANS' PROJECT CODE (ID)
	NA			

15. ☐ Double Permit Parent Permit Number NA

Applicant's Reference Number / Utility Work Order Number

16. Have your plans been reviewed by another Caltrans branch? ☒ NO ☐ YES (If "YES") Who?

17. Completely describe work to be done within STATE Highway right-of-way:

Attach 6 complete sets of plans (folded to 8.5" x 11") and any applicable specifications, calculations, maps, etc.

A.S
4/1/16

2 environmental borings in parking lot in FLA04-ALA-880-34 air space. Borings are vertical and 3.0" in diameter.

25. NAME OF APPLICANT OR ORGANIZATION
Jordan Lewis The Source Group

ADDRESS OF APPLICANT OR ORGANIZATION WHERE PERMIT IS TO BE MAILED (Include City and Zip Code)
944 McCourtney Road, Suite H, Grass Valley, CA 95949

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER
Jordan.Lewis@apexcos.com	(530) 272-4200	(530) 272-4211

26. NAME OF AUTHORIZED AGENT / ENGINEER (A "Letter of authorization" is required if different from #25)

IS A LETTER OF AUTHORIZATION ATTACHED? ☐ YES ☐ NO

ADDRESS OF AUTHORIZED AGENT / ENGINEER (Include City and Zip Code)

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER

27. NAME OF BILLING CONTACT (Same as #25 ☒ Same as #26 ☐)

BILLING ADDRESS WHERE INVOICE(S) IS/ARE TO BE MAILED (Include City and Zip Code)

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER

28. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT	29. PRINT OR TYPE NAME	30. TITLE	31. DATE
[signature]	Jordan Lewis	Senior Staff Geologist	3/24/16

Acknowledgement

We have received your Encroachment Permit Application.
A copy of your original application is enclosed for your information, and includes a reference number printed in the upper right hand corner of the application.

You may expect a response within 45 days from the date of this letter.

Please contact Permit Writer Daniel Chang at 510-286-4415 or
Daniel.Chang@dot.ca.gov
any questions or inquiries regarding your application status.

Thank You!

Caltrans District 4–Office of Encroachment Permits

Acknowledgement

We have received your request for a change in your original permit.
The original application number can be found below:

Reference# _____

You may expect a response within 45 days from the date of this letter.

Please contact Permit Writer Daniel Chang at 510-286-4415 or
Daniel.Chang@dot.ca.gov
for any questions or inquiries regarding your request.

Thank You!

Caltrans District 4–Office of Encroachment Permits

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/18/2016 By jamesy

Permit Numbers: W2016-0169
Permits Valid from 04/28/2016 to 04/28/2016

Application Id:	1457460677043	**City of Project Site:**	Oakland
Site Location:	789 7th St, Oakland, CA		
Project Start Date:	03/31/2016	**Completion Date:**	03/31/2016
Assigned Inspector:	Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com		
Extension Start Date:	04/28/2016	**Extension End Date:**	04/28/2016
Extension Count:	1	**Extended By:**	jamesy

Applicant:	The Source Group - Jordan Lewis 944 Mc Courtney Rd Ste H, Grass Valley, CA 95949	**Phone:**	530-272-4200
Property Owner:	The Brush Street Group LLC 1155 3rd St #230, Oakland, CA 94607	**Phone:**	510-286-8200
Client:	** same as Property Owner **		

	Total Due:	$265.00
Receipt Number: WR2016-0108	**Total Amount Paid:**	$265.00
Payer Name : The Source Group	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 3 Boreholes
Driller: Cascade - Lic #: 938110 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0169	03/18/2016	06/29/2016	3	3.00 in.	12.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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.

4. Applicant shall contact assigned inspector listed on the top of the permit 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.

5. 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.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic

submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

7. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a 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.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/18/2016 By jamesy

Permit Numbers: W2016-0168
Permits Valid from 04/28/2016 to 04/28/2016

Application Id:	1457459442249	**City of Project Site:**	Oakland
Site Location:	880Frwy,(beneath Air Space) south of 789 7th St, Oakland, CA		
Project Start Date:	03/31/2016	**Completion Date:**	03/31/2016
Assigned Inspector:	Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com		
Extension Start Date:	04/28/2016	**Extension End Date:**	04/28/2016
Extension Count:	1	**Extended By:**	jamesy

Applicant:	The Source Group - Jordan Lewis 944 McCourtney Rd, Ste H, Grass Valley, CA 95949	**Phone:** 530-272-4200
Property Owner:	Nancy Bocanegra Caltrans 111 Grand Ave, Oakland, CA 94612	**Phone:** 530-286-4444
Client:	** same as Property Owner **	

	Total Due:	$265.00
Receipt Number: WR2016-0107	**Total Amount Paid:**	$265.00
Payer Name : The Source Group	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 2 Boreholes
Driller: Cascade - Lic #: 1938110 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0168	03/18/2016	06/29/2016	2	3.00 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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.

