

RECEIVED

By Alameda County Environmental Health at 3:10 pm, Jun 26, 2014

GROUNDWATER DELINEATION WORK PLAN

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

01-FP-002

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



June 2, 2014

Prepared By:

A handwritten signature in black ink, appearing to read 'Paisha Jorgensen'.

Paisha Jorgensen, P.G.
Project Geologist

Reviewed By:

A handwritten signature in blue ink, appearing to read 'Matthew C. Sutton'.

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 AND SENSITIVE RECEPTOR SURVEY	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	2-2
2.4 Sensitive Receptor Survey.....	2-3
3.0 GROUNDWATER DELINEATION ACTIVITIES	3-1
3.1 Pre-Field Activities	3-1
3.2 Groundwater Monitoring	3-1
3.3 Groundwater Sampling	3-2
3.4 Investigation Derived Waste	3-2
3.5 Data Evaluation and Reporting.....	3-2
4.0 LIMITATIONS	4-1
5.0 REFERENCES	5-1

LIST OF FIGURES

- | | |
|----------|--|
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan |
| Figure 3 | Hexavalent Chromium in Groundwater – 15 April 2010 |
| Figure 4 | Site and Downgradient Vicinity |

LIST OF APPENDICES

- | | |
|------------|--|
| Appendix A | Historical Tables from BASELINE Environmental |
| Appendix B | Historical Figures from BASELINE Environmental |

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 Work Plan (Work Plan) 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).

This Work Plan has been prepared in response to the ACEH April 1, 2014 letter requesting a Work Plan for delineation of the contaminant plume originating from the former Frog Pond area at the Site. As noted in the correspondence, the Brush Street Group recently requested splitting the Former Francis Plating Site into two cases to allow the eastern portion of the Site (Parcel 2) to proceed towards case closure more quickly while the western portion of the Site (Parcel 1) containing the former Frog Pond is investigated further and remediated. ACEH was open to this approach provided that progress is shown in moving forward with the next steps towards completing Site characterization for the western parcel. This Work Plan has been prepared to describe the initial steps for Site delineation, including proposed sampling of on- and off-Site monitoring wells, performing a well and off-Site receptor survey, and collection of additional data for future remedial alternative screening.

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

The purpose of this Work Plan is to describe the initial activities associated with delineation of the contaminant plume originating from the former Frog Pond area at the Site. No groundwater data has been collected from the Site since April 2010, so the objectives of the delineation activities described in this Work Plan are 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 AND SENSITIVE RECEPTOR SURVEY

This section provides information about subsurface conditions and previous remediation activities at the Site. In addition, information regarding potential off-Site receptors is discussed.

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 ranges 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 San Francisco Bay Regional Water Quality Control Board (Regional Water Board) 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 of the investigation, 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 was completed in April 2010 (BASELINE, 2010), and included on-Site and off-Site investigation activities. The investigation concluded the following:

- The chemical of primary concern for groundwater is Cr-VI. A figure showing Cr-VI in groundwater samples collected in 2010 is presented as Figure 3;

- The groundwater impacts are 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 is limited since detection of these metals has only been reported in a few soil samples collected on-Site;
- While some VOCs have been 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 has migrated in a southwesterly direction off-Site and is present in both shallow and deeper screened monitoring wells as far as 120 feet downgradient from the Site.

Tables and figures summarizing historical groundwater sampling data and locations, originally published in the BASELINE report, are included in Appendix A and B, respectively.

2.4 Sensitive Receptor Survey

In preparation of this Work Plan, SGI reviewed readily available historical documents, databases, maps, and aerial photos to assess whether any sensitive receptors are located on, or downgradient of the Site. The Site, and all properties downgradient of the Site, are located in a commercial/industrial area.

A contaminated property located at 404 Market Street (Safety-Kleen) is currently conducting groundwater and soil vapor remediation actions under Department of Toxic Substances Control oversight. The Safety-Kleen site is located approximately 600 feet south/southwest (downgradient) of the Site and has 10 groundwater monitoring wells. A 1990 review of the California Department of Water Resources well logs indicated that there are no domestic, industrial, municipal, or agricultural water supply wells within a one-mile radius of the Safety-Kleen site (Safety-Kleen, 1990). Based on property use in the area, it is unlikely any new domestic, municipal, or agricultural wells would have been installed downgradient of the Site since 1990.

The Oakland Estuary, located approximately 1,700 feet south of the Site, is the closest surface water body downgradient of the Site. No other surface water bodies (creeks or wetlands) are located downgradient of the Site. On April 19, 2000, the RWQCB adopted Groundwater Basin Plan Amendments, which “dedesignated” the municipal supply beneficial use designation for portions of the Oakland shoreline due to the brackishness of the groundwater. This area includes the shoreline along the Oakland Estuary. Therefore, the groundwater in these areas would not be considered an actual or potential drinking water source.

3.0 GROUNDWATER DELINEATION ACTIVITIES

This section of the Work Plan describes the proposed monitoring and sampling to be conducted as part of the groundwater delineation activities. As noted previously, the purpose of this Work Plan is to describe the initial activities associated with delineation of the contaminant plume originating from the former Frog Pond area at the Site. Proposed activities include performing a current round of groundwater monitoring and sampling, including well(s) downgradient of the Site, and collection of data that will be helpful in screening and evaluating potential remedial alternatives for the Site. The data will be evaluated to develop a current and accurate Conceptual Site Model (CSM) and make recommendations for next steps for the Site. Details of the proposed activities are provided below.

3.1 Pre-Field Activities

Prior to initiation of activities described in this Work Plan, the Site-Specific Health and Safety Plan (HASP) will be updated. The HASP will be consistent with State and Federal Occupational Safety and Health Administration ("OSHA") standards for hazardous waste operations (CCR, Title 8, Section 5192 and 29 Code of Federal Regulations 1910.120, respectively). The HASP will include a description of health and safety training requirements for onsite workers, a description of the level of personal protective equipment to be used, if any, air quality monitoring plans, and any other applicable precautions to be undertaken. The HASP shall include procedures for handling soil and/or groundwater contaminated with VOCs, petroleum hydrocarbons, PAHs, and/or metals.

