

GROUNDWATER DELINEATION REPORT

**Former Francis Plating Site
751 7th Street, Oakland, California**

01-FP-003

Prepared For:

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

Prepared By:



3451-C Vincent Road
Pleasant Hill, California 94523

February 23, 2015



Prepared By:



S. Albert Simmons, P.G., Q.S.D.
Project Geologist

Reviewed By:



Matthew C. Sutton, P.E.
Principal Engineer

TABLE OF CONTENTS

	PAGE
LIST OF FIGURES.....	ii
LIST OF APPENDICES.....	ii
CERTIFICATION.....	iii
1.0 INTRODUCTION.....	1-1
1.1 Site Location and Description	1-1
1.2 Purpose and Objectives.....	1-1
2.0 SITE BACKGROUND	2-1
2.1 Site Operational History.....	2-1
2.2 Hydrogeologic Setting.....	2-1
2.3 Summary of Remedial Actions and Current Environmental Conditions	2-1
3.0 MONITORING AND SAMPLING ACTIVITIES.....	3-1
3.1 Groundwater Monitoring	3-1
3.2 Groundwater Sampling	3-1
3.3 Investigation Derived Waste	3-2
4.0 MONITORING AND SAMPLING RESULTS.....	4-1
4.1 Groundwater Elevations.....	4-1
4.2 Groundwater Analytical Results.....	4-1
4.3 Biochemical Parameter Evaluation	4-2
5.0 WELL SURVEY.....	5-1
6.0 CONCLUSIONS AND RECOMMENDATIONS.....	6-1
7.0 LIMITATIONS.....	7-1
8.0 REFERENCES.....	8-1

LIST OF FIGURES

- Figure 1 Site Location Map
- Figure 2 Site and Downgradient Vicinity
- Figure 3 Groundwater Elevation and Potentiometric Surface Map – Q1 2015
- Figure 4 VOC Concentrations in Groundwater – Q1 2015
- Figure 5 Hexavalent Chromium Concentrations in Groundwater – Q1 2015

LIST OF TABLES

- Table 1 Groundwater Monitoring Well Elevation Measurements – Q1 2015
- Table 2 Summary of Groundwater VOC Analytical Results – Q1 2015
- Table 3 Summary of Groundwater Dissolved Metals Analytical Results – Q1 2015

LIST OF APPENDICES

- Appendix A Regulatory Correspondence
- Appendix B Sampling Field Forms
- Appendix C Laboratory Analytical Data – Groundwater

CERTIFICATION

All hydrogeologic and geologic information in this document regarding the 751 7th Street Site have been prepared under the supervision of and reviewed by the certified professional whose signature appears below.



Matthew C. Sutton, P.E.
Principal Engineer
The Source Group, Inc.



1.0 INTRODUCTION

On behalf of The Brush Street Group, LLC (Brush Street Group), The Source Group, Inc. (SGI) has prepared this Groundwater Delineation Report (Report) for the parcel at 751 7th Street, Oakland, California (Parcel 1), one of the parcels that made 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 June 2, 2014 Groundwater Delineation Work Plan (SGI, 2014), and conditional approval from ACEH April 1, 2014 (Appendix).

1.1 Site Location and Description

The Site is located at 751 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.

1.2 Purpose and Objectives

No groundwater data has been collected at the Site since April 2010, so the objectives of the delineation activities was to collect current Site data in order to develop an accurate Conceptual Site Model (CSM) and begin collection of data that will be helpful in screening and evaluating potential remedial alternatives for the Site.

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 Brush 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 residential or commercial environmental screening levels (ESLs) established by the California Regional Water Quality Control Board – San Francisco Bay Region (CRWQCB) for land uses where groundwater is not 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 residential or commercial 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).

The most recent investigation prior to the work described in this Report was completed in April 2010 (BASELINE, 2010), and included on-Site and off-Site investigation activities. The April 2010 investigation concluded the following:

- The chemical of primary concern for groundwater was Cr-VI.
- The groundwater impacts were confined to the Merritt Sand since the Old Bay Mud, present at approximately 60 feet below ground surface, acts as a barrier to further vertical migration;
- While dissolved cobalt, copper, nickel, thallium, and vanadium were also reported in groundwater samples collected on-Site at concentrations exceeding ESLs the impact was limited since detection of these metals has only been reported in a few soil samples collected on-Site;

- While some VOCs were detected in shallow soil samples collected at the Site, no VOCs were reported at concentrations exceeding ESLs in the groundwater samples collected; and
- Dissolved Cr-VI migrated in a southwesterly direction off-Site and was present in both shallow and deeper screened monitoring wells as far as 120 feet downgradient from the Site.

3.0 MONITORING AND SAMPLING ACTIVITIES

In accordance with SGI's June 2, 2014 Work Plan and the July 3, 2014 ACEH conditional approval letter (Appendix A), groundwater monitoring and sampling activities were conducted on January 5 and 6, 2015. Blaine Tech Services, Inc., of San Jose, California was contracted to conduct the groundwater monitoring and sampling event under the supervision of SGI personnel. Field forms from the monitoring activities are provided in Appendix B. This Section details the procedures used during the First Quarter 2015 (Q1 2015) event.

3.1 Groundwater Monitoring

Groundwater levels were measured in five shallow on-Site wells (MW-FP1, MW-FP2, MW-FP3, MW-FP4A, and MW-FP5), two deeper screened on-Site wells (MW-FP4B and MW-FP7B), and three off-Site shallow wells (MW-1, MW-4, and MW-5). Despite attempts using hand tools and a metal detector, On-Site well MW-FP6 could not be located under recent landscaping improvements. Well locations are presented on Figure 2.

Groundwater levels in all accessible wells were gauged from the top of the well casings using an electronic water level indicator graduated to 0.01-foot. The measured depth to water and surveyed top of casing elevations for each well are presented in Table 1. A Q1 2015 potentiometric surface map is presented as Figure 3. Groundwater monitoring results for 1Q15 are discussed below in Section 4.0.

3.2 Groundwater Sampling

Prior to sampling, all groundwater monitoring wells were purged of a minimum of three casing volumes of water using a submersible pump and 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. Groundwater samples were collected using the submersible pump. 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 Q1 2015 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 hexavalent chromium by EPA Method 7196A. In addition, groundwater from MW-FP4A was analyzed for biochemical parameters (alkalinity, sulfate, iron [ferrous, ferric], salinity, arsenic, manganese, total organic carbon [TOC], and dissolved organic carbon [DOC]) to aid in evaluating groundwater conditions for potential in-situ remediation in the former Frog Pond area.

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.

4.0 MONITORING AND SAMPLING RESULTS

In accordance with SGI's June 2, 2014 Work Plan and the July 3, 2014 ACEH conditional approval letter, Q1 2015 groundwater monitoring and sampling was conducted on January 5 and 6, 2015. Results are presented in the following sections. Laboratory analytical reports are presented as Attachment C and the analytic results are summarized in Tables 2 and 3.

4.1 Groundwater Elevations

A potentiometric surface map for Q1 2015 was generated from the groundwater elevation data and is presented as Figure 3. Groundwater elevation measurements are presented in Table 1.

Depth to water measurements ranged from 15.12 feet below ground surface (bgs) in on-Site well MW-FP4B to 5.55 feet bgs in off-Site well MW-1. Corresponding groundwater elevations ranged from 10.32 feet above mean sea level (amsl) to 2.44 feet amsl, respectively. It should be noted that Shell well MW-9 was observed with an extended surface completion where it appears to have been incorporated into a new concrete step entrance for the adjacent facility. As a result, the existing TOC elevation datum appears incorrect; therefore, this well was not used for contouring. A review of elevation data and the potentiometric surface map (Figure 3) indicates a southwest gradient at rate of approximately 0.0035 ft/ft, similar to previous findings.

4.2 Groundwater Analytical Results

On-Site Groundwater Results

PCE and vinyl chloride were not detected in any groundwater samples. TCE was detected in 3 of 7 wells ranging in concentration from 1.4 µg/L (MW-FP7B) to 52 µg/L (MW-FP4A). Concentrations of cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCE were detected in MW-FP4A at 37, 2.6, 0.6 µg/L, respectively. MW-FP4A is located immediately downgradient of the former frog pond. These constituents were not detected in any other well. A comparison of these results against ESLs indicates TCE exceeded the screening level in two wells (MW-FP4A and MW-9), and cis-1,2-DCE exceeded the ESL in one well (MW-FP4A). VOC results are summarized in Table 2 and displayed on Figure 4.

Most dissolved metals analytic results were non-detect; where detected, results were typically above the corresponding ESL (Table 3). Cr-VI concentrations ranged from 10 µg/L (MW-FP2, MW-FP3) to 37,000 µg/L (MW-FP4A). The highest Cr-VI concentrations were detected in MW-FP4A, MW-FP5, and MW-9, all downgradient of the former frog pond. In contrast, low concentrations of Cr-VI were detected in the two deep wells, MW-FP4B and MW-FP7B, consistent with previous findings and the result of low vertical hydraulic conductivity and effective porosity (BASELINE, 2010). Cr-VI results exceeded the ESL (0.002 µg/L) in all wells. Dissolved metals results are summarized in Table 3 and Cr-VI results are displayed on Figure 5.

Off-Site Groundwater Results

TCE was detected in MW-4 at 2.2 µg/L, which is less than half the ESL. No other VOCs were detected in off-Site wells. VOC results are summarized in Table 2 and displayed on Figure 4.

Most dissolved metals results were non-detect. Only arsenic and barium were detected in off-Site wells and at concentrations below the ESLs. Chromium and Cr-VI were not detected in any off-Site well. Dissolved metals results are summarized in Table 3 and Cr-VI results are displayed on Figure 5.

4.3 Biochemical Parameter Evaluation

To begin evaluating potential in-situ remedial alternatives for the former Frog Pond area, SGI collected an additional sample from MW-FP4A for biochemical parameters analyses. The sample from MW-FP4A was analyzed for alkalinity, sulfate, iron (ferrous, ferric), salinity, manganese, total organic carbon (TOC), and dissolved organic carbon (DOC). The results of biochemical parameter analyses, along with field parameters dissolved oxygen (DO), oxygen release potential (ORP), pH, and temperature were reviewed against known parameters favorable for reducing concentrations of VOCs and Cr-VI via natural degradation. Review of the field and laboratory biochemical parameter data indicated that the current aquifer conditions are aerobic and not conducive to natural degradation.

5.0 WELL SURVEY

As requested by ACEH in its July 3, 2014 conditional Work Plan approval letter (Appendix A), an updated well survey was conducted for the Site. To complete the request, a 2000-foot radius well survey records release form signed by ACEH was submitted to the California Department of Water Resources and Alameda County Public Works Department. A review of the well logs indicates no new domestic, industrial, municipal, or agricultural water supply wells have been installed within the search radius since the previous 1990 survey. Because these records are not publically available, copies of well logs are not included in this report.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical results of the groundwater samples collected during this investigation indicate the following:

- Groundwater during Q1 2015 flowed toward the southwest at a gradient of approximately 0.0035 ft/ft. Given the southwest gradient, the Safety-Kleen site was more cross-gradient than down-gradient of the Site during Q1 2015.
- TCE was detected in 3 of 7 groundwater samples at or below concentrations from the last sampling event in 2010. Only two wells, MW-FP4A and MW-9, contained TCE concentrations exceeding the ESL (5.0 µg/L) at 52 and 6.6 µg/L, respectively. While minor concentrations of TCE daughter products are present in MW-FP4A, the general lack of degradation products over time in other wells suggests a non-reductive, aerobic environment. TCE was detected in only one Safety-Kleen well, MW-4, at 2.2 µg/L, which is below the ESL.
- The maximum Cr-VI concentration was detected in shallow screened well MW-FP4A at 37,000 µg/L, a significant decrease from 460,000 µg/L detected in 2010. The Cr-VI concentration detected in adjacent, deep-screened well MW-FP4B was 10 µg/L, a reduction from 30 µg/L detected in 2010. Concentrations of Cr-VI in both shallow and deep wells exhibit a strong decreasing trend with time. Cr-VI was not detected in any Safety-Kleen wells.
- Biochemical parameter data along with field data indicate that aquifer conditions are currently aerobic and not conducive to natural degradation.

