



**Pacific Gas and
Electric Company™**

**Ben LePage, Ph.D.,
PWS
Manager,
Environmental Remediation**

3401 Crow Canyon Rd
San Ramon, CA 94583
(925) 415-6407
(925) 415-6952
Ben.LePage@pg&e.com

1 June 2016

RECEIVED

By Alameda County Environmental Health 1:56 pm, Jun 03, 2016

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: 205 Brush Street
Oakland, CA
RO0003196

Mr. Keith Nowell:

As the legally authorized representative of PG&E, who contracted ERM-WEST, Inc. (ERM) to prepare the *Site Characterization Technical Memorandum*, I have reviewed the report and declare under the penalty of perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Sincerely,

Ben A. LePage, Ph.D.

Manager, Remediation

Memorandum

Environmental
Resources
Management

To: Keith Nowell, ACEH

1277 Treat Boulevard
Suite 500
Walnut Creek, CA 94597
(925) 946-0455
(925) 946-9968 (fax)

From:



John Lucio, ERM

Date: 1 June 2016



Subject: RO0003196 - Site Characterization Technical
Memorandum, 205 Brush Street, Oakland, California

This memorandum presents the results of the initial phase of investigation at the former Port of Oakland property located at 205 Brush Street in Oakland, California (site; Figure 1). The general scope of work was described in the November 2015 *Site Characterization Investigation Work Plan* (Work Plan; ERM 2015), which was modified based on comments and requests provided by Alameda County Department of Environmental Health (ACEH) in a 4 March 2016 letter to Pacific Gas and Electric Company (PG&E). The revised sampling strategy was provided in a summary figure and table that was submitted to ACEH on 8 and 9 March 2016. The summary figure and table are included in this memorandum as Figure 2 and Table 1. ACEH provided approval of the Work Plan in a 15 March 2016 letter to PG&E.

As presented in the Work Plan and shown on Figure 2, the first phase of work entailed the completion of 16 borings and three soil vapor probes to complete the onsite delineation of chemicals of concern to soil, soil vapor, and shallow groundwater at the site. Consistent with the Work Plan, the purpose of this technical memorandum is to provide ACEH with (1) the results of the initial investigations and (2) any additional scope necessary to address remaining data gaps or changes to the scope of the second phase of investigation provided in the Work Plan. Below is a brief summary of the investigation results and the proposed scope of work for the second phase of investigation; a complete evaluation will be provided in a subsequent investigation report that will be submitted following the completion of the second phase of investigation.

Investigation Results

The fieldwork was completed between 6 and 15 April 2016. The specific details of the fieldwork with regard to proposed depth of the borings and sample intervals are provided in Table 1. The boring logs will be provided within the subsequent investigation report. The borings were completed to total depths ranging from 4 to 15 feet below ground surface (bgs). Groundwater was encountered at depths ranging from approximately 5 to 11 feet bgs during the investigation.

Soil Results

Forty-two soil samples were collected for analysis during the first phase of investigation and the samples were sent to Curtis & Tompkins, Ltd., a California-certified laboratory in Berkeley, California, for analysis of total petroleum hydrocarbons (TPH) by U.S. Environmental Protection Agency (USEPA) Method 8015M, volatile organic compounds (VOCs) by USEPA Method 8260, semivolatile organic compounds (SVOCs) by USEPA Method 8270, organochlorine pesticides by USEPA 8081A, and polychlorinated biphenyls (PCBs) by USEPA Method 8082. The results of the soil sample analyses are provided in Tables 2 through 6, as well as on Figures 3 through 6. The soil results provided in the tables and figures are compared to applicable Environmental Screening Levels (ESLs) set by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in their ESL Workbook (February 2016, Revision 3). The applicable ESLs provided in the tables and figures are primarily the Tier-1 ESLs, which are the most conservative levels, with the exception of Tier-1 ESLs that were based on direct contact in a residential scenario. For these ESLs, the risk levels corresponding to direct contact in a commercial/industrial scenario were used, which is consistent with the current and future use of the property.