The current tenant on the Site (Kinetic Arts Center) will be notified of the planned activities. SGI will work with the tenant to minimize disruption to their business.

In an effort to delineate the downgradient extent of the Site groundwater plume, SGI plans to sample monitoring well MW-4 on the Safety-Kleen site, located approximately 600 feet south/southwest (downgradient) of the Site (Figure 4). SGI and the Brush Street Group will negotiate an access agreement with Safety Kleen prior to sampling well MW-4.

SGI will contract with Blaine Tech Services of San Jose, California to perform the groundwater monitoring and sampling activities.

3.2 Groundwater Monitoring

Groundwater levels will be gauged in five on-Site groundwater monitoring wells (MW-FP1, MW-FP3, MW-FP4A, MW-FP4B, and MW-FP5) and four off-Site monitoring wells (MW-FP2, MW-FP6, MW-FP7B, and MW-9). In addition, the groundwater level in Safety-Kleen well MW-4 will be gauged. Groundwater levels in all wells will be gauged from the top of the well casings using an electronic water level indicator graduated to 0.01-foot.

3.3 Groundwater Sampling

Prior to collecting samples, groundwater wells will be purged of a minimum of three casing volumes of water using a submersible pump or peristaltic pump with new tubing. During well purging, water quality parameters (dissolved oxygen [DO], oxidation reduction potential [ORP], temperature, electrical conductivity, and pH) will be measured and recorded to ensure the groundwater samples are representative of aquifer conditions. Groundwater samples will be collected directly from the tubing, labeled, and placed on ice for transport to a California Department of Health-certified laboratory under chain-of-custody control. All groundwater samples will be analyzed for VOCs by USEPA Method 8260B and dissolved metals by USEPA Method 6010B. Groundwater samples collected for dissolved metals analysis will be field filtered using a 0.45-micron filter.

In addition, samples will be collected from monitoring well MW-FP4A and analyzed for biochemical parameters. Samples will be analyzed for general minerals, alkalinity, sulfate, iron (ferrous, ferric), salinity, arsenic, manganese, total organic carbon (TOC), and dissolved organic carbon (DOC). Results of these analyses will be used to evaluate groundwater conditions for potential in-situ remediation in the former Frog Pond area.

3.4 Investigation Derived Waste

Decontamination and purge water generated as a result of the groundwater sampling activities will be containerized in 55-gallon drums, labeled, and temporarily staged on Site pending off-Site disposal at an approved disposal facility.

3.5 Data Evaluation and Reporting

After completion of the tasks outlined in this Work Plan, all data will be evaluated and a report documenting groundwater delineation activities will be prepared and submitted to the ACEH. This report will include:

- Discussion of groundwater flow direction and calculated gradients, and comparison to historical data;
- Groundwater potentiometric contour map;
- Evaluation of the distribution and magnitude of groundwater constituents of concern (COCs) and biogeochemical parameters;
- Isoconcentration maps showing pertinent COCs; and
- Conclusions and recommendations.

4.0 LIMITATIONS

This Work Plan 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 plan 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 plan preparation, current regulatory requirements, and any specified assumptions. Findings or conclusions presented in this plan 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.

5.0 REFERENCES

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

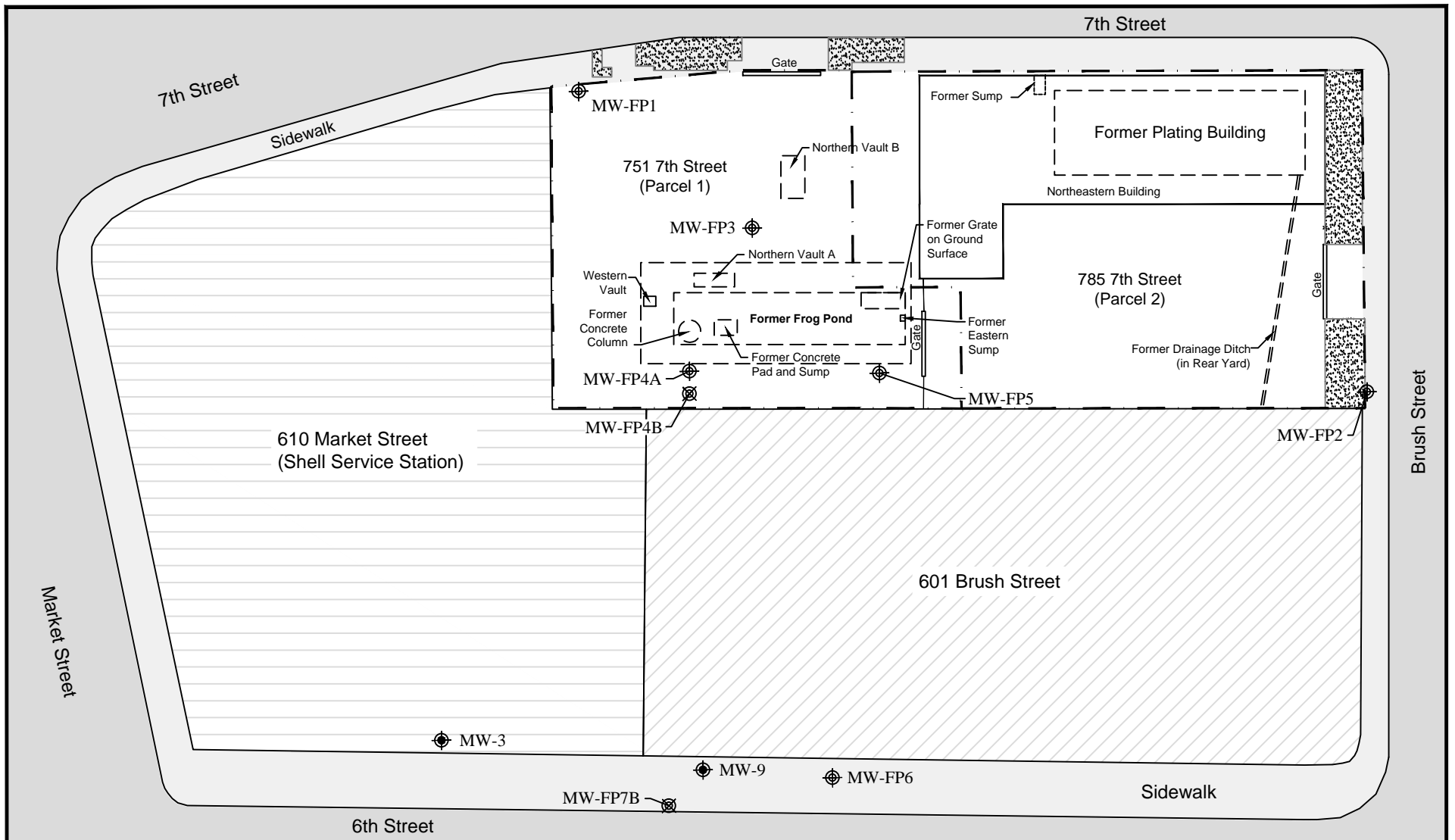
BASELINE. 2008. Documentation of Frog Pond Removal Activities, 751-785 Seventh Street, Oakland, California. February 29.