Based on the information presented herein, the following activities are recommended:

- Locate missing well, MW-FP6.
- Perform a semi-annual round of monitoring and sampling in July 2015 to capture seasonal variations in groundwater and chemical characteristics.
- Evaluate source reduction options based on the sampling results that indicate COC concentrations reduce relatively rapidly as they migrate off-Site.

7.0 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.

8.0 REFERENCES

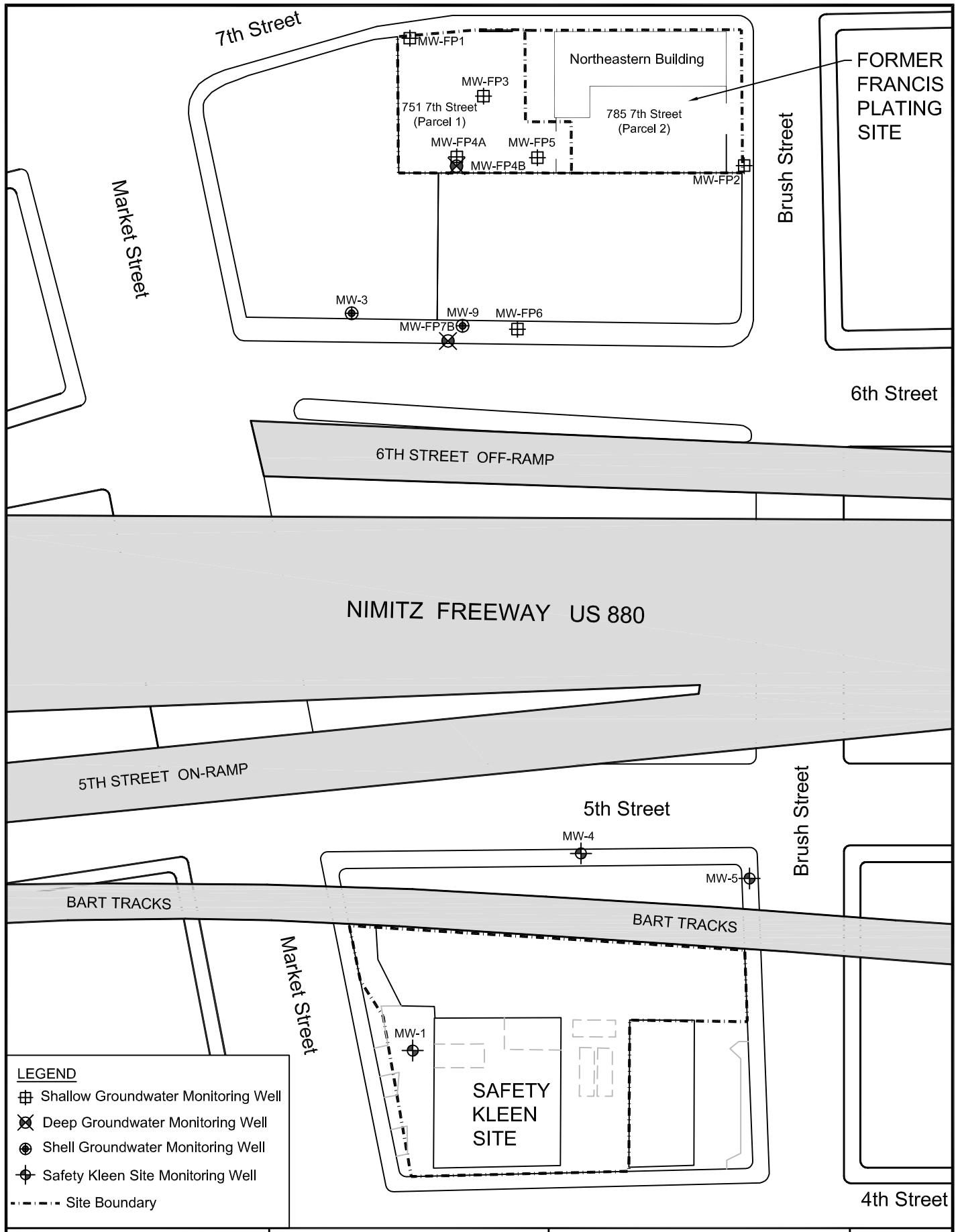
- BASELINE Environmental Consulting (BASELINE). 2005. Site History and Data Summary Report, 785 7th Street, Oakland, California. January 10.
- BASELINE. 2008. Documentation of Frog Pond Removal Activities, 751-785 Seventh Street, Oakland, California. February 29.
- BASELINE. 2010. Phase IV Soil and Groundwater 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.
- Safety-Kleen Corporation. 1990. RCRA Facility Assessment. 404 Market Street, Oakland, California. September.

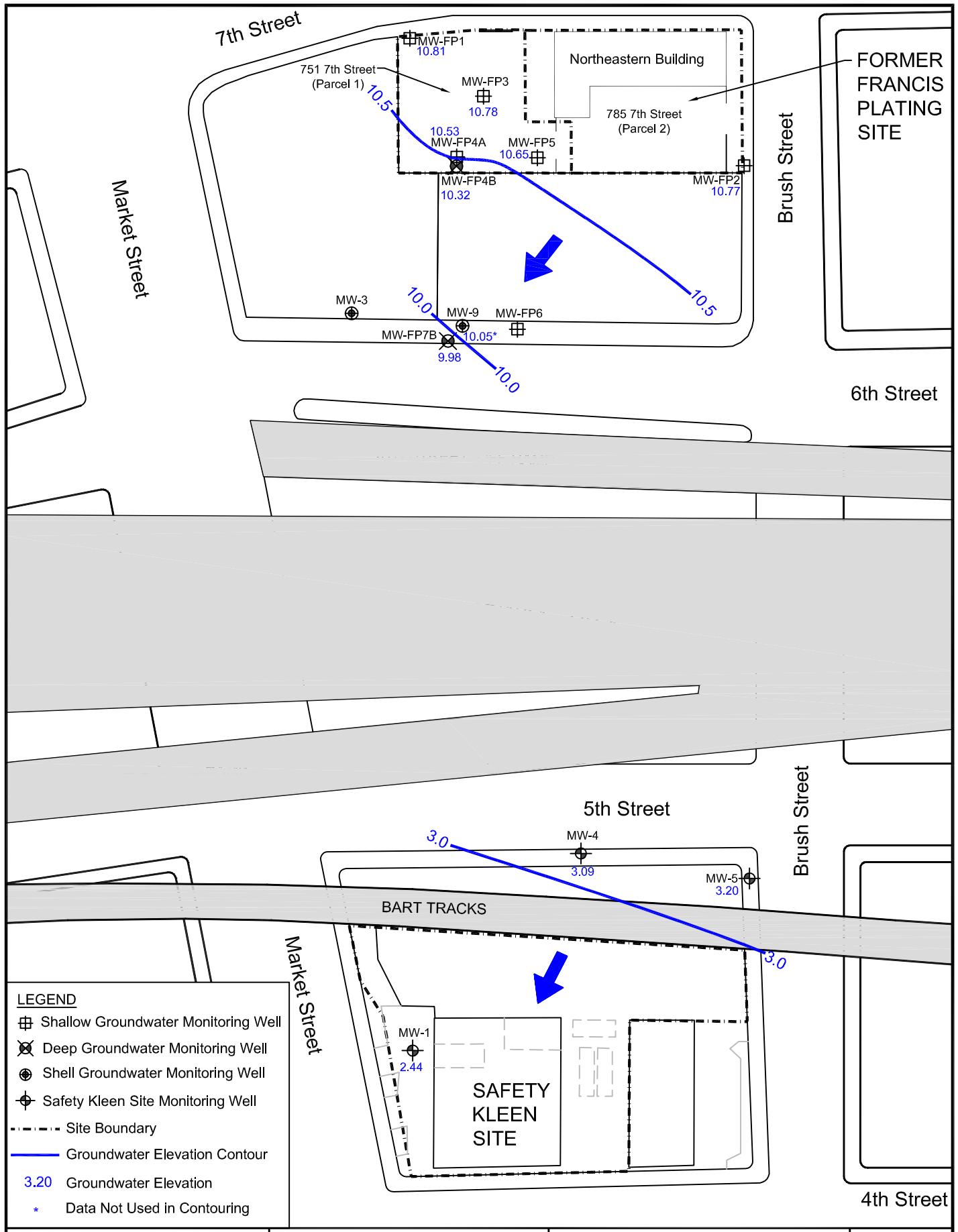
APPENDIX C

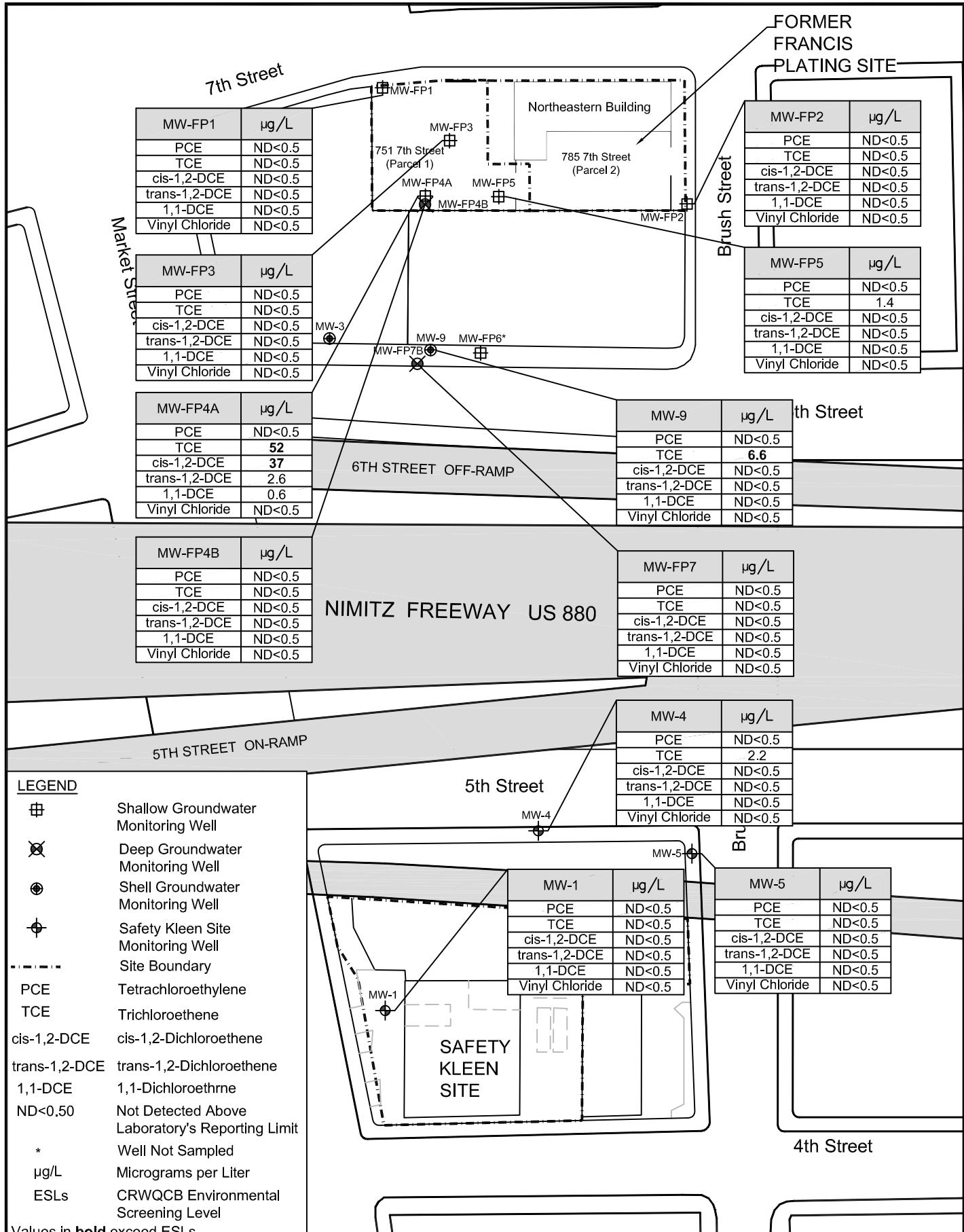
LABORATORY ANALYTICAL DATA – GROUNDWATER