As seen in Figures 3, 4, and 6, the locations with concentrations of TPH, VOCs, SVOCs, pesticides, and PCBs in soil above their applicable ESLs have been adequately defined to allow for future assessment of site-specific risk and remedial design.

As seen on Figure 5, two metals, arsenic and lead, were detected above their applicable ESLs. Arsenic concentrations detected in all soil samples were above the applicable ESL; however, the range of detected concentrations (0.82 to 25 milligrams per kilogram [mg/kg]) are within

the same order of magnitude as the recognized upper limit of background levels in Bay Area soil and do not appear to indicate an origin from previous site activities. Concentrations of lead above its applicable ESL appears to be isolated to shallow soil samples and may be indicative of the fill used on the site prior to development of the current structures. As seen in Figure 5, a number of locations (SB-11, SB-12, and SB-23) with shallow lead concentrations above the applicable ESL are not currently bound by samples with levels below the applicable ESL. To address this remaining soil data gap, shallow borings and sample collection for lead analysis are proposed for the second phase of investigation to complete the lead delineation in shallow soil. These proposed locations are discussed below.

Groundwater Results

Grab groundwater samples were collected from shallow groundwater at 11 locations during the initial investigation. The groundwater samples were submitted to Curtis & Tompkins for analysis of TPH by USEPA Method 8015M, VOCs by USEPA 8260, SVOCs by USEPA 8270, and metals by USEPA Methods 6010/7000. The results of the groundwater analyses are provided in Tables 7 through 10 and Figures 7 through 9. The results of the groundwater analyses are compared to Tier-1 ESLs from the RWQCB ESL Workbook (February 2016, Revision 3). As seen in Figures 7 through 9, the locations with concentrations of TPH, VOCs, SVOCs, and metals in groundwater above their Tier-1 ESLs have been adequately defined to allow for future assessment of site-specific risk and remedial design.

Soil Vapor Results

Four soil vapor samples were collected to characterize the presence of a vapor sample collected during the due diligence fieldwork that contained a concentration of tetrachloroethene (PCE) above its commercial/industrial ESL. The samples were collected and sent to Eurofins Air Toxics, Inc., a California-certified laboratory in Folsom, California, for analysis of VOCs by USEPA TO-15. The results of the soil vapor analyses are provided on Table 10 and Figure 10. As seen on Figure 10, the results show that the presence of PCE above the applicable commercial/industrial ESL has been delineated. The figure also shows that a concentration of benzene above its commercial/industrial ESL. This location was close to the former underground storage tank (UST) site, which will be the focus of future remediation.

Proposed Phase II Investigation Scope

Based on the results of the initial investigation, ERM recommends that the second phase of site investigation be completed as presented in the November 2015 Work Plan. The second phase will provide delineation of deeper site lithology and hydrostratigraphy, as well as groundwater quality in the deeper groundwater zone. As outlined in the Work Plan, the second phase will entail the completion of three cone penetration test (CPT) borings (one upgradient and two downgradient of the former UST) and collection of depth-discrete groundwater samples. The locations are shown on Figure 11.

In addition, to address the delineation of lead in shallow soil, we propose five additional shallow borings at the locations shown on Figure 11. The soil borings will be completed to approximately 5 feet bgs and two soil samples (0.5 to 1 feet bgs and 3.5 to 4 feet bgs) will be collected and submitted for analysis of Title 22 metals by USEPA Methods 6010/7000. Also, to address the potential for PCE in soil vapor to be present above its residential ESL near a neighboring work/live property, one additional soil vapor sample will be collected at the location shown in Figure 11 using the sampling procedure outlined in the Work Plan. The vapor sample will be submitted to a California state-certified laboratory for VOCs analysis by USEPA Method TO-15.

PG&E is prepared to conduct the second phase of the investigation upon concurrence of the proposed sampling locations and scope with ACEH. Please contact me with any questions or comments.