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.

FIGURES



LEGEND

-  Shallow Groundwater Monitoring Well
-  Deep Groundwater Monitoring Well
-  Shell Station Groundwater Monitoring Well
-  Exposed Soil
-  Parcel Boundary
-  Site Boundary

**FORMER FRANCIS PLATING
751 SEVENTH STREET
OAKLAND, CALIFORNIA**

SITE PLAN

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
01-FP-001	05/29/2014	DM	MS

0 50 100
HORIZONTAL SCALE IN FEET



THE SOURCE GROUP, INC.
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523



**FIGURE
2**



Site Location

SGI THE SOURCE GROUP, INC.
 environmental
 3478 BURSKIRK AVENUE, SUITE 100
 PLEASANT HILL, CA 94523

FORMER FRANCIS PLATING
 751 SEVENTH STREET
 OAKLAND, CALIFORNIA

SITE LOCATION MAP



PROJECT NO.	DATE	DR. BY:	APP. BY:
01-FP-001	5/28/2014	DM	MS

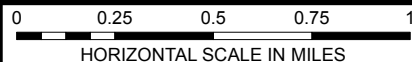
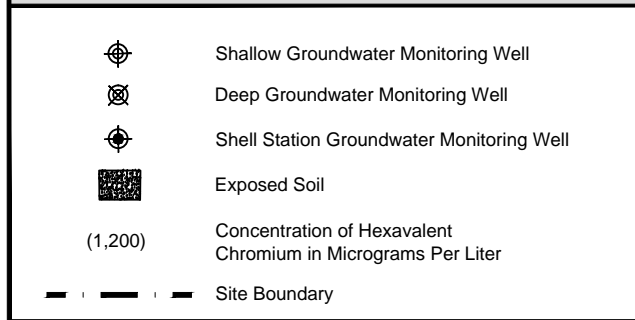
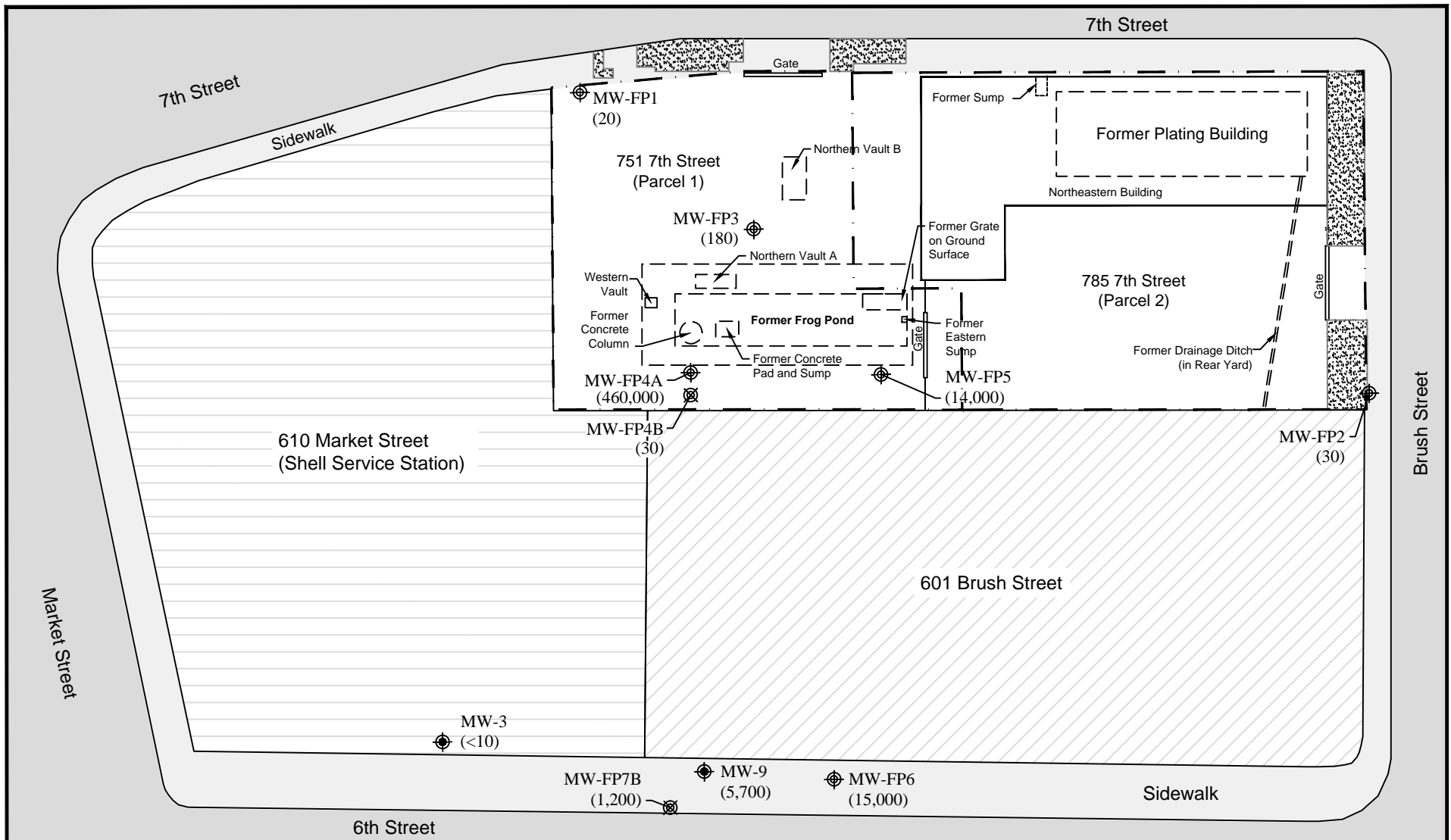