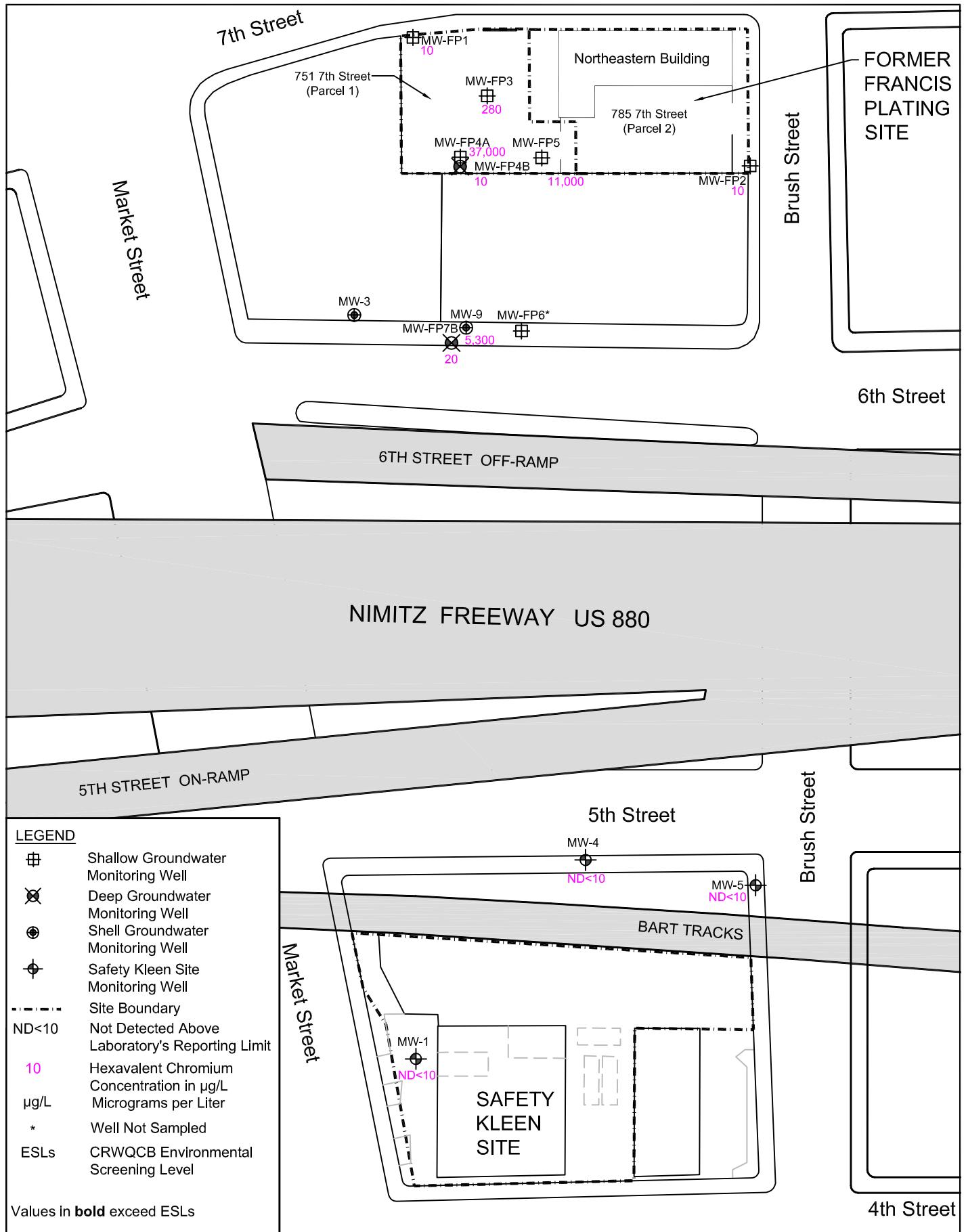
FIGURES











SGI <small>environmental</small> THE SOURCE Group, Inc. 3478 BUSKIRK AVENUE, SUITE 100 PLEASANT HILL, CA 94523	FORMER FRANCIS PLATING SITE OAKLAND, CALIFORNIA				HEXAVALENT CHROMIUM CONCENTRATIONS IN GROUNDWATER - Q1 2015		FIGURE 5
PROJECT NO.	DATE	DR.BY:	APP. BY:	 HORIZONTAL SCALE IN FEET			
01-FP-003	02/04/2015	ZA	MS	0	100	200	

TABLES

Table 1
Groundwater Monitoring Well Elevation Measurements -
January 2015
Former Francis Plating Site
751 7th Street
Oakland, California

Well ID	Sample Date	DTW	TOC ¹	GWE
ON-SITE				
MW-FP1	1/5/2015	14.95	25.77	10.82
MW-FP2	1/6/2015	13.04	23.81	10.77
MW-FP3	1/5/2015	14.88	25.66	10.78
MW-FP4A	1/5/2015	15.11	25.64	10.53
MW-FP4B	1/5/2015	15.12	25.44	10.32
MW-FP5	1/5/2015	15.04	25.69	10.65
MW-FP6	1/5/2015	Unable to locate		
MW-FP7B	1/5/2015	10.53	20.51	9.98
MW-9	1/5/2015	10.98	21.03	10.05
OFF-SITE				
MW-1	1/6/2015	5.55	7.99	2.44
MW-4	1/6/2015	7.23	10.32	3.09
MW-5	1/6/2015	7.08	10.28	3.20

Notes:

TOC = Top of casing (feet above mean sea level)

DTW = Depth to water (measured in feet from top of casing)

DTB = Depth to bottom of well (measured in feet from top of casing)

GWE = Groundwater elevation (feet above mean sea level)

¹ = Elevation datum is North American Vertical Datum of 1988 (NAVD88).

Table 2
Summary of Groundwater VOC Analytical Results -
January 2015
Former Francis Plating Site
751 7th Street
Oakland, California

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
ON-SITE							
MW-FP1	1/5/2015	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
MW-FP3	1/5/2015	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
MW-FP4B	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	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
MW-FP6	1/5/2015	-	-	-	-	-	-
MW-FP7B	1/5/2015	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-9	1/5/2015	ND<0.5	6.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5
OFF-SITE							
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
ESLs		5.0	5.0	6.0	11	6.0	0.5

Notes:

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

Values in **bold** exceed Commercial ESLs

Table 3
Summary of Groundwater Dissolved Metals Analytical Results -
January 2015
 Former Francis Plating Site
 751 7th Street
 Oakland, California

Well ID	Sample Date	Antimony	Arsenic	Barium	Chromium (Total)	Chromium (Hexavalent)	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													
MW-FP1	1/5/2015	ND<10	ND<5.0	44	5.2	10	ND<5.0	ND<5.0	ND<0.20	ND<5.0	31	ND<5.0	ND<20
MW-FP2	1/6/2015	ND<10	ND<5.0	32	16	10	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
MW-FP3	1/5/2015	ND<10	ND<5.0	45	270	280	ND<5.0	ND<5.0	ND<0.20	ND<5.0	19	5.2	ND<20
MW-FP4A	1/5/2015	44	ND<5.0	38	38,000	37,000	9.7	38	ND<0.20	14	330	ND<5.0	59
MW-FP4B	1/5/2015	ND<10	ND<5.0	24	11	10	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	8.9	ND<20
MW-FP5	1/5/2015	16	ND<5.0	55	14,000	11,000	ND<5.0	ND<5.0	ND<0.20	6.0	12	ND<5.0	ND<20
MW-FP6	1/5/2015	-	-	-	-	-	-	-	-	-	-	-	-
MW-FP7B	1/5/2015	ND<10	ND<5.0	16	20	20	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	12	ND<20
MW-9	1/5/2015	ND<10	ND<5.0	44	5,400	5,300	ND<5.0	ND<5.0	ND<0.20	ND<5.0	15	ND<5.0	ND<20
OFF-SITE													
MW-1	1/6/2015	ND<10	6.4	52	ND<5.0	ND<10	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	5.2	35	ND<5.0	ND<10	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<5.0	48	ND<5.0	ND<10	ND<5.0	ND<5.0	ND<0.20	ND<5.0	ND<5.0	ND<5.0	ND<20
ESLs		6.0	10	100	50	0.002	3.0	3.1	0.025	78	82	19	81

Notes:

µg/L = Micrograms per liter

ND<0.10 =Analyte not detected above laboratory reporting limit

- = Not sampled

NA = Not analyzed

ESLs = CRWQCB Environmental Screening Levels

Values in **bold** exceed Commercial ESLs

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

July 3, 2014

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, 751-785 7th Street, Oakland, CA 94607

Dear Mr. McCoy:

Alameda County Environmental Health (ACEH) staff has reviewed the Spills, Leaks, Investigation, and Cleanup (SLIC) case file for the above referenced site including the recently submitted document entitled, "Groundwater Delineation Work Plan, Former Francis Plating Site, 751-785 Seventh Street, Oakland, California," dated June 2, 2014 (Work Plan). The Work Plan, which was prepared on your behalf by The Source Group, Inc., (SGI) proposes sampling of on-and off-site wells as an initial step in delineation of the extent of dissolved metals and volatile organic compounds in groundwater downgradient from the site. The proposed sampling of existing wells is an initial step in the delineation. Additional activities are expected to be necessary following the proposed sampling of existing wells.

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. **Sampling of Wells at Safety Kleen Site.** We concur with sampling of existing monitoring wells at the Safety Kleen site. However, we request that groundwater samples be collected for analysis from monitoring wells MW-1, MW-4, and MW-5 at the Safety Kleen site. The Work Plan currently proposes sampling of only well MW-4. Please present the results in the Preliminary Groundwater Assessment Report requested below.
2. **Clarification of Laboratory Analysis.** The Work Plan indicates that the groundwater samples will be analyzed for dissolved metals. For clarification, we request that the groundwater samples be analyzed for the 18 dissolved metals shown in Table 11 of the Work Plan, which includes Chromium VI.

Mr. Tom McCoy
RO0002586
July 3, 2014
Page 2

3. **Well Survey.** The Sensitive Receptor Survey section of the Work Plan cites a 1990 review of well logs that was performed for the Safety Kleen site and concludes that no wells are likely present. This analysis is does not meet the requirements for a valid well survey. Please complete a valid well survey and present the results in the Preliminary Groundwater Assessment Report requested below.
4. **GeoTracker Submittals.** ACEH has uploaded the "Groundwater Delineation Work Plan, Former Francis Plating Site, 751-785 Seventh Street, Oakland, California," dated June 2, 20H14 to the State Water Resource Control Board (SWRCB) GeoTracker website in order to keep the online case file up to date. As described in the attached Responsible Party(ies) Legal Requirements/Obligations, all technical reports must be submitted to both the ACEH ftp site and the GeoTracker website. Therefore, please upload all future reports to the ACEH ftp site and the GeoTracker website. **In the future, ACEH will not review documents until all uploads are complete.** Pursuant to CCR Sections 2729 and 2729.1, beginning July 1, 2005 for SLIC cases, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Additionally, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website.