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Attachments:

Tables 1 - 10

Figures 1 - 11

Tables

Table 1
Proposed Phase I Sampling Strategy
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sampling Location	Anticipated Total Depth (ft bgs)	Approximate Sampling Depths (ft bgs)	Groundwater Samples	Analytes
SB-11	5	0.5 to 1.0, 3.5 to 4	No	Soil: Title 22 Metals
SB-12	5	0.5 to 1.0, 3.5 to 4	No	Soil: Title 22 Metals
SB-13	15	None proposed	Yes	GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-14	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs; samples above 5 feet add organochlorine pesticides, PCBs, and Title 22 metals GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-15	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs; samples above 5 feet add organochlorine pesticides, PCBs, and Title 22 metals GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-16	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs; samples above 5 feet add organochlorine pesticides, PCBs, and Title 22 metals GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-17	5	0.5 to 1.0, 3.5 to 4	No	Soil: Title 22 Metals
SB-18	5	0.5 to 1.0, 3.5 to 4	No	Soil: Title 22 Metals, TPH-d, TPH-mo, organochlorine pesticides, and PCBs
SB-19	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs; samples above 5 feet add Title 22 metals GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals

Table 1
Proposed Phase I Sampling Strategy
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sampling Location	Anticipated Total Depth (ft bgs)	Approximate Sampling Depths (ft bgs)	Groundwater Samples	Analytes
SB-20	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-21	15	None proposed	Yes	GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-22	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-23	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, TPH-mo GW: VOCs, TPH-g, TPH-d, TPH-mo, SVOCs, Title 22 Metals
SB-24	5	0.5 to 1.0, 3.5 to 4	No	Soil: Title 22 Metals
SB-25	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, SVOCs GW: VOCs, TPH-g, TPH-d, SVOCs
SB-26	15	0.5 to 1.0, 3.5 to 4, 7.5 to 8, 11.5 to 12	Yes	Soil: VOCs, TPH-g, TPH-d, SVOCs GW: VOCs, TPH-g, TPH-d, SVOCs

Notes:

ft bgs = feet below ground surface

Bolded analytes indicate additional requested analyses by ACEH

Highlighted borings indicate additional requested locations by ACEH.

TPH-d and TPH-mo will be analyzed without silica gel cleanup; based on initial analytical results, silica gel cleanup may be used on some samples for comparison purposes.

Soil samples intervals are approximate and will be based on visual and field screening with an organic vapor analyzer; sample intervals will not be in excess of 5 feet bgs.

Samples will be collected at significant changes in lithology, areas of obvious impact, and, at ACEH's request, at the soil/groundwater interface.