FIGURE
1

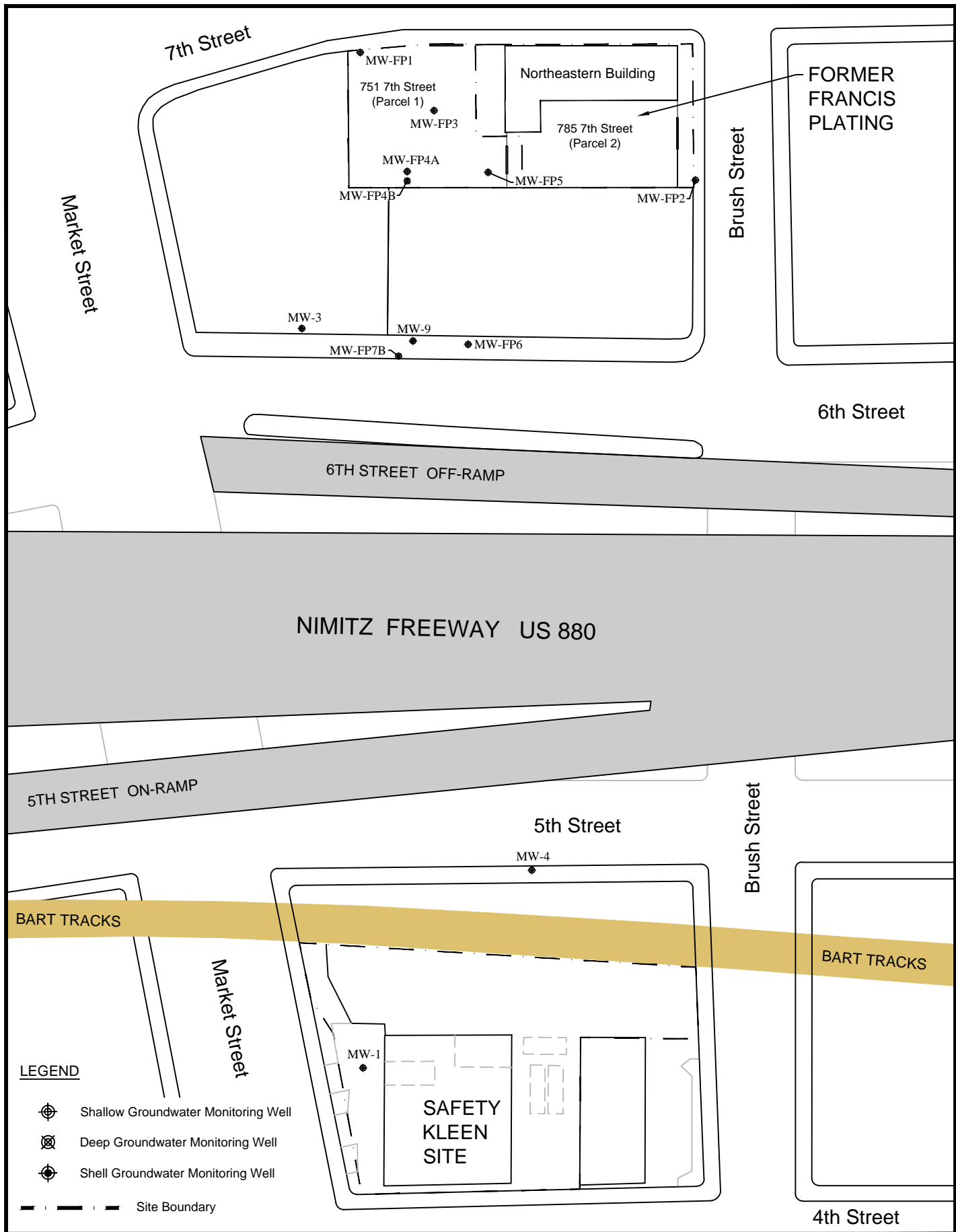


FORMER FRANCIS PLATING 751 SEVENTH STREET OAKLAND, CALIFORNIA			
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
01-FP-001	05/29/2014	DM	MS
0 50 100 HORIZONTAL SCALE IN FEET			

**HEXAVALENT CHROMIUM
IN GROUNDWATER
15 APRIL 2010**


THE SOURCE GROUP, INC.
 3478 BUSKIRK AVENUE, SUITE 100
 PLEASANT HILL, CA 94523


**FIGURE
3**



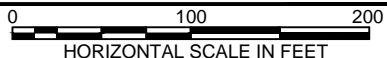
SGI environmental
THE SOURCE GROUP, INC.
 3478 BUSKIRK AVENUE, SUITE 100
 PLEASANT HILL, CA 94523