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:

- **October 8, 2014 – Preliminary Groundwater Assessment Report**
File to be named: GWM_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,



Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County Environmental
Health, ou, email=jerry.wickham@acgov.org, c=US
Date: 2014.07.03 10:47:59 -07'00'

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

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

Mr. Tom McCoy
RO0002586
July 3, 2014
Page 3

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

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

Matthew Sutton, The Source Group, Inc., 3478 Buskirk Avenue, Suite100, Pleasant Hill, CA 94523 (*Sent via E-mail to: msutton@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
SAMPLING FIELD FORMS

WELL GAUGING DATA

Project # 150105 - GR1 Date 01/05/2015 Client SOF

Site Former Francis Plating - Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-FP1	0942	2		—	—	—	14.95	24.91		
MW-FP2	1140	2		—	—	—	13.04	24.90		
MW-FP3	1230	2		—	—	—	14.88	24.93		
MW-FP4A	1028	2		—	—	—	15.11	24.93		
MW-FP4B	1030	2		—	—	—	15.12	56.68		
MW-FP5	1310	2		—	—	—	15.04	24.96		
MW-FP6		Unable to Locate. Burried under gravel								
MW-FP7B	0752	2		—	—	—	10.53	49.00		
MW-1	0942	2		—	—	—	5.55	22.02		
MW-4	0805	2		—	—	—	7.23	25.00		
MW-5	0857	2		—	—	—	7.08	29.02		
MW-9	0857	2		—	—	—	10.98	24.52		

LOW FLOW WELL MONITORING DATA SHEET

Project #:	150105-GR1	Client:	SGI
Sampler:	GR	Start Date:	01/05/2015
Well I.D.:	MW-FP1	Well Diameter:	(2) 3 4 6 8
Total Well Depth:	24.91	Depth to Water	Pre: 14.95 Post: 15.03
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: 452 ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Flow Rate: 200 ml/min @ 0951 Pump Depth: 20'

Time	Temp. (C or °F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0954	17.7	6.20	515	11	0.68	185.6	600	15.02
0957	18.7	6.19	515	8	0.41	181.3	1200	15.03
1000	18.9	6.19	523	7	0.36	179.2	1800	15.03
1003	19.0	6.20	532	6	0.33	177.0	2400	15.03
1006	18.8	6.21	539	5	0.31	174.9	3000	15.03
1009	18.8	6.21	542	5	0.29	173.1	3600	15.03

Did well dewater? Yes No Amount actually evacuated: 3600 ml

Sampling Time: 1012 Sampling Date: 01/05/2015

Sample I.D.: MW-FP1 Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other See COL

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	150105-GR1	Client:	SGI
Sampler:	GR	Start Date:	01/06/2015
Well I.D.:	MW-FP2	Well Diameter:	(2) 3 4 6 8
Total Well Depth:	24.90	Depth to Water	Pre: 13.04 Post: 13.07
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: USI ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Flow Rate: 200 ml /min @ 145 Pump Depth: _____

Time	Temp. (C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1148	18.5	6.52	323	2	2.50	86.9	600	13.05
1157	19.1	6.52	313	2	2.41	93.8	1200	13.06
1154	19.3	6.52	309	1	2.37	99.6	1800	13.06
1157	19.4	6.57	307	2	2.40	103.4	2400	13.07
1200	19.5	6.57	308	1	2.31	107.0	3000	13.07

Did well dewater? Yes No Amount actually evacuated: 3000 ml

Sampling Time: 1203 Sampling Date: 01/06/05

Sample I.D.: MW-FP2 Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	150105 - GR1	Client:	SGE
Sampler:	GR	Start Date:	01/05/2015
Well I.D.:	MW-FP3	Well Diameter:	(2) 3 4 6 8
Total Well Depth:	24.93	Depth to Water	Pre: 14.88 Post: 15.08
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSE ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Flow Rate: 200 ml/min Q 1234 Pump Depth: _____

Time	Temp. °C or °F	pH	Cond. (mS or μ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or ml)	DTW / Observations
1237	19.4	6.38	791	7	2.63	182.2	600	15.02
1240	20.0	6.29	787	8	2.49	200.2	1200	15.05
1243	20.3	6.28	790	6	2.44	207.3	1800	15.08
1246	20.2	6.28	792	5	2.61	210.3	2400	15.08
1249	20.1	6.28	791	5	2.62	214.6	3000	15.08

Did well dewater? Yes No Amount actually evacuated: 3000 ml

Sampling Time: 1252 Sampling Date: 01/05/15

Sample I.D.: MW-FP3 Laboratory: TA-EF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See Log

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105-GR1	Client: STB
Sampler: GR	Start Date: 01/05/2015
Well I.D.: MW-FP4A	Well Diameter: (2) 3 4 6 8
Total Well Depth: 24.93	Depth to Water Pre: 15.11 Post: 15.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade: Flow Cell Type: YSI ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Flow Rate: 200 ml/min @ 10.34 Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1037	18.0	6.20	1736	15	0.65	217.8	600	15.12
1040	18.2	6.21	1806	12	0.57	226.2	1200	15.14
1043	18.5	6.22	1828	11	0.40	230.2	1800	15.12
1046	18.6	6.24	1826	13	0.35	231.4	2400	15.12
1049	18.6	6.25	1808	12	0.34	232.2	3000	15.12
1052	18.8	6.26	1795	14	0.32	232.9	3600	15.12

Did well dewater? Yes No Amount actually evacuated: 3600 ml

Sampling Time: 1055 Sampling Date: 01/05/15

Sample I.D.: MW-FP4A Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see loc

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105 - GR1	Client: SGT
Sampler: GR	Start Date: 01/05/2015
Well I.D.: MW-FP 4B	Well Diameter: (2) 3 4 6 8
Total Well Depth: 56.68	Depth to Water Pre: 15.12 Post: 15.41
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Flow Cell Type: YSI ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Flow Rate: 200 ml/min @ 115 Pump Depth:

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1118	17.5	7.10	475	12	0.33	9.0	600	15.34
1121	17.8	7.05	509	4	0.25	45.4	1200	15.37
1124	17.9	7.04	530	3	0.22	63.4	1800	15.38
1127	17.7	7.04	532	3	0.20	71.4	2400	15.39
1130	17.7	7.04	529	2	0.19	75.8	3000	15.40
1133	18.1	7.04	525	2	0.19	80.1	3600	15.41

Did well dewater? Yes No Amount actually evacuated: 3600 ml

Sampling Time: 1136 Sampling Date: 01/05/15

Sample I.D.: MW-FP 4B Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	150105-GR1	Client:	SGI
Sampler:	GR	Start Date:	01/05/2015
Well I.D.:	MW-FPS	Well Diameter:	(2) 3 4 6 8
Total Well Depth:	24.96	Depth to Water	Pre: 15.04 Post: 15.23
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: 458 Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Flow Rate: 200 ml/min @ 1312 Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1315	18.6	6.88	541	7	5.21	180.8	600	15.18
1318	18.7	6.88	526	6	5.31	181.5	1200	15.19
1321	18.8	6.87	525	4	5.23	180.7	1800	15.20
1324	18.9	6.86	526	4	5.35	180.3	2400	15.22
1327	18.8	6.85	528	3	5.27	180.4	3000	15.23

Did well dewater? Yes No Amount actually evacuated: 3000 m³

Sampling Time: 1330 Sampling Date: 01/05/15

Sample I.D.: MW-FPS Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	150105-GR1	Client:	SGI
Sampler:	GR	Start Date:	01/05/2015
Well I.D.:	MW-FP 7B	Well Diameter:	② 3 4 6 8
Total Well Depth:	49.00	Depth to Water	Pre: 10.53 Post: 10.65
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: 4SI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Flow Rate: 200 ml/min @ 0.757 Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0800	16.9	6.99	494	2	0.86	107.3	600	10.63
0803	17.2	6.92	367	3	0.85	124.7	1200	10.65
0806	17.4	6.84	336	2	0.83	133.9	1800	10.65
0809	18.0	6.81	333	4	0.82	135.5	2400	10.65
0812	17.9	6.81	333	3	0.81	135.9	3000	10.65

Did well dewater? Yes No Amount actually evacuated: 3000 ml

Sampling Time: 0815 Sampling Date: 01/05/15

Sample I.D.: MW-FP 7B Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105 - GR 1	Client: SGI
Sampler: GR	Start Date: 01/06/2015
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 22.02	Depth to Water Pre: 5.53 Post:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Flow Cell Type: YSI ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Flow Rate: 200 ml/min @ 0.49 Pump Depth: 18'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0952	16.7	6.69	800	22	1.47	172.4	600	5.93
0955	16.8	6.70	819	26	1.31	163.8	1200	5.94
0958	17.0	6.70	815	23	1.18	156.9	1800	5.96
1001	17.0	6.69	807	12	1.08	144.1	2400	5.97
1004	17.1	6.69	808	13	1.03	119.5	3000	5.98
1007	17.1	6.68	806	13	0.88	108.2	3600	5.95
1010	17.0	6.68	803	10	0.89	87.7	4200	5.95
1013	17.1	6.68	800	10	0.86	79.0	4800	5.95
1016	17.1	6.67	800	8	0.85	52.2	5400	5.95
1019	17.1	6.67	799	9	0.83	41.2	6000	5.95
1022	17.1	6.66	795	9	0.75	39.6	6600	5.93

Did well dewater? Yes No Amount actually evacuated: 6600 ml

Sampling Time: 1022 Sampling Date: 01/06/2015

Sample I.D.: MW-1 Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105 - GR1	Client: SGI
Sampler: GR	Start Date: 01/06/2015
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8
Total Well Depth: 25.00	Depth to Water Pre: 7.23 Post:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Flow Cell Type: YSL Pro Plus

Purge Method: **2" Grundfos Pump** **Peristaltic Pump**
 Sampling Method: **Dedicated Tubing** **New Tubing**
 Other _____

Flow Rate: **200 ml/min @ 0814** Pump Depth: **20.6**

Time	Temp. °C or °F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0817	16.1	6.81	927	5-	5.94	220.2	600	7.31
0820	16.9	6.47	1016	7	6.01	215.1	1200	7.25
0823	17.0	6.34	1050	7	6.00	209.6	1800	7.27
0826	16.8	6.29	1061	6	5.91	207.8	2400	7.27
0829	16.9	6.25	1065	7	5.63	207.3	3000	7.27

Did well dewater? Yes **No** Amount actually evacuated: **3000 ml**

Sampling Time: **0832** Sampling Date: **01/06/2014**

Sample I.D.: **MW-4** Laboratory: **TA-SR**

Analyzed for: **TPH-G BTEX MTBE TPH-D** Other: **see COC**

Equipment Blank I.D.: **@ Time** Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105 - GR1	Client: SGR
Sampler: GR	Start Date: 01/06/2015
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8
Total Well Depth: 29.02	Depth to Water Pre: 7.08 Post: 7.14
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Flow Rate: 200 ml/min @ 0904 Pump Depth: 25'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0907	15.6	6.63	576	8	1.86	192.2	600	7.13
0910	16.0	6.63	578	5	1.72	193.0	1200	7.14
0913	16.2	6.62	574	4	1.63	192.3	1800	7.14
0916	16.4	6.62	574	3	1.54	191.7	2400	7.15
0919	16.0	6.62	575	4	1.53	190.6	3000	7.14

Did well dewater? Yes No Amount actually evacuated: 3000 ml

Sampling Time: 0922 Sampling Date: 01/06/2015

Sample I.D.: MW-5 Laboratory: TA-SF

Analyzed for: TPH-G BTEX MTBE TPH-D Others See Col

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 150105 - GR1	Client: SGE
Sampler: GR	Start Date: 01/05/2015
Well I.D.: MW-FP6 MW-9	Well Diameter: ② 3 4 6 8
Total Well Depth: 24.52	Depth to Water Pre: 10.98 Post: 11.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade: Flow Cell Type: 4SI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump
 Sampling Method: Dedicated Tubing Bladder Pump
 New Tubing Other
 Flow Rate: 200 ml/min @ 0.858 Pump Depth: 20'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or ml)	DTW / Observations
0801	16.2	6.18	958	14-	3.48	181.0	600	11.06
0904	16.6	6.16	1063	12	3.17	186.6	1200	11.10
0907	16.8	6.16	1080	14	3.17	190.6	1800	11.10
0910	17.1	6.16	1079	14	3.27	193.3	2400	11.10
0913	17.1	6.16	1083	13	3.24	195.5	3000	11.10