Table 2
 Total Petroleum Hydrocarbons and Volatile Organic Compounds in Soil
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	TPH-d*	TPH-mo*	TPH-g*	Acetone	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	MTBE	Naphthalene	Tetrachloroethene	1,1,2-Trichloroethane	1,2,4-Trimethylbenzene	1,2,3-Trichloropropane	1,3,5-Trimethylbenzene	2-Butanone	Isopropylbenzene	para-Isopropyl Toluene	Propylbenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene		
		Tier-1 ESLs	230	5,100	100	0.5	0.044	2.9	1.4	2.3	2.3	0.023	0.033	0.42	0.07	--	--	--	2.8	--	--	--	--	--	--		
		Applicable ESLs	1,100	5,100	500	0.5	0.044	2.9	1.4	2.3	2.3	0.023	0.033	0.42	0.07	--	--	--	2.8	--	--	--	--	--	--		
January 2014 Event																											
SB-2	1.5 - 2.0	1/23/2014	170 HD,SG	370 HD, SG	3.7 HD	<0.12	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0052	<0.0049	0.015	<0.0049	<0.0049	<0.0049	<0.0049	
SB-2	8.5 - 9.0	1/23/2014	80 HD,SG	65 HD, SG	2,300	<12	<5	100	54	220	81	<5	<50	<5	<5	99	<5	32	<50	<5	<5	17	8.1	<5	<5	<5	
SB-2	14.0 - 14.5	1/23/2014	<5.0 SG	<25 SG	<0.50	<0.13	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	
SB-3	0.5 - 1.0	1/23/2014	<4.9	<24	<0.50	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-3	6.0 - 6.5	1/23/2014	<5.0	<25	<0.50	<0.13	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	
SB-4	0.5 - 1.0	1/24/2014	70 SG,HD	380 SG,HD	<0.50	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-4	7.0 - 7.5	1/24/2014	<5.0	<25	<0.50	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-5	0.5 - 1.0	1/23/2014	390 HD,SG	680 HD,SG	<0.50	<0.13	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
SB-5	6.5 - 7.0	1/23/2014	<4.9 SG	<24 SG	<0.50	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-6	0.5 - 1.0	1/23/2014	15 HD,SG	34 HD,SG	<0.50	<0.13	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
SB-6	7.0 - 7.5	1/23/2014	<4.9 SG	<24 SG	<0.50	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-7	0.5 - 1.0	1/24/2014	22 SG,HD	58 SG,HD	<0.50	<0.13	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	0.006	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
SB-7	7.0 - 7.5	1/24/2014	<5.0	<25	<0.50	<0.13	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0052	<0.0051	<0.0052	<0.0051	<0.0052	<0.0051	<0.0052	<0.0051	<0.0052	<0.0051	<0.0052	<0.0051	<0.0051	
SB-8	0.5 - 1.0	1/23/2014	9,900 HD,SG	10,000 HD,SG	1.6 HD	<0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SB-8	6.0 - 6.5	1/23/2014	<5.0 SG	<25 SG	<0.50	<0.13	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
SB-9	2.5 - 3.0	1/23/2014	13 HD,SG	<25 SG	2.5 HD	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0082	<0.005	<0.005	<0.005	<0.005	
SB-9	6.0 - 6.5	1/23/2014	560 HD,SG	67 HD,SG	1,600	<25	1.1	<1	21	1.5	<1	<1	24	<1	<1	2.5	<1	1	<10	8.8	<1	17	5.5	<1	<1	<1	
SB-9	11.5 - 12.0	1/23/2014	<5.0 SG	<25 SG	66	<13	3.1	3.5	1.9	6.8	2.1	<0.51	<5.1	<0.51	<0.51	2.8	<0.51	0.85	<5.1	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	
SB-10	0.5 - 1.0	1/24/2014	<5.0	<25	<0.50	<0.130	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	
SB-10	6.0 - 6.5	1/24/2014	<5.0	<25	<0.50	<0.130	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
April 2016 Event																											
SB-14	0.5-1.0	4/7/2016	250 Y	280	0.11 J	0.0077 J	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	
SB-14	3.5-4.0	4/7/2016	0.55 J	<5.0	0.11 J	0.043	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0072 J	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	
SB-14	7.5-8.0	4/7/2016	0.93 J	<5.0	0.096 J	0.016 J b	<0.0046	<0.0046	0.0011 J	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	0.0019 J	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	
SB-14	11.5-12.0	4/7/2016	<1.0	<5.0	0.088 J	<0.020	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
SB-15	0.5-1.0	4/7/2016	180 Y	360	0.080 J	<0.019	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	
SB-15	3.5-4.0	4/7/2016	0.52 J	2.1 J	0.11 J	0.053	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
SB-15	7.5-8.0	4/7/2016	0.46 J	<5.0	0.075 J	0.018 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.002 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
SB-15	11.5-12.0	4/7/2016	<1.0	<5.0	0.12 J	0.0046 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
SB-16	0.5-1.0	4/7/2016	340 Y	580	0.12 J	<0.019	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	
SB-16	3.5-4.0	4/7/2016	0.85 J	<5.0	0.12 J	0.041	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0079 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
SB-16	7.5-8.0	4/7/2016	0.37 J	<5.0	0.089 J	0.024	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	0.0026 J	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	
SB-16	11.5-12.0	4/7/2016	3.2 Y	<5.0	0.085 J	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SB-18	0.5-1.0	4/8/2016	58 Y	340	NA																						