4. Applicant shall contact assigned inspector listed on the top of the permit 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.

5. 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.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic

submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

7. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a 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.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX E

BORING LOGS

BOREHOLE LOG

BORING / WELL ID: **SB-FP1**

TOTAL DEPTH: **12'**

PROJECT NAME AND SITE ADDRESS: **Former Francis Plating - 789 7th Street, Oakland, California**

BORING LOCATION / DESCRIPTION: **Northwest corner of Site, at Site boundary.**

PROJECT INFORMATION

PROJECT NO.:	**06-FP-001**
PERMIT NO.:	**W2016-0168**
LOGGED BY:	**J. Lewis**
REVIEWED BY:	**J. Heisler**
SURFACE ELEVATION:	**--**
CASING TOP ELEVATION:	**--**
START DATE (TIME):	**05/19/16 (1430)**
FINISH DATE (TIME):	**05/19/16 (1440)**

DRILLING INFORMATION

SUBCONTRACTOR:	**Cascade Drilling, LP**
EQUIPMENT:	**Direct Push**
SAMPLING METHOD:	**Acetate Liners**
MONITORING DEVICE:	**MiniRae2000 PID**
BORING DIAMETER (IN):	**2.25 inches**
ANNULUS MATERIAL:	**NA**
BORING ANGLE: **Vertical**	CASING DIAMETER: **NA**
SCREEN INTERVAL: **NA**	

First Water Encountered Stabilized Water Level Sample Packaged for Analysis

TIME	PID READING	WATER LEVEL	SAMPLE INTERVAL	RECOVERY (%)	DEPTH	STRATIGRAPHY	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size / plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED.	WELL CONSTRUCTION DETAILS
1430					0		Boring cleared to five feet bgs with hand auger. Concrete to one foot bgs.	
							SP-SC: Poorly graded sand with clay, moderate brown (5YR 4/4), damp to wet, loose, medium grained sand, (0,90,0,10).	
	0.2				5		SC: Clayey sand, moderate brown (5YR 4/4), wet, medium dense, medium grained sand, medium to low plasticity, (0,75,5,20).	Grout
	0.5				10			
1440	1.2						Bottom of borehole at 12 feet bgs.	

BOREHOLE LOG

BORING / WELL ID: **SB-FP2**

TOTAL DEPTH: **12'**

PROJECT NAME AND SITE ADDRESS: **Former Francis Plating - 789 7th Street, Oakland, California**

BORING LOCATION / DESCRIPTION: **Southeast cornerof Site, at Site boundary.**

PROJECT INFORMATION

PROJECT NO.:	**06-FP-001**
PERMIT NO.:	**W2016-0168**
LOGGED BY:	**J. Lewis**
REVIEWED BY:	**J. Heisler**
SURFACE ELEVATION:	**--**
CASING TOP ELEVATION:	**--**
START DATE (TIME):	**05/19/16 (1410)**
FINISH DATE (TIME):	**05/19/16 (1425)**

DRILLING INFORMATION

SUBCONTRACTOR:	**Cascade Drilling, LP**
EQUIPMENT:	**Direct Push**
SAMPLING METHOD:	**Acetate Liners**
MONITORING DEVICE:	**MiniRae2000 PID**
BORING DIAMETER (IN):	**2.25 inches**
ANNULUS MATERIAL:	**NA**
BORING ANGLE: **Vertical**	CASING DIAMETER: **NA**
SCREEN INTERVAL: **NA**	

First Water Encountered Stabilized Water Level Sample Packaged for Analysis

TIME	PID READING	WATER LEVEL	SAMPLE INTERVAL	RECOVERY (%)	DEPTH	STRATIGRAPHY	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size / plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED.	WELL CONSTRUCTION DETAILS
1410					0		Boring cleared to five feet bgs with hand auger. Concrete to 0.75 feet bgs.	
	0.3				5		SP-SC: Poorly graded sand with clay, moderate brown (5YR 4/4), damp, medium dense, medium grained sand, (0,90,0,10).	Grout
	1.1				10			
1425	5.6						Bottom of borehole at 12 feet bgs.	