Did well dewater? Yes No Amount actually evacuated: 3000 ml

Sampling Time: 0916 Sampling Date: 01/05/2015

Sample I.D.: ~~MW-FP6~~ MW-9 Laboratory: TA SF

Analyzed for: TPH-G BTEX MTBE TPH-D Other see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

TEST EQUIPMENT CALIBRATION LOG

WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client SGI Date 01/05/2015

Site Address Former Francis Platiny - Oakland, CA

Job Number 150105 - GR1 Technician GR

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-FP1					X			
MW-FP2					X			
MW-FP3					X			
MW-FP4A					X			
MW-FP4B					X			
MW-FP5					X X			
MW-FP6					Unable to locate well			
MW-FP7B					X			
MW-1								
MW-4								
MW-5								
MW-9					X			

NOTES:

APPENDIX C

LABORATORY ANALYTICAL DATA – GROUNDWATER



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

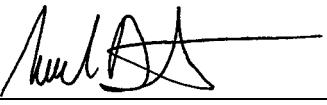
**Laboratory Job Number 263689
ANALYTICAL REPORT**

The Source Group, Inc.
3478 Buskirk Ave
Pleasant Hill, CA 94523

Project : 01-FP-001
Location : Francis Plating
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-FP7B	263689-001
MW-9	263689-002
MW-FP1	263689-003
MW-FP4A	263689-004
MW-FP4B	263689-005
MW-FP3	263689-006
MW-FP5	263689-007

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: 

Date: 01/20/2015

Mike J. Dahlquist
Project Manager
mike.dahlquist@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: **263689**
Client: **The Source Group, Inc.**
Project: **01-FP-001**
Location: **Francis Plating**
Request Date: **01/05/15**
Samples Received: **01/05/15**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 01/05/15. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Metals (EPA 6010B) Water:

High recovery was observed for iron in the MS for batch 219207; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A) Filtrate:

No analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):

No analytical problems were encountered.

Salinity (SM2520B):

No analytical problems were encountered.

Alkalinity (SM2320B):

No analytical problems were encountered.

Total Organic Carbon (TOC) (SM5310C):

No analytical problems were encountered.

Dissolved Organic Carbon (DOC) (SM5310C):

No analytical problems were encountered.

Ferrous Iron (Fe+2) (SM3500FE-B):

No analytical problems were encountered.

Ferric Iron (Fe+3) (SM3500-FE):

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

C&T LOGIN # 203689

Page 1 of _____

Chain of Custody # SM2520B

Project No: 01-FP-001

Sampler: Albert Simmals

Project Name: Francis Plating

Report To: Matt Sutton

Project P. O. No: 01-FP-001

Company: The Source Group, Inc.

EDD Format: Report Level II III IV

Telephone: (925) 951-6386

Turnaround Time: RUSH

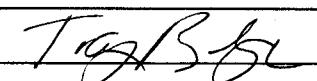
Standard

Email: msutton@thesourcegroup.net

Lab No.	Sample ID.	SAMPLING		# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected		HCl	H2SO4	HNO3	NaOH	None
MW-FP7B	1/5/2015	0815	X	5	3		1		1
MW-9		0916	X	5	3		1		1
MW-FP1		012	X	5	3		1		1
MW-FP4A		1055	X	9	4	1	1	3	
MW-FP4B		1136	X	5	3		1		1
MW-FP3		1252	X	5	3		1		1
MW-FP5		1330	X	5	3		1		1

ANALYTICAL REQUEST									
VOCs	8860B	*	ICAM 17 metals	6010B					
X	X	X	Xek chrome	7194A					
X	X	X	Alkalinity	2320B					
X	X	X	Nitrate, sulfate, chloride	3000D					
X	X	X	Salinity	3500E					
X	X	X	TOC/DOC	SW 5310 C					
X	X	X	Manganese	6010B (Total)					
X	X	X	Ferric/ferric Fe	SW3500Fe-D					

Notes: *Field filtered (.45)

SAMPLE RECEIPT <input type="checkbox"/> Intact <input type="checkbox"/> Cold <input checked="" type="checkbox"/> On Ice <input type="checkbox"/> Ambient	RELINQUISHED BY:		RECEIVED BY:	
	 DATE: <u>1/5/15</u> TIME: <u>1415</u>		 DATE: <u>1/5/15</u> TIME: <u>1410</u>	

COOLER RECEIPT CHECKLIST



Login # 263689 Date Received 01/05/15 Number of coolers 1
 Client The Source Group Project 01-FP-001

Date Opened 01/05 By (print) FB (sign) JJ
 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) 0.8

Samples Received on ice & cold without a temperature blank; temp. taken with 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? 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

(5) Transferred to personnel w/ HNO3 (#58770) on 1/5/15 @ 1505 hr -004

Curtis & Tompkins Sample Preservation for 263689

Sample	pH:	<2	>9	>12	Other
-001a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-002a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-003a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-004a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		X	[]	[]	_____
e		[]	[]	[]	_____

Sample	pH:	<2	>9	>12	Other
f		[]	[]	[]	_____
g		[]	[]	[]	_____
h		[]	[]	[]	_____
i		[]	[]	[]	_____
j		[]	[]	[]	_____
-005a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-006a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-007a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____

Analyst: _____

Date: _____

Page 1 of 1

Detections Summary for 263689

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

Client : The Source Group, Inc.
 Project : 01-FP-001
 Location : Francis Plating

Client Sample ID : MW-FP7B Laboratory Sample ID : 263689-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Chloroform	20		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	16		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	20		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	12		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	0.02		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-9 Laboratory Sample ID : 263689-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Trichloroethene	6.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	44		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	5,400		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	15		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	5.3		0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Client Sample ID : MW-FP1 Laboratory Sample ID : 263689-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	44		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	5.2		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	31		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	0.01		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP4A

Laboratory Sample ID :

263689-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	2.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	37		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	52		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Iron	130		100	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Manganese	600		5.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Antimony	44		10	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	38		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	38,000		50	ug/L	DISS.	10.00	EPA 6010B	METHOD
Cobalt	9.7		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Copper	38		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	14		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	330		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Zinc	59		20	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chloride	33		4.0	mg/L	TOTAL	20.00	EPA 300.0	METHOD
Nitrogen, Nitrate	98		1.0	mg/L	TOTAL	20.00	EPA 300.0	METHOD
Sulfate	240		10	mg/L	TOTAL	20.00	EPA 300.0	METHOD
Alkalinity, Bicarbonate	180		4.0	mg/L	TOTAL	4.000	SM2320B	METHOD
Alkalinity, Total as CaCO ₃	180		4.0	mg/L	TOTAL	4.000	SM2320B	METHOD
Dissolved Organic Carbon	3.6		1.0	mg/L	TOTAL	1.000	SM5310C	METHOD
Ferric Iron (Fe+3)	0.13		0.10	mg/L	TOTAL	1.000	SM3500FE-B	METHOD
Hexavalent Chromium	37		1.0	mg/L	TOTAL	100.0	EPA 7196A	METHOD
Salinity	0.90		0.50	S	TOTAL	1.000	SM2520B	
Total Organic Carbon	3.5		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : MW-FP4B

Laboratory Sample ID :

263689-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Chloroform	5.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	24		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	11		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	8.9		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	0.01		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP3

Laboratory Sample ID :

263689-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	45		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	270		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	19		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	5.2		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	0.28		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Client Sample ID : MW-FP5

Laboratory Sample ID :

263689-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Trichloroethene	1.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Antimony	16		10	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	55		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	14,000		500	ug/L	DISS.	100.0	EPA 6010B	METHOD
Molybdenum	6.0		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	12		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	11		0.10	mg/L	TOTAL	10.00	EPA 7196A	METHOD

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP7B	Batch#:	219116
Lab ID:	263689-001	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	20	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP7B	Batch#:	219116
Lab ID:	263689-001	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	219116
Lab ID:	263689-002	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	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	6.6	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	219116
Lab ID:	263689-002	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	107	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP1	Batch#:	219116
Lab ID:	263689-003	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	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.

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP1	Batch#:	219116
Lab ID:	263689-003	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	106	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP4A	Batch#:	219116
Lab ID:	263689-004	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	0.6	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	2.6	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	37	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	52	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP4A	Batch#:	219116
Lab ID:	263689-004	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	77-136
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP4B	Batch#:	219116
Lab ID:	263689-005	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	5.9	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP4B	Batch#:	219116
Lab ID:	263689-005	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	107	77-136
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP3	Batch#:	219116
Lab ID:	263689-006	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP3	Batch#:	219116
Lab ID:	263689-006	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	106	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP5	Batch#:	219116
Lab ID:	263689-007	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	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	1.4	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

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP5	Batch#:	219116
Lab ID:	263689-007	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Analyzed:	01/06/15
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	106	77-136
1,2-Dichloroethane-d4	108	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	219116
Units:	ug/L	Analyzed:	01/06/15
Diln Fac:	1.000		

Type: BS Lab ID: QC772145

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.25	90	65-134
Benzene	12.50	12.65	101	80-124
Trichloroethene	12.50	12.23	98	80-120
Toluene	12.50	12.67	101	80-122
Chlorobenzene	12.50	12.59	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC772146

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.37	91	65-134	1	20
Benzene	12.50	12.58	101	80-124	1	20
Trichloroethene	12.50	12.35	99	80-120	1	20
Toluene	12.50	12.53	100	80-122	1	20
Chlorobenzene	12.50	12.64	101	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Page 1 of 1

17.0

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772147	Batch#:	219116
Matrix:	Water	Analyzed:	01/06/15
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

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772147	Batch#:	219116
Matrix:	Water	Analyzed:	01/06/15
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	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

RL= Reporting Limit

Metals Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	01-FP-001	Analysis:	EPA 6010B
Field ID:	MW-FP4A	Batch#:	219207
Matrix:	Water	Sampled:	01/05/15
Units:	ug/L	Received:	01/05/15
Diln Fac:	1.000	Prepared:	01/08/15

Type: SAMPLE Analyzed: 01/09/15
 Lab ID: 263689-004

Analyte	Result	RL
Iron	130	100
Manganese	600	5.0

Type: BLANK Analyzed: 01/08/15
 Lab ID: QC772471

Analyte	Result	RL
Iron	ND	100
Manganese	ND	5.0

ND= Not Detected
 RL= Reporting Limit

Page 1 of 1

34.0

Batch QC Report

Metals Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	01-FP-001	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	219207
Units:	ug/L	Prepared:	01/08/15
Diln Fac:	1.000	Analyzed:	01/08/15

Type: BS Lab ID: QC772472

Analyte	Spiked	Result	%REC	Limits
Iron	10,000	10,220	102	79-120
Manganese	100.0	99.81	100	80-120

Type: BSD Lab ID: QC772473

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Iron	10,000	10,230	102	79-120	0 21
Manganese	100.0	103.1	103	80-120	3 20

RPD= Relative Percent Difference

Page 1 of 1

35.0

Batch QC Report
Metals Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 3010A
Project#:	01-FP-001	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	219207
MSS Lab ID:	263698-001	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	ug/L	Prepared:	01/08/15
Diln Fac:	10.00	Analyzed:	01/08/15

Type: MS Lab ID: QC772474

Analyte	MSS Result	Spiked	Result	%REC	Limits
Iron	28,900	10,000	43,570	147 *	66-127
Manganese	574.2	100.0	726.5	152 NM	70-128

Type: MSD Lab ID: QC772475

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Iron	10,000	37,970	91	66-127	14 21
Manganese	100.0	660.7	86 NM	70-128	9 20