FORMER FRANCIS PLATING
 AND SAFETY-KLEEN SYSTEM, INC.
 OAKLAND, CALIFORNIA

**SITE
 AND DOWNGRADIENT
 VICINITY**



PROJECT NO.	DATE	DR. BY:	APP. BY:
01-FP-001	05/29/2014	DM	MS



**FIGURE
 4**

APPENDIX A

HISTORICAL TABLES FROM BASELINE ENVIRONMENTAL

Table 10: Volatile Organic Compounds in Groundwater, 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	Acetone	m,p-Xylenes	o-Xylene	MTBE	Carbon Disulfide	2-Chlorotoluene	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	Trichloroethene
Residential/Commercial ESLs ¹		1,500	100	100	1,800	NE	NE	330	25	590	590	62	360
Phase I													
B-FP04	02/05/03	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	21
B-FP05	02/05/03	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	42
MW-FP1	02/12/03	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
MW-FP2	02/12/03	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Phase II													
B-FP07A	11/29/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-FP09	11/22/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5
B-FP10	11/28/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.1	<0.5	<0.5	9.8	8.9
B-FP11	11/28/05	<10	<0.5	<0.5	7.7	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	1.2	1.2
B-FP13	11/29/05	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	11	0.9	<0.5	13
B-FP14	11/29/05	<400	<20	<20	<20	<20	<20	<20	<20	2,200	58	<20	1,000
B-FP16	11/28/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	8
B-FP17	11/28/05	<10	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SS-FP09	11/29/05	<10	<0.5	1.0	<0.5	<0.5	4.1	<0.5	<0.5	1.7	<0.5	<0.5	3.6
MW-FP1	11/28/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-FP2	11/28/05	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
Phase III													
B-FP18	03/31/06	<170	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	1,200	26	<8.3	600
B-FP19	03/30/06	<10	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	6.4
B-FP20	03/30/06	<400	<20	<20	<20	<20	<20	<20	<20	3,000	31	<20	390
B-FP21	03/31/06	<63	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	540	6.3	<3.1	57
B-FP22	03/31/06	<630	<31	<31	<31	<31	<31	<31	<31	3,400	88	<31	1,500
B-FP23	03/30/06	<71	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	5.3	520	11	<3.6	310

Table 10: Volatile Organic Compounds in Groundwater, 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	Acetone	m,p-Xylenes	o-Xylene	MTBE	Carbon Disulfide	2-Chlorotoluene	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	Trichloroethene
Residential/Commercial ESLs ¹		1,500	100	100	1,800	NE	NE	330	25	590	590	62	360
Phase IV													
MW-FP1	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-FP2	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-FP3	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9
MW-FP4A	04/15/10	34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	31	1.9	<0.5	51
MW-FP4B ²	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	19	<0.5	<0.5	<0.5	<0.5	<0.5
MW-FP5	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2
MW-FP6	04/15/10	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	9.4
MW-FP7B	04/15/10	<10	<0.5	<0.5	1.3	<0.5	<0.5	7.9	<0.5	2.3	<0.5	<0.5	4.9
MW-3 (Shell)	04/15/10	<10	<0.5	<0.5	1.0	0.6	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9 (Shell)	04/15/10	<10	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	48	0.9	<0.5	27

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

MTBE = methyl tertiary-butyl ether

NE = not established

Shell =groundwater monitoring wells from Shell Service Station at 610 Market Street

µg/L = microgram per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Analyzed in accordance with EPA Method 8260B.

Laboratory reports for Phase II and III investigations are included in Appendix D.

Only those analytes reported above the laboratory reporting limit in at least one sample are shown.

Sample locations shown on Figure 2.

Values reported above the laboratory reporting limit are indicated in bold text.

Yellow shaded values exceed the ESL.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

² The groundwater sample for volatile organic analysis from MW-FB4B reportedly contains more than one milliliter of headspace, and therefore, may be biased low.

Table 11: Dissolved Metals in Groundwater, 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Chromium VI, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Lead, Dissolved	Mercury, Dissolved	Molybdenum, Dissolved	Nickel, Dissolved	Selenium, Dissolved	Silver, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
Residential/Commercial ESLs ¹		30	36	1,000	0.53	0.25	11	180	3.0	3.1	2.5	0.025	240	8.2	5.0	0.19	4.0	19	81
Phase I																			
B-FP04	02/05/03	<60	<5	110	<2	<5	<10	<10	<20	<10	<3	<0.2	<20	32	<5	<5	<5	<10	<20
B-FP05	02/05/03	<60	<5	62	<2	<5	10	17	<20	<10	<3	<0.2	<20	96	11	<5	<5	<10	<20
MW-FP1	02/12/03	<60	<5	67	<2	<5	<10	<10	<20	<10	<3	<0.2	<20	24	<5	<5	<5	<10	<20
MW-FP2	02/12/03	<60	<5	74	<2	<5	70	61	<20	<10	<3	<0.2	<20	<20	<5	<5	<5	<10	<20
Phase III																			
B-FP23	03/31/06	<600	<5	<10	<2	<5	360,000	1,300,000	300	<10	120	0.25	160	1,000	<50	18	250	160	<200
FP-GRAB GW ²	06/04/07	180	13	15	<2	<5	100,000	93,000	37	15	<3	<0.2	23	270	<10	<5	16	25	<20
Phase IV																			
MW-FP1	04/15/10	<10	<5.0	41	<2.0	<5.0	20	13	<5.0	<5.0	<5.0	<0.20	<5.0	16	<10	<5.0	<10	<5.0	<2.0
MW-FP2	04/15/10	<10	<5.0	61	<2.0	<5.0	30	22	<5.0	<5.0	<5.0	<0.20	<5.0	<5.0	<10	<5.0	<10	<5.0	<2.0
MW-FP3	04/15/10	<10	<5.0	49	<2.0	<5.0	180	150	<5.0	<5.0	<5.0	<0.20	<5.0	25	<10	<5.0	<10	<5.0	71
MW-FP4A	04/15/10	<10	<5.0	<5.0	<2.0	<5.0	460,000	400,000	180	37	<5.0	<0.20	68	930	<10	<5.0	110	<5.0	61
MW-FP4B	04/15/10	<10	<5.0	41	<2.0	<5.0	30	43	<5.0	<5.0	<5.0	<0.20	<5.0	<5.0	<10	<5.0	<10	20	30
MW-FP5	04/15/10	<10	<5.0	51	<2.0	<5.0	14,000	11,000	5.6	<5.0	<5.0	<0.20	16	9.9	<10	<5.0	<10	<5.0	25
MW-FP6	04/15/10	<10	<5.0	40	<2.0	<5.0	15,000	11,000	6.1	6.5	<5.0	<0.20	<5.0	26	<10	<5.0	<100	<5.0	33
MW-FP7B	04/15/10	<10	<5.0	34	<2.0	<5.0	1,200	1,200	<5.0	<5.0	<5.0	<0.20	<5.0	<5.0	<10	<5.0	<10	<5.0	<2.0
MW-3 (Shell)	04/15/10	<10	<5.0	190	<2.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<0.20	<5.0	<5.0	<10	<5.0	<10	<5.0	20
MW-9 (Shell)	04/15/10	<10	<5.0	64	<2.0	<5.0	5,700	4,900	<5.0	5.8	<5.0	<0.20	<5.0	19	<10	<5.0	<10	<5.0	26