BOREHOLE LOG

BORING / WELL ID: **SB-FP3**

TOTAL DEPTH: **12'**

PROJECT NAME AND SITE ADDRESS: **Former Francis Plating - 789 7th Street, Oakland, California**

BORING LOCATION / DESCRIPTION: **Western portion of Site, center of Parcel 1.**

PROJECT INFORMATION

PROJECT NO.:	**06-FP-001**
PERMIT NO.:	**W2016-0168**
LOGGED BY:	**J. Lewis**
REVIEWED BY:	**J. Heisler**
SURFACE ELEVATION:	**--**
CASING TOP ELEVATION:	**--**
START DATE (TIME):	**05/19/16 (1340)**
FINISH DATE (TIME):	**05/19/16 (1400)**

DRILLING INFORMATION

SUBCONTRACTOR:	**Cascade Drilling, LP**
EQUIPMENT:	**Direct Push**
SAMPLING METHOD:	**Acetate Liners**
MONITORING DEVICE:	**MiniRae2000 PID**
BORING DIAMETER (IN):	**2.25 inches**
ANNULUS MATERIAL:	**NA**
BORING ANGLE: **Vertical**	CASING DIAMETER: **NA**
SCREEN INTERVAL: **NA**	

▽ First Water Encountered ▼ Stabilized Water Level ■ Sample Packaged for Analysis

TIME	PID READING	WATER LEVEL	SAMPLE INTERVAL	RECOVERY (%)	DEPTH	STRATIGRAPHY	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size / plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED.	WELL CONSTRUCTION DETAILS
1340					0		Boring cleared to five feet bgs with hand auger. Concrete to 0.33 feet bgs.	
	0.6				5		SP-SM: Poorly graded sand with silt, moderate brown (5YR 4/4), damp to dey, loose to medium dense, medium grained sand, (0,90,10,0).	Grout
	1.1							
					10			
1400	1.6						Bottom of borehole at 12 feet bgs.	

BOREHOLE LOG

BORING / WELL ID: **SB-FP4**

TOTAL DEPTH: **20'**

PROJECT NAME AND SITE ADDRESS: **Former Francis Plating - 789 7th Street, Oakland, California**

BORING LOCATION / DESCRIPTION: **Southwest Site boundary, ~100 feet north of Shell MW-9.**

PROJECT INFORMATION

PROJECT NO.:	**06-FP-001**
PERMIT NO.:	**W2016-0169**
LOGGED BY:	**J. Lewis**
REVIEWED BY:	**J. Heisler**
SURFACE ELEVATION:	**--**
CASING TOP ELEVATION:	**--**
START DATE (TIME):	**05/19/16 (1115)**
FINISH DATE (TIME):	**05/19/16 (1245)**

DRILLING INFORMATION

SUBCONTRACTOR:	**Cascade Drilling, LP**
EQUIPMENT:	**Direct Push**
SAMPLING METHOD:	**Acetate Liners**
MONITORING DEVICE:	**MiniRae2000 PID**
BORING DIAMETER (IN):	**2.25 inches**
ANNULUS MATERIAL:	**NA**
BORING ANGLE: **Vertical**	CASING DIAMETER: **NA**
SCREEN INTERVAL: **NA**	

▽ First Water Encountered ▼ Stabilized Water Level ■ Sample Packaged for Analysis

TIME	PID READING	WATER LEVEL	SAMPLE INTERVAL	RECOVERY (%)	DEPTH	STRATIGRAPHY	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size / plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED.	WELL CONSTRUCTION DETAILS
1115					0		Asphalt: Boring cleared to five feet bgs with hand auger. Asphalt to 0.66 feet bgs.	
							SP: Poorly graded sand, moderate brown (5YR 4/4), dry, loose to medium dense, medium to fine grained sand, non-plastic, (0,95,5,0).	
					5			
					10			Grout
							SC: Clayey sand, moderate yellowish brown (10YR 5/6), damp, medium dense, fine grained sand, low to medium plasticity, (0,70,5,25).	
					15			
1245					20		Bottom of borehole at 20 feet bgs.	

BOREHOLE LOG

BORING / WELL ID: **SB-FP5**

TOTAL DEPTH: **20'**

PROJECT NAME AND SITE ADDRESS: **Former Francis Plating - 789 7th Street, Oakland, California**

BORING LOCATION / DESCRIPTION: **Southeast corner of Former Frog Pond, ~150 feet west of Brush St.**

PROJECT INFORMATION

PROJECT NO.:	**06-FP-001**
PERMIT NO.:	**W2016-0169**
LOGGED BY:	**J. Lewis**
REVIEWED BY:	**J. Heisler**
SURFACE ELEVATION:	**--**
CASING TOP ELEVATION:	**--**
START DATE (TIME):	**05/19/16 (0850)**
FINISH DATE (TIME):	**05/19/16 (1031)**

DRILLING INFORMATION

SUBCONTRACTOR:	**Cascade Drilling, LP**
EQUIPMENT:	**Direct Push**
SAMPLING METHOD:	**Acetate Liners**
MONITORING DEVICE:	**MiniRae2000 PID**
BORING DIAMETER (IN):	**2.25 inches**
ANNULUS MATERIAL:	**NA**
BORING ANGLE: **Vertical**	CASING DIAMETER: **NA**
SCREEN INTERVAL: **NA**	

▽ First Water Encountered ▼ Stabilized Water Level ■ Sample Packaged for Analysis