* = Value outside of QC limits; see narrative

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP7B	Sampled:	01/05/15
Lab ID:	263689-001	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL	Batch#	Analysis
Antimony	ND	10	219226	EPA 6010B
Arsenic	ND	5.0	219226	EPA 6010B
Barium	16	5.0	219226	EPA 6010B
Beryllium	ND	2.0	219226	EPA 6010B
Cadmium	ND	5.0	219226	EPA 6010B
Chromium	20	5.0	219226	EPA 6010B
Cobalt	ND	5.0	219226	EPA 6010B
Copper	ND	5.0	219226	EPA 6010B
Lead	ND	5.0	219226	EPA 6010B
Mercury	ND	0.20	219209	EPA 7470A
Molybdenum	ND	5.0	219226	EPA 6010B
Nickel	ND	5.0	219226	EPA 6010B
Selenium	ND	10	219226	EPA 6010B
Silver	ND	5.0	219226	EPA 6010B
Thallium	ND	10	219226	EPA 6010B
Vanadium	12	5.0	219226	EPA 6010B
Zinc	ND	20	219226	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

21.1

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-9	Sampled:	01/05/15
Lab ID:	263689-002	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL	Batch#	Analysis
Antimony	ND	10	219226	EPA 6010B
Arsenic	ND	5.0	219226	EPA 6010B
Barium	44	5.0	219226	EPA 6010B
Beryllium	ND	2.0	219226	EPA 6010B
Cadmium	ND	5.0	219226	EPA 6010B
Chromium	5,400	5.0	219226	EPA 6010B
Cobalt	ND	5.0	219226	EPA 6010B
Copper	ND	5.0	219226	EPA 6010B
Lead	ND	5.0	219226	EPA 6010B
Mercury	ND	0.20	219209	EPA 7470A
Molybdenum	ND	5.0	219226	EPA 6010B
Nickel	15	5.0	219226	EPA 6010B
Selenium	ND	10	219226	EPA 6010B
Silver	ND	5.0	219226	EPA 6010B
Thallium	ND	10	219226	EPA 6010B
Vanadium	ND	5.0	219226	EPA 6010B
Zinc	ND	20	219226	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

22.1

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP1	Sampled:	01/05/15
Lab ID:	263689-003	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL	Batch#	Analysis
Antimony	ND	10	219226	EPA 6010B
Arsenic	ND	5.0	219226	EPA 6010B
Barium	44	5.0	219226	EPA 6010B
Beryllium	ND	2.0	219226	EPA 6010B
Cadmium	ND	5.0	219226	EPA 6010B
Chromium	5.2	5.0	219226	EPA 6010B
Cobalt	ND	5.0	219226	EPA 6010B
Copper	ND	5.0	219226	EPA 6010B
Lead	ND	5.0	219226	EPA 6010B
Mercury	ND	0.20	219209	EPA 7470A
Molybdenum	ND	5.0	219226	EPA 6010B
Nickel	31	5.0	219226	EPA 6010B
Selenium	ND	10	219226	EPA 6010B
Silver	ND	5.0	219226	EPA 6010B
Thallium	ND	10	219226	EPA 6010B
Vanadium	ND	5.0	219226	EPA 6010B
Zinc	ND	20	219226	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

23.1

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP4A	Sampled:	01/05/15
Lab ID:	263689-004	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Antimony	44	10	1.000	219226	01/09/15	EPA 6010B
Arsenic	ND	5.0	1.000	219226	01/09/15	EPA 6010B
Barium	38	5.0	1.000	219226	01/09/15	EPA 6010B
Beryllium	ND	2.0	1.000	219226	01/09/15	EPA 6010B
Cadmium	ND	5.0	1.000	219226	01/09/15	EPA 6010B
Chromium	38,000	50	10.00	219226	01/08/15	EPA 6010B
Cobalt	9.7	5.0	1.000	219226	01/09/15	EPA 6010B
Copper	38	5.0	1.000	219226	01/09/15	EPA 6010B
Lead	ND	5.0	1.000	219226	01/09/15	EPA 6010B
Mercury	ND	0.20	1.000	219209	01/08/15	EPA 7470A
Molybdenum	14	5.0	1.000	219226	01/09/15	EPA 6010B
Nickel	330	5.0	1.000	219226	01/09/15	EPA 6010B
Selenium	ND	10	1.000	219226	01/09/15	EPA 6010B
Silver	ND	5.0	1.000	219226	01/09/15	EPA 6010B
Thallium	ND	10	1.000	219226	01/09/15	EPA 6010B
Vanadium	ND	5.0	1.000	219226	01/09/15	EPA 6010B
Zinc	59	20	1.000	219226	01/09/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP4B	Sampled:	01/05/15
Lab ID:	263689-005	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL	Batch#	Analysis
Antimony	ND	10	219226	EPA 6010B
Arsenic	ND	5.0	219226	EPA 6010B
Barium	24	5.0	219226	EPA 6010B
Beryllium	ND	2.0	219226	EPA 6010B
Cadmium	ND	5.0	219226	EPA 6010B
Chromium	11	5.0	219226	EPA 6010B
Cobalt	ND	5.0	219226	EPA 6010B
Copper	ND	5.0	219226	EPA 6010B
Lead	ND	5.0	219226	EPA 6010B
Mercury	ND	0.20	219209	EPA 7470A
Molybdenum	ND	5.0	219226	EPA 6010B
Nickel	ND	5.0	219226	EPA 6010B
Selenium	ND	10	219226	EPA 6010B
Silver	ND	5.0	219226	EPA 6010B
Thallium	ND	10	219226	EPA 6010B
Vanadium	8.9	5.0	219226	EPA 6010B
Zinc	ND	20	219226	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP3	Sampled:	01/05/15
Lab ID:	263689-006	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL	Batch#	Analysis
Antimony	ND	10	219226	EPA 6010B
Arsenic	ND	5.0	219226	EPA 6010B
Barium	45	5.0	219226	EPA 6010B
Beryllium	ND	2.0	219226	EPA 6010B
Cadmium	ND	5.0	219226	EPA 6010B
Chromium	270	5.0	219226	EPA 6010B
Cobalt	ND	5.0	219226	EPA 6010B
Copper	ND	5.0	219226	EPA 6010B
Lead	ND	5.0	219226	EPA 6010B
Mercury	ND	0.20	219209	EPA 7470A
Molybdenum	ND	5.0	219226	EPA 6010B
Nickel	19	5.0	219226	EPA 6010B
Selenium	ND	10	219226	EPA 6010B
Silver	ND	5.0	219226	EPA 6010B
Thallium	ND	10	219226	EPA 6010B
Vanadium	5.2	5.0	219226	EPA 6010B
Zinc	ND	20	219226	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP5	Sampled:	01/05/15
Lab ID:	263689-007	Received:	01/05/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Antimony	16	10	1.000	219226	01/08/15	EPA 6010B
Arsenic	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Barium	55	5.0	1.000	219226	01/08/15	EPA 6010B
Beryllium	ND	2.0	1.000	219226	01/08/15	EPA 6010B
Cadmium	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Chromium	14,000	500	100.0	219226	01/09/15	EPA 6010B
Cobalt	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Copper	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Lead	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Mercury	ND	0.20	1.000	219209	01/08/15	EPA 7470A
Molybdenum	6.0	5.0	1.000	219226	01/08/15	EPA 6010B
Nickel	12	5.0	1.000	219226	01/08/15	EPA 6010B
Selenium	ND	10	1.000	219226	01/08/15	EPA 6010B
Silver	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Thallium	ND	10	1.000	219226	01/08/15	EPA 6010B
Vanadium	ND	5.0	1.000	219226	01/08/15	EPA 6010B
Zinc	ND	20	1.000	219226	01/08/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	219209
Lab ID:	QC772482	Prepared:	01/08/15
Matrix:	Filtrate	Analyzed:	01/08/15
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

28.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	219209
Matrix:	Water	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC772483	2.500	2.518	101	80-120		
BSD	QC772484	2.500	2.691	108	80-120	7	20

RPD= Relative Percent Difference

Page 1 of 1

29.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	219209
Field ID:	ZZZZZZZZZZ	Sampled:	01/06/15
MSS Lab ID:	263724-006	Received:	01/06/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC772485	<0.04000	2.500	2.474	99	57-127		
MSD	QC772486		2.500	2.453	98	57-127	1	42

RPD= Relative Percent Difference

Page 1 of 1

30.0

Batch QC Report
Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772549	Batch#:	219226
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15

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

Page 1 of 1

31.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	219226
Units:	ug/L	Prepared:	01/08/15
Diln Fac:	1.000	Analyzed:	01/08/15

Type: BS Lab ID: QC772550

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	80.89	81	78-120
Arsenic	100.0	98.92	99	80-120
Barium	100.0	100.9	101	80-120
Beryllium	100.0	103.4	103	80-120
Cadmium	100.0	107.9	108	80-120
Chromium	100.0	97.69	98	80-120
Cobalt	100.0	97.80	98	80-120
Copper	100.0	97.35	97	79-120
Lead	100.0	98.89	99	80-120
Molybdenum	100.0	98.42	98	80-120
Nickel	100.0	97.51	98	80-120
Selenium	100.0	103.9	104	80-120
Silver	100.0	96.40	96	80-120
Thallium	50.00	52.60	105	80-120
Vanadium	100.0	105.0	105	80-120
Zinc	100.0	103.4	103	80-120

Type: BSD Lab ID: QC772551

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	81.72	82	78-120	1	20
Arsenic	100.0	94.36	94	80-120	5	20
Barium	100.0	98.21	98	80-120	3	20
Beryllium	100.0	102.0	102	80-120	1	20
Cadmium	100.0	105.3	105	80-120	2	20
Chromium	100.0	93.80	94	80-120	4	20
Cobalt	100.0	95.00	95	80-120	3	20
Copper	100.0	93.37	93	79-120	4	20
Lead	100.0	95.47	95	80-120	4	20
Molybdenum	100.0	96.99	97	80-120	1	20
Nickel	100.0	94.36	94	80-120	3	20
Selenium	100.0	100.2	100	80-120	4	20
Silver	100.0	93.45	93	80-120	3	20
Thallium	50.00	52.55	105	80-120	0	20
Vanadium	100.0	101.1	101	80-120	4	20
Zinc	100.0	101.4	101	80-120	2	20

RPD= Relative Percent Difference

Page 1 of 1

32.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Field ID:	MW-FP7B	Batch#:	219226
MSS Lab ID:	263689-001	Sampled:	01/05/15
Matrix:	Filtrate	Received:	01/05/15
Units:	ug/L	Prepared:	01/08/15
Diln Fac:	1.000	Analyzed:	01/08/15

Type: MS Lab ID: QC772552

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.348	100.0	88.07	88	76-120
Arsenic	<1.028	100.0	99.05	99	79-126
Barium	15.55	100.0	113.0	97	74-120
Beryllium	<0.1463	100.0	99.39	99	80-122
Cadmium	<0.2822	100.0	98.24	98	76-122
Chromium	20.11	100.0	113.3	93	76-120
Cobalt	<0.8861	100.0	90.38	90	74-120
Copper	<0.6734	100.0	91.76	92	74-122
Lead	<1.306	100.0	90.60	91	71-120
Molybdenum	0.9626	100.0	94.91	94	78-120
Nickel	<0.7500	100.0	89.18	89	73-120
Selenium	4.656	100.0	105.7	101	71-127
Silver	<1.126	100.0	88.63	89	58-128
Thallium	<2.777	50.00	49.08	98	71-120
Vanadium	11.52	100.0	111.1	100	80-120
Zinc	<2.830	100.0	96.39	96	74-123

Type: MSD Lab ID: QC772553

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	87.67	88	76-120	0	20
Arsenic	100.0	98.31	98	79-126	1	20
Barium	100.0	112.5	97	74-120	0	25
Beryllium	100.0	99.15	99	80-122	0	20
Cadmium	100.0	97.07	97	76-122	1	20
Chromium	100.0	113.2	93	76-120	0	20
Cobalt	100.0	89.72	90	74-120	1	20
Copper	100.0	91.18	91	74-122	1	21
Lead	100.0	89.83	90	71-120	1	20
Molybdenum	100.0	94.30	93	78-120	1	20
Nickel	100.0	88.66	89	73-120	1	20
Selenium	100.0	106.2	102	71-127	0	35
Silver	100.0	88.36	88	58-128	0	22
Thallium	50.00	47.01	94	71-120	4	20
Vanadium	100.0	110.5	99	80-120	0	20
Zinc	100.0	95.33	95	74-123	1	20