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

Shell = groundwater monitoring wells from Shell Service Station at 610 Market Street.

µg/L = micrograms per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Analyzed in accordance with EPA Methods 6010B/7400/7196A.

Sample locations shown on Figure 2.

Values reported above the laboratory reporting limit are indicated in bold text.

Yellow shaded values exceed the ESL.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

² Grab groundwater sample collected underneath former Frog Pond, adjacent to concrete column.

Table 12: Polychlorinated Biphenyls in Groundwater , 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262
Residential/Commercial ESLs ¹		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Phase I									
B-FP04	02/05/03	<1	<1	<1	<1	<1	<1	<1	<1
B-FP05	02/05/03	<1	<1	<1	<1	<1	<1	<1	<1
MW-FP1	02/12/03	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.47	--
MW-FP2	02/12/03	<0.49	<0.97	<0.49	<0.49	<0.49	<0.49	<0.49	--

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

µg/L = micrograms per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Analyzed in accordance with EPA Methods 8082.

Sample locations shown on Figure 2.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

Table 13: Polynuclear Aromatic Hydrocarbons in Groundwater, 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Residential/Commercial ESLs ¹		23	30	0.73	0.027	0.014	0.029	0.10	0.40	0.35	0.25	8.0	3.9	0.048	24	4.6	2.0
Phase I																	
B-FP04	02/05/03	<1	<1	<1	<1	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
B-FP05	02/05/03	<1	<1	<1	<1	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-FP1	02/12/03	<0.94	<1.9	<0.09	<0.09	<0.09	<0.19	<0.19	<0.09	<0.09	<0.19	<0.19	<0.19	<0.09	<0.94	<0.09	<0.09
MW-FP2	02/12/03	<0.94	<1.9	<0.09	<0.09	<0.09	<0.19	<0.19	<0.09	<0.09	<0.19	<0.19	<0.19	<0.09	<0.94	<0.09	<0.09
Phase II																	
B-FP07A	11/29/05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-FP1	11/28/05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-FP2	11/28/05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

µg/L = micrograms per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Analyzed in accordance with EPA Methods 8310 or 8270C-SIM.

Sample locations shown on Figure 2.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

Table 14: Cyanide and pH in Groundwater, 781-785 Seventh Street, Oakland, California

Sample Location	Sample Date	Total Cyanide (µg/L)	pH
Residential/Commercial ESLs ¹		1.0	
Phase I			
B-FP04	02/05/03	<10	--
B-FP05	02/05/03	<10	--
MW-FP1	02/12/03	<10	--
MW-FP2	02/12/03	<10	--
Phase III			
B-FP23	03/31/06	--	10.1

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

µg/L = micrograms per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Cyanide analyzed in accordance with EPA Methods 335.2.

pH analyzed in accordance with EPA Methods 9045C.

Sample locations shown on Figure 2.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

Table 15: Petroleum Hydrocarbons in Groundwater, 781-785 Seventh Street, Oakland, California (µg/L)

Sample Location	Sample Date	TPH as diesel	TPH as gasoline
Residential/Commercial ESLs ¹		210	210
Phase I			
B-FP03	02/04/03	<50	150
B-FP04	02/05/03	<50	<50
B-FP05	02/05/03	<50	<50
MW-FP1	02/12/03	260	<50
MW-FP2	02/12/03	110	<50
Phase II			
B-FP07A	11/29/05	<50	<50
MW-FP1	11/28/05	<50	<50
MW-FP2	11/28/05	<50	<50

Notes:

ESLs = Environmental Screening Levels; Source: RWQCB, 2007, Revised May 2008.

TPH = total petroleum hydrocarbons

µg/L = micrograms per liter

<x.x = compound not identified above laboratory reporting limit of x.x

Sample locations are shown on Figure 2.

TPH as diesel analyzed in accordance with EPA Methods 8015M with silica gel clean-up.

TPH as gasoline analyzed in accordance with EPA Methods 8015M.