RPD= Relative Percent Difference

Page 1 of 1

33.0

Curtis & Tompkins Laboratories Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 300.0
Field ID:	MW-FP4A	Batch#:	219101
Matrix:	Water	Sampled:	01/05/15 10:55
Units:	mg/L	Received:	01/05/15

Type: SAMPLE Diln Fac: 20.00
 Lab ID: 263689-004 Analyzed: 01/05/15 15:51

Analyte	Result	RL
Chloride	33	4.0
Nitrogen, Nitrate	98	1.0
Sulfate	240	10

Type: BLANK Diln Fac: 1.000
 Lab ID: QC772102 Analyzed: 01/05/15 10:24

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Curtis & Tompkins Laboratories Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC772103	Batch#:	219101
Matrix:	Water	Analyzed:	01/05/15 10:52
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.039	101	80-120
Nitrogen, Nitrate	1.000	1.022	102	80-120
Sulfate	10.00	10.17	102	80-120

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 300.0
Field ID:	MW-FP4A	Diln Fac:	50.00
MSS Lab ID:	263689-004	Batch#:	219101
Matrix:	Water	Sampled:	01/05/15 10:55
Units:	mg/L	Received:	01/05/15

Type: MS Analyzed: 01/05/15 16:46
 Lab ID: QC772104

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	32.99	100.0	129.8	97	75-120
Nitrogen, Nitrate	98.17	25.00	120.4	89	80-120
Sulfate	243.5	250.0	486.3	97	79-120

Type: MSD Analyzed: 01/05/15 17:14
 Lab ID: QC772105

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Chloride	100.0	130.5	98	75-120	1 20
Nitrogen, Nitrate	25.00	120.3	89	80-120	0 20
Sulfate	250.0	488.9	98	79-120	1 20

RPD= Relative Percent Difference

Page 1 of 1

5.0

Alkalinity

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM2320B
Field ID:	MW-FP4A	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/14/15
Batch#:	219407		

Type: SAMPLE Diln Fac: 4.000
 Lab ID: 263689-004

Analyte	Result	RL
Alkalinity, Bicarbonate	180	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	180	4.0

Type: BLANK Diln Fac: 1.000
 Lab ID: QC773295

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

40.0

Batch QC Report

Alkalinity

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC773296	Batch#:	219407
Matrix:	Water	Analyzed:	01/14/15

Spiked	Result	%REC	Limits
200.0	208.0	104	90-110

Batch QC Report

Alkalinity

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	10.00
Field ID:	ZZZZZZZZZ	Batch#:	219407
MSS Lab ID:	263750-002	Sampled:	01/06/15
Matrix:	Water	Received:	01/07/15
Units:	mg/L	Analyzed:	01/14/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD Lim
MS	QC773297	1,225	500.0	1,729	101	80-120	
MSD	QC773298		500.0	1,685	92	80-120	3 25

RPD= Relative Percent Difference

Page 1 of 1

42.0

Dissolved Organic Carbon (DOC)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	219464
Field ID:	MW-FP4A	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/16/15
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	263689-004	3.6	1.0
BLANK	QC773532	ND	1.0

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

47.0

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Diln Fac:	1.000
Field ID:	MW-FP4A	Batch#:	219464
MSS Lab ID:	263689-004	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/16/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC773533		10.00	9.669	97	90-110		
MS	QC773534	3.619	2.000	5.726	105	51-141		
MSD	QC773535		2.000	5.714	105	51-141	0	20

RPD= Relative Percent Difference

Page 1 of 1

48.0

Ferrous Iron (Fe+2)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	219103
Field ID:	MW-FP4A	Sampled:	01/05/15 10:55
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Prepared:	01/05/15 16:00
Diln Fac:	1.000	Analyzed:	01/06/15 15:39

Type	Lab ID	Result	RL
SAMPLE	263689-004	ND	0.10
BLANK	QC772110	ND	0.10

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

6.0

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	219103
Field ID:	MW-FP4A	Sampled:	01/05/15 10:55
MSS Lab ID:	263689-004	Received:	01/05/15
Matrix:	Water	Prepared:	01/05/15 16:00
Units:	mg/L	Analyzed:	01/06/15 15:39
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC772111		0.8000	0.7884	99	90-110		
MS	QC772112	<0.1000	0.8000	0.7835	98	78-127		
MSD	QC772113		0.8000	0.9282	116	78-127	17	20

RPD= Relative Percent Difference

Page 1 of 1

7.0

Ferric Iron (Fe+3)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM3500FE-B
Analyte:	Ferric Iron (Fe+3)	Units:	mg/L
Field ID:	MW-FP4A	Diln Fac:	1.000
Lab ID:	263689-004	Sampled:	01/05/15 10:55
Matrix:	Water	Received:	01/05/15

Result	RL
0.13	0.10

RL= Reporting Limit

Page 1 of 1

9.1

Hexavalent Chromium

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	219111
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/05/15 18:30

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled
MW-FP7B	SAMPLE	263689-001	0.02	0.01	1.000	01/05/15 08:15
MW-9	SAMPLE	263689-002	5.3	0.10	10.00	01/05/15 09:16
MW-FP1	SAMPLE	263689-003	0.01	0.01	1.000	01/05/15 10:12
MW-FP4A	SAMPLE	263689-004	37	1.0	100.0	01/05/15 10:55
MW-FP4B	SAMPLE	263689-005	0.01	0.01	1.000	01/05/15 11:36
MW-FP3	SAMPLE	263689-006	0.28	0.01	1.000	01/05/15 12:52
MW-FP5	SAMPLE	263689-007	11	0.10	10.00	01/05/15 13:30
	BLANK	QC772137	ND	0.01	1.000	

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

44.0

Batch QC Report

Hexavalent Chromium

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	MW-FP7B	Batch#:	219111
MSS Lab ID:	263689-001	Sampled:	01/05/15 08:15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/05/15 18:30

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC772138		1.000	1.049	105	90-110		
MS	QC772139	0.02300	1.000	1.094	107	85-115		
MSD	QC772140		1.000	1.102	108	85-115	1	20

RPD= Relative Percent Difference

Page 1 of 1

45.0

Salinity

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Analysis:	SM2520B
Project#:	01-FP-001		
Analyte:	Salinity	Batch#:	219401
Field ID:	MW-FP4A	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	S	Analyzed:	01/14/15
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	263689-004	0.90	0.50
BLANK	QC773271	ND	0.50

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

37.0

Batch QC Report

Salinity

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Analysis:	SM2520B
Project#:	01-FP-001		
Analyte:	Salinity	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	219401
MSS Lab ID:	263726-014	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	S	Analyzed:	01/14/15

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC773272		17.50	17.00		97	80-120		
SDUP	QC773273	2.400		2.500	0.5000			4	20

RL= Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

38.0

Total Organic Carbon (TOC)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	219540
Field ID:	MW-FP4A	Sampled:	01/05/15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/19/15
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	263689-004	3.5	0.50
BLANK	QC773806	ND	0.50

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

50.0

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	263689	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	ZZZZZZZZZ	Batch#:	219540
MSS Lab ID:	263984-002	Sampled:	01/16/15
Matrix:	Water	Received:	01/16/15
Units:	mg/L	Analyzed:	01/19/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC773807		10.00	9.646	96	90-110		
MS	QC773808	2.100	2.000	4.175	104	33-129		
MSD	QC773809		2.000	4.488	119	33-129	7	39

RPD= Relative Percent Difference

Page 1 of 1

51.0



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 263710
ANALYTICAL REPORT**

The Source Group, Inc.
3478 Buskirk Ave
Pleasant Hill, CA 94523

Project : 01-FP-001
Location : Francis Plating
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-4	263710-001
MW-5	263710-002
MW-1	263710-003
MW-FP2	263710-004

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:  Date: 01/15/2015
Mike J. Dahlquist
Project Manager
mike.dahlquist@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: **263710**
Client: **The Source Group, Inc.**
Project: **01-FP-001**
Location: **Francis Plating**
Request Date: **01/06/15**
Samples Received: **01/06/15**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 01/06/15. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

High surrogate recoveries were observed for bromofluorobenzene in many samples. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):

No analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):

No analytical problems were encountered.

CHAIN OF CUSTODY



2323 Fifth Street
Berkeley, CA 94710

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

C&T LOGIN # 263710

Project No: 01 - FP - 001

Sampler: Albert Simmons

Project Name: Francis Plating

Report To: Matt Sutton

Project P. O. No: 01 - FP - 001

Company: The Source Group, Inc.

EDD Format: Report Level II III IV

Telephone (925) 951-6386

Turnaround Time: RUSH

Standard

Email: msutton@thesourcegroup.net

Page 1 of 1

Chain of Custody # _____

ANALYTICAL REQUEST										
# of Containers										
	HCl	H ₂ SO ₄	HNO ₃	NaOH	None					
5	3	1	1	1						
5	3	1	1	1						
5	3	1	1	1						
5	3	1	1	1						
VOCs										
CAM 17 Metals										
Hex chrome										
8260B										
GODB										
7196A										

Lab No.	Sample ID.	SAMPLING		MATRIX		# of Containers	CHEMICAL PRESERVATIVE					
		Date Collected	Time Collected	Water	Solid		HCl	H ₂ SO ₄	HNO ₃	NaOH	None	
1	MW-4	1/6/2015	0832	X		5	3	1	1	1		
2	MW-5		0922	X		5	3	1	1	1		
3	MW-1		1022	X		5	3	1	1	1		
4	MW-FP2		1203	X		5	3	1	1	1		

Notes: * Field filtered (.45)

SAMPLE RECEIPT	RELINQUISHED BY:				RECEIVED BY:					
					DATE: 1/6/15	TIME: 1300				
					DATE:	TIME:				
					DATE:	TIME:				
					DATE:	TIME:				

COOLER RECEIPT CHECKLIST



Login # 263710 Date Received 01/06/15 Number of coolers 1
 Client The Source Group Project 01-FP-601

Date Opened 01/06 By (print) MC (sign) Ch
 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) .9

- Samples Received on ice & cold without a temperature blank; temp. taken with 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? _____ 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

Curtis & Tompkins Sample Preservation for 263710

Sample	pH:	<2	>9	>12	Other
-001a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-002a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-003a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____
-004a		[]	[]	[]	_____
b		[]	[]	[]	_____
c		[]	[]	[]	_____
d		[]	[]	[]	_____
e		X	[]	[]	_____

Analyst: MC
Date: 1/27/15
Page 1 of 1

Detections Summary for 263710

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

Client : The Source Group, Inc.
 Project : 01-FP-001
 Location : Francis Plating

Client Sample ID : MW-4 Laboratory Sample ID : 263710-001

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
Arsenic	5.2		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	35		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : MW-5 Laboratory Sample ID : 263710-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	48		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : MW-1 Laboratory Sample ID : 263710-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	6.4		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	52		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : MW-FP2 Laboratory Sample ID : 263710-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Barium	32		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	16		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Hexavalent Chromium	0.01		0.01	mg/L	TOTAL	1.000	EPA 7196A	METHOD

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	219205
Lab ID:	263710-001	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
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	ND	0.5
Bromoform	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	2.2	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
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

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	219205
Lab ID:	263710-001	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL
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	110	77-136
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	123 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

10.0

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	219205
Lab ID:	263710-002	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
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	ND	0.5
Bromoform	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
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

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	219205
Lab ID:	263710-002	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL
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	109	77-136
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	123 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

11.0

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	219205
Lab ID:	263710-003	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
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	ND	0.5
Bromoform	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
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

* = Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 1 of 2

12.0

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	219205
Lab ID:	263710-003	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Analyte	Result	RL
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	109	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	121 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

12.0



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP2	Batch#:	219251
Lab ID:	263710-004	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/09/15
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	ND	0.5
Bromoform	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
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

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Field ID:	MW-FP2	Batch#:	219251
Lab ID:	263710-004	Sampled:	01/06/15
Matrix:	Water	Received:	01/06/15
Units:	ug/L	Analyzed:	01/09/15
Diln Fac:	1.000		

Analyte	Result	RL
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	113	77-136
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	130 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

13.0

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772467	Batch#:	219205
Matrix:	Water	Analyzed:	01/08/15
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
Bromoform	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
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

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 1 of 2

14.0

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772467	Batch#:	219205
Matrix:	Water	Analyzed:	01/08/15
Units:	ug/L		

Analyte	Result	RL
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	107	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	122 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

14.0

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC772568	Batch#:	219205
Matrix:	Water	Analyzed:	01/08/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	16.28	130	65-134
Benzene	12.50	13.42	107	80-124
Trichloroethene	12.50	14.45	116	80-120
Toluene	12.50	14.36	115	80-122
Chlorobenzene	12.50	13.79	110	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	119	80-120

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772652	Batch#:	219251
Matrix:	Water	Analyzed:	01/09/15
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
Bromoform	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
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

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772652	Batch#:	219251
Matrix:	Water	Analyzed:	01/09/15
Units:	ug/L		

Analyte	Result	RL
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	114	77-136
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	132 *	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

16.0

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	EPA 5030B
Project#:	01-FP-001	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	219251
Units:	ug/L	Analyzed:	01/09/15
Diln Fac:	1.000		

Type: BS Lab ID: QC772694

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	15.61	125	65-134
Benzene	12.50	12.94	104	80-124
Trichloroethene	12.50	14.53	116	80-120
Toluene	12.50	13.80	110	80-122
Chlorobenzene	12.50	13.20	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	110	77-136
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	127 *	80-120

Type: BSD Lab ID: QC772695

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	15.43	123	65-134	1	20
Benzene	12.50	13.21	106	80-124	2	20
Trichloroethene	12.50	14.80	118	80-120	2	20
Toluene	12.50	14.65	117	80-122	6	20
Chlorobenzene	12.50	13.43	107	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	77-136
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	128 *	80-120

* = Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-4	Diln Fac:	1.000
Lab ID:	263710-001	Sampled:	01/06/15
Matrix:	Filtrate	Received:	01/06/15
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Arsenic	5.2	5.0	219329	01/12/15	01/13/15	EPA 6010B
Barium	35	5.0	219329	01/12/15	01/13/15	EPA 6010B
Beryllium	ND	2.0	219329	01/12/15	01/13/15	EPA 6010B
Cadmium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Chromium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Cobalt	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Copper	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Lead	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Mercury	ND	0.20	219209	01/08/15	01/08/15	EPA 7470A
Molybdenum	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Nickel	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Selenium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Silver	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Thallium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Vanadium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Zinc	ND	20	219329	01/12/15	01/13/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-5	Diln Fac:	1.000
Lab ID:	263710-002	Sampled:	01/06/15
Matrix:	Filtrate	Received:	01/06/15
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Arsenic	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Barium	48	5.0	219329	01/12/15	01/13/15	EPA 6010B
Beryllium	ND	2.0	219329	01/12/15	01/13/15	EPA 6010B
Cadmium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Chromium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Cobalt	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Copper	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Lead	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Mercury	ND	0.20	219209	01/08/15	01/08/15	EPA 7470A
Molybdenum	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Nickel	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Selenium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Silver	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Thallium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Vanadium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Zinc	ND	20	219329	01/12/15	01/13/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

4.1

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-1	Diln Fac:	1.000
Lab ID:	263710-003	Sampled:	01/06/15
Matrix:	Filtrate	Received:	01/06/15
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Arsenic	6.4	5.0	219329	01/12/15	01/13/15	EPA 6010B
Barium	52	5.0	219329	01/12/15	01/13/15	EPA 6010B
Beryllium	ND	2.0	219329	01/12/15	01/13/15	EPA 6010B
Cadmium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Chromium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Cobalt	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Copper	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Lead	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Mercury	ND	0.20	219209	01/08/15	01/08/15	EPA 7470A
Molybdenum	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Nickel	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Selenium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Silver	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Thallium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Vanadium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Zinc	ND	20	219329	01/12/15	01/13/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001		
Field ID:	MW-FP2	Diln Fac:	1.000
Lab ID:	263710-004	Sampled:	01/06/15
Matrix:	Filtrate	Received:	01/06/15
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Arsenic	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Barium	32	5.0	219329	01/12/15	01/13/15	EPA 6010B
Beryllium	ND	2.0	219329	01/12/15	01/13/15	EPA 6010B
Cadmium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Chromium	16	5.0	219329	01/12/15	01/13/15	EPA 6010B
Cobalt	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Copper	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Lead	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Mercury	ND	0.20	219209	01/08/15	01/08/15	EPA 7470A
Molybdenum	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Nickel	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Selenium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Silver	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Thallium	ND	10	219329	01/12/15	01/13/15	EPA 6010B
Vanadium	ND	5.0	219329	01/12/15	01/13/15	EPA 6010B
Zinc	ND	20	219329	01/12/15	01/13/15	EPA 6010B

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

6.1

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	219209
Lab ID:	QC772482	Prepared:	01/08/15
Matrix:	Filtrate	Analyzed:	01/08/15
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

7.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	219209
Matrix:	Water	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC772483	2.500	2.518	101	80-120		
BSD	QC772484	2.500	2.691	108	80-120	7	20

RPD= Relative Percent Difference

Page 1 of 1

8.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	219209
Field ID:	ZZZZZZZZZZ	Sampled:	01/06/15
MSS Lab ID:	263724-006	Received:	01/06/15
Matrix:	Filtrate	Prepared:	01/08/15
Units:	ug/L	Analyzed:	01/08/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC772485	<0.04000	2.500	2.474	99	57-127		
MSD	QC772486		2.500	2.453	98	57-127	1	42

RPD= Relative Percent Difference

Page 1 of 1

9.0

Batch QC Report
Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772989	Batch#:	219329
Matrix:	Filtrate	Prepared:	01/12/15
Units:	ug/L	Analyzed:	01/13/15

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

Page 1 of 1

18.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	219329
Units:	ug/L	Prepared:	01/12/15
Diln Fac:	1.000	Analyzed:	01/13/15

Type: BS Lab ID: QC772990

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	101.1	101	78-120
Arsenic	100.0	107.9	108	80-120
Barium	100.0	105.5	106	80-120
Beryllium	100.0	102.8	103	80-120
Cadmium	100.0	109.6	110	80-120
Chromium	100.0	101.8	102	80-120
Cobalt	100.0	101.0	101	80-120
Copper	100.0	89.39	89	79-120
Lead	100.0	99.55	100	80-120
Molybdenum	100.0	104.5	105	80-120
Nickel	100.0	102.6	103	80-120
Selenium	100.0	113.3	113	80-120
Silver	100.0	104.1	104	80-120
Thallium	50.00	55.83	112	80-120
Vanadium	100.0	107.0	107	80-120
Zinc	100.0	108.4	108	80-120

Type: BSD Lab ID: QC772991

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	95.31	95	78-120	6	20
Arsenic	100.0	105.4	105	80-120	2	20
Barium	100.0	102.5	103	80-120	3	20
Beryllium	100.0	98.25	98	80-120	4	20
Cadmium	100.0	105.4	105	80-120	4	20
Chromium	100.0	99.36	99	80-120	2	20
Cobalt	100.0	98.34	98	80-120	3	20
Copper	100.0	86.75	87	79-120	3	20
Lead	100.0	96.96	97	80-120	3	20
Molybdenum	100.0	100.6	101	80-120	4	20
Nickel	100.0	99.55	100	80-120	3	20
Selenium	100.0	108.1	108	80-120	5	20
Silver	100.0	97.54	98	80-120	7	20
Thallium	50.00	53.91	108	80-120	3	20
Vanadium	100.0	103.5	104	80-120	3	20
Zinc	100.0	105.2	105	80-120	3	20

RPD= Relative Percent Difference

Page 1 of 1

20.0

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	219329
MSS Lab ID:	263724-006	Sampled:	01/06/15
Matrix:	Filtrate	Received:	01/06/15
Units:	ug/L	Prepared:	01/12/15
Diln Fac:	1.000	Analyzed:	01/13/15

Type: MS Lab ID: QC772992

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.6500	100.0	99.89	100	76-120
Arsenic	9.347	100.0	122.7	113	79-126
Barium	119.1	100.0	210.3	91	74-120
Beryllium	0.4273	100.0	102.0	102	80-122
Cadmium	<0.5791	100.0	100.2	100	76-122
Chromium	1.340	100.0	101.7	100	76-120
Cobalt	<0.3220	100.0	98.51	99	74-120
Copper	<0.9890	100.0	88.51	89	74-122
Lead	<0.9081	100.0	86.88	87	71-120
Molybdenum	6.626	100.0	111.5	105	78-120
Nickel	3.966	100.0	101.4	97	73-120
Selenium	10.63	100.0	126.4	116	71-127
Silver	1.302	100.0	99.16	98	58-128
Thallium	5.167	50.00	53.62	97	71-120
Vanadium	7.035	100.0	113.0	106	80-120
Zinc	13.35	100.0	120.4	107	74-123

Type: MSD Lab ID: QC772993

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	100.3	100	76-120	0	20
Arsenic	100.0	122.2	113	79-126	0	20
Barium	100.0	212.2	93	74-120	1	25
Beryllium	100.0	100.6	100	80-122	1	20
Cadmium	100.0	99.61	100	76-122	1	20
Chromium	100.0	100.6	99	76-120	1	20
Cobalt	100.0	96.98	97	74-120	2	20
Copper	100.0	89.41	89	74-122	1	21
Lead	100.0	85.54	86	71-120	2	20
Molybdenum	100.0	111.1	104	78-120	0	20
Nickel	100.0	100.5	97	73-120	1	20
Selenium	100.0	125.2	115	71-127	1	35
Silver	100.0	98.67	97	58-128	0	22
Thallium	50.00	51.86	93	71-120	3	20
Vanadium	100.0	112.8	106	80-120	0	20
Zinc	100.0	120.5	107	74-123	0	20

RPD= Relative Percent Difference

Page 1 of 1

21.0

Batch QC Report
Dissolved California Title 22 Metals

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC772994	Batch#:	219329
Matrix:	Filtrate	Prepared:	01/12/15
Units:	ug/L	Analyzed:	01/13/15

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

Page 1 of 1

19.0

Hexavalent Chromium

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Water	Batch#:	219111
Units:	mg/L	Received:	01/06/15

Field ID	Type	Lab ID	Result	RL	Sampled	Prepared	Analyzed
MW-4	SAMPLE	263710-001	ND	0.01	01/06/15 08:32	01/06/15 16:00	01/06/15 16:30
MW-5	SAMPLE	263710-002	ND	0.01	01/06/15 09:22	01/06/15 16:00	01/06/15 16:30
MW-1	SAMPLE	263710-003	ND	0.01	01/06/15 10:22	01/06/15 16:00	01/06/15 16:30
MW-FP2	SAMPLE	263710-004	0.01	0.01	01/06/15 12:03	01/06/15 16:00	01/06/15 16:30
	BLANK	QC772137	ND	0.01		01/05/15 18:30	01/05/15 18:30

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

22.0

Batch QC Report

Hexavalent Chromium

Lab #:	263710	Location:	Francis Plating
Client:	The Source Group, Inc.	Prep:	METHOD
Project#:	01-FP-001	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	MW-FP7B	Batch#:	219111
MSS Lab ID:	263689-001	Sampled:	01/05/15 08:15
Matrix:	Water	Received:	01/05/15
Units:	mg/L	Analyzed:	01/05/15 18:30

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC772138		1.000	1.049	105	90-110		
MS	QC772139	0.02300	1.000	1.094	107	85-115		
MSD	QC772140		1.000	1.102	108	85-115	1	20

RPD= Relative Percent Difference

Page 1 of 1

23.0