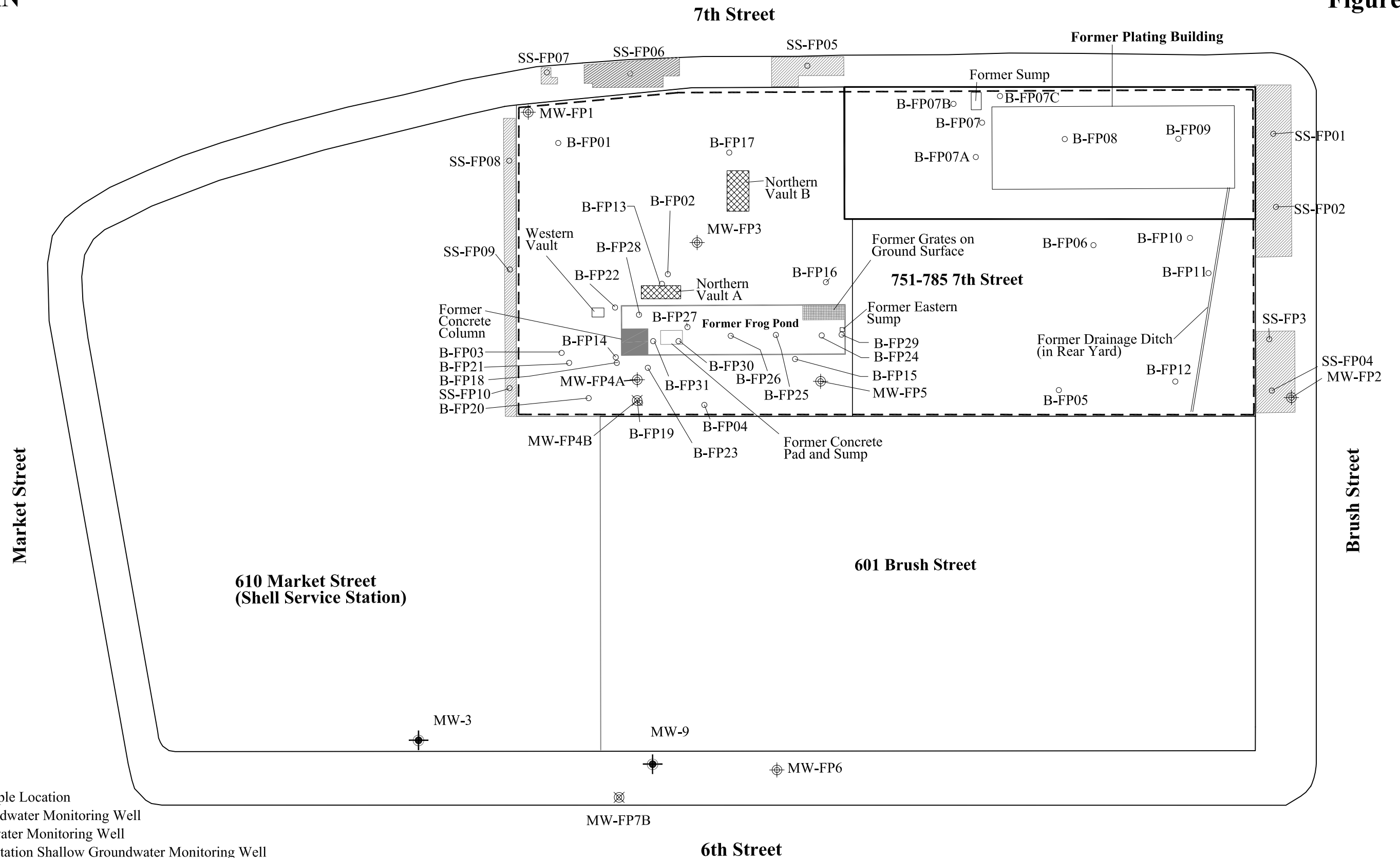
Values reported above the laboratory reporting limit are indicated in bold text.

Yellow shaded values exceed the ESL.

¹ Table B, Environmental Screening Levels, Shallow Soils, (≤ 3 m bgs), Groundwater is not a Current or Potential Source of Drinking Water.

APPENDIX B

HISTORICAL FIGURES FROM BASELINE ENVIRONMENTAL



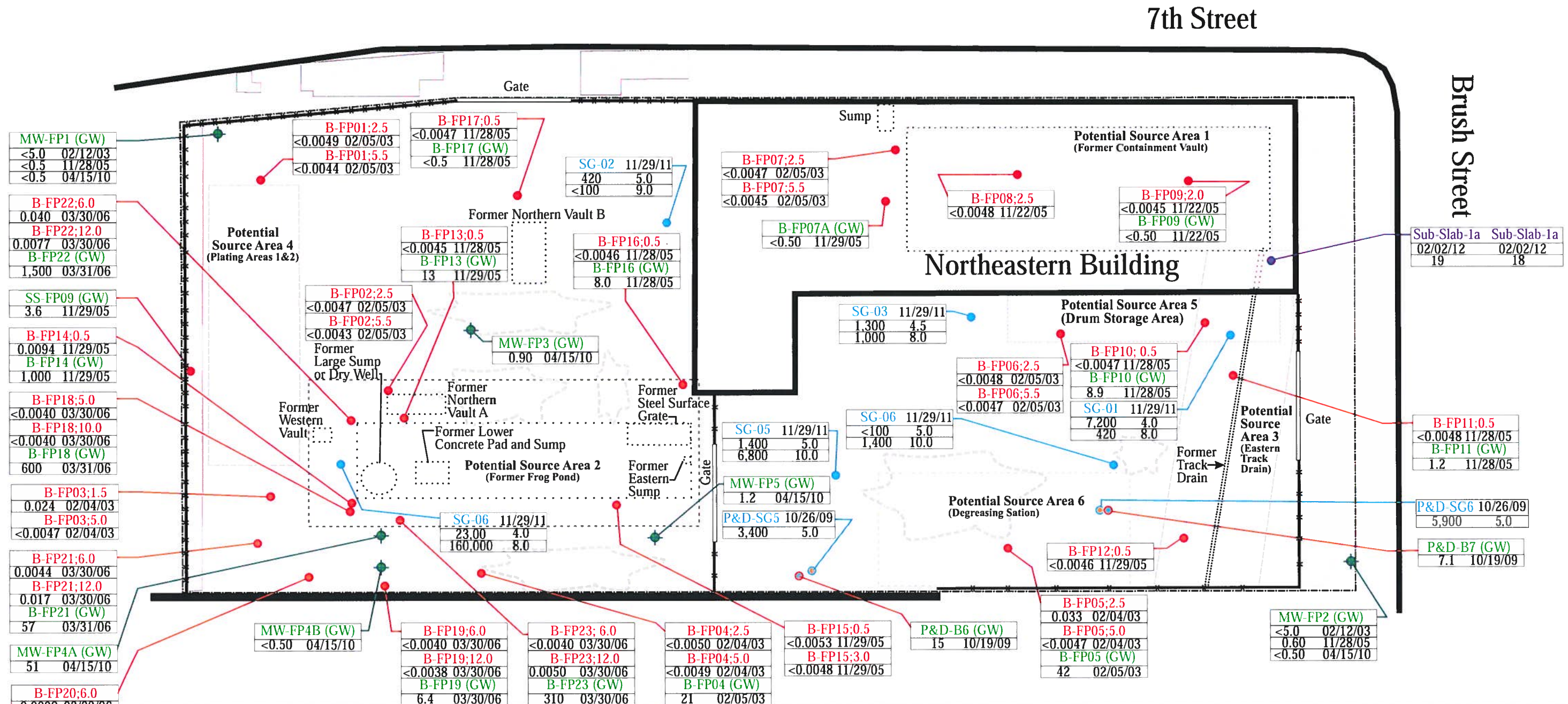
- Legend**
- Site Boundary
 - ▨ Exposed Soil
 - Boring or Sample Location
 - ⊕ Shallow Groundwater Monitoring Well
 - ⊗ Deep Groundwater Monitoring Well
 - ⊕ Shell Service Station Shallow Groundwater Monitoring Well
 - Parcel Boundaries

**751 - 785 Seventh Street
Oakland, California**



TCE CONCENTRATIONS IN SOIL, GROUNDWATER, SOIL GAS, AND SUB-SLAB VAPOR

Figure 9



**751-785 Brush Street
Oakland, California**

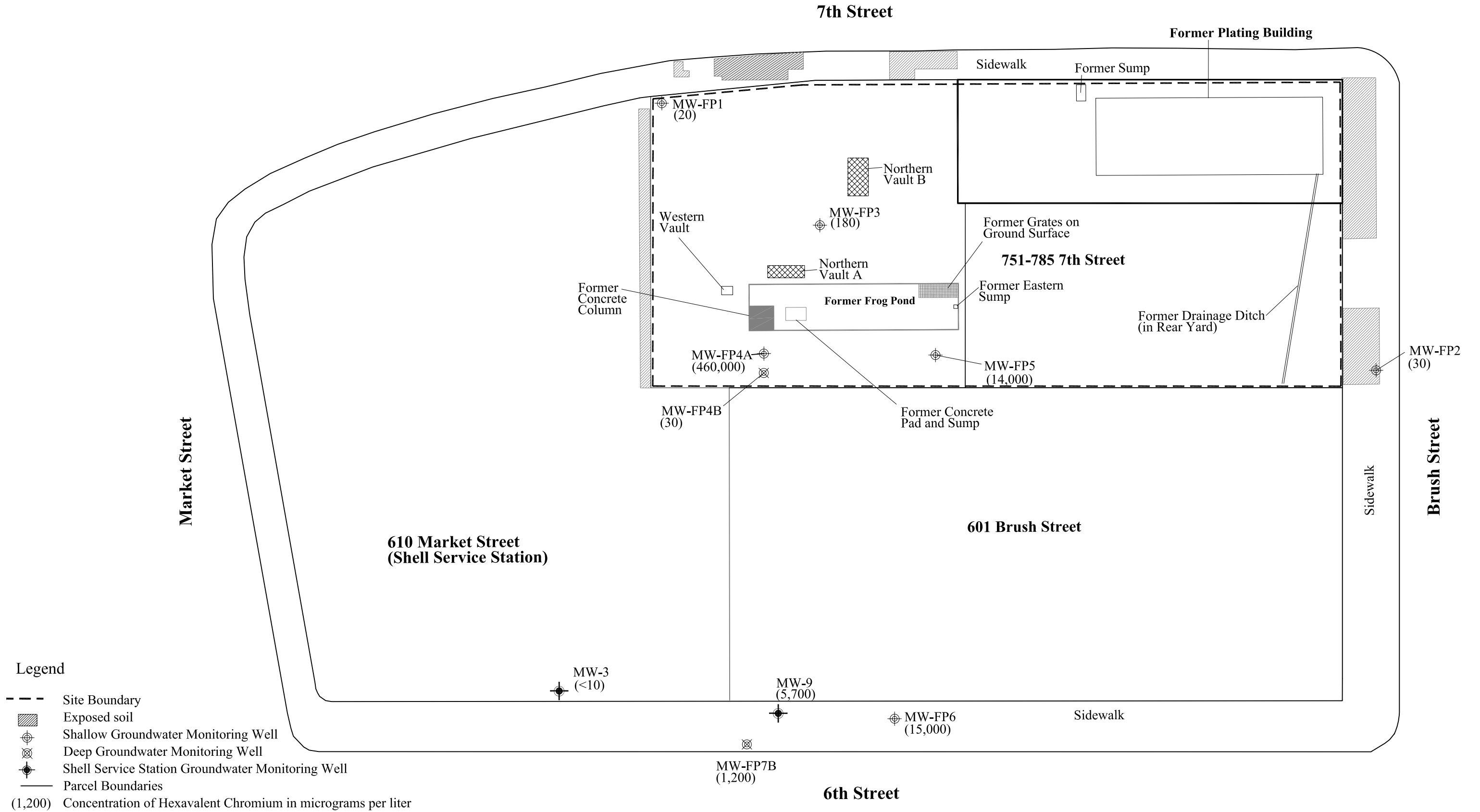
LEGEND

- Boring Location
- Monitoring Well Location
- Soil Gas Sample Location
- Sub-Slab Vapor Probe
- Soil Gas Sample Location (P&D Environmental, 2009)
- Grab Groundwater Sample Location (P&D Environmental, 2009)
- Exposed Soil Areas
- Property Boundary
- Location of Historical Features Since Removed or Sealed and Capped
- Potential Source Areas 1, 2, 3, 4 & 6

Notes:
 TCE = Trichloroethene
 mg/kg = milligrams per kilogram
 µg/L = micrograms per liter
 µg/m³ = micrograms per cubic meter
 ft bgs = feet below ground surface

Scale: 0 to 20 Feet

BASELINE



- Legend**
- - - Site Boundary
 - Exposed soil
 - Shallow Groundwater Monitoring Well
 - Deep Groundwater Monitoring Well
 - Shell Service Station Groundwater Monitoring Well
 - Parcel Boundaries
- (1,200) Concentration of Hexavalent Chromium in micrograms per liter

**751 - 785 Seventh Street
Oakland, California**