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	TPH-d*	TPH-mo*	TPH-g*	Acetone	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	MTBE	Naphthalene	Tetrachloroethene	1,1,2-Trichloroethane	1,2,4-Trimethylbenzene	1,2,3-Trichloropropane	1,3,5-Trimethylbenzene	2-Butanone	Isopropylbenzene	para-Isopropyl Toluene	Propylbenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene
		Tier-1 ESLs	230	5,100	100	0.5	0.044	2.9	1.4	2.3	2.3	0.023	0.033	0.42	0.07	--	--	--	2.8	--	--	--	--	--	--
		Applicable ESLs	1,100	5,100	500	0.5	0.044	2.9	1.4	2.3	2.3	0.023	0.033	0.42	0.07	--	--	--	2.8	--	--	--	--	--	--
		Applicable ESLs	1,100	5,100	500	0.5	0.044	2.9	1.4	2.3	2.3	0.023	0.033	0.42	0.07	--	--	--	2.8	--	--	--	--	--	--

Legend:

ft bgs = feet below ground surface
 TPH-d = Total Petroleum Hydrocarbons as Diesel
 TPH-mo = Total Petroleum Hydrocarbons as Motor Oil
 TPH-g = Total Petroleum Hydrocarbons as Gasoline
 C/I = Commercial/Industrial
 ESL = Environmental Screening Level
 -- = No screening level established
 SB-# = Soil Boring Location
 < = Analyte not detected at or above the stated laboratory reporting limit
 NA = Not analyzed

Qualifiers:

HD - The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
 SG - The sample extract was subjected to Silica Gel treatment prior to analysis.

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).
 * = Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8015B Modified (M) with silica gel cleanup.
 Samples were analyzed by USEPA Method 8260B.
 Tier-1 ESL = Tier 1 Environmental Screening Level for Shallow Soils, San Francisco Bay Regional Water Quality Control Board, ESL Workbook, Tier-1 ESL Table, February 2016.
 Applicable ESL = Appropriate ESL based on current and future site use as a Commercial/Industrial site using the Soil Summary Table from the San Francisco Bay Regional Water Quality Control Board ESL Workbook, February 2016.

Bold values indicate detections at or above the laboratory reporting limit.

Values shaded gray indicate concentrations detected above the Applicable ESLs.

Table 4
Total Metals in Soil
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
		Tier-1 ESLs	31	0.067	3,000	42	39	120,000	23	3,100	80	390	86	390	390	0.78	390	23,000	13
		Applicable ESLs	470	0.31	220,000	2,200	580	1,800,000	350	47,000	320	5,800	11,000	5,800	5,800	12	5,800	350,000	190
January 2014 Event																			
SB-2	1.5 - 2.0	1/23/2014	<0.765	3.43	120	0.312	0.661	22.9	5.99	55.8	312	0.400	23.1	<0.765	<0.255	<0.765	20.0	339	4.50
SB-2	8.5 - 9.0	1/23/2014	<0.732	0.775	59.7	<0.244	<0.488	43.6	7.06	8.47	2.48	<0.244	33.5	<0.732	<0.244	<0.732	27.1	22.2	<0.0845
SB-2	14.0 - 14.5	1/23/2014	<0.773	2.47	63.8	<0.258	<0.515	39.3	7.95	8.90	1.94	<0.258	33.1	<0.773	<0.258	<0.773	27.6	21.2	<0.0820
SB-3	0.5 - 1.0	1/23/2014	<0.769	1.77	61.2	<0.256	<0.513	5.68	5.33	25.8	5.15	<0.256	6.79	<0.769	<0.256	<0.769	19.6	66.0	0.134
SB-3	6.0 - 6.5	1/23/2014	<0.773	0.921	46.4	<0.258	<0.515	28.3	2.45	9.34	2.16	<0.258	13.9	<0.773	<0.258	<0.773	17.5	20.1	<0.0805
SB-4	0.5 - 1.0	1/24/2014	1.16	13.3	309	0.522	4.98	36.2	9.65	385	1,670	<0.251	43.1	<0.754	<0.251	<0.754	23.8	2,080	1.55
SB-4	7.0 - 7.5	1/24/2014	<0.765	1.48	54.7	<0.255	<0.510	34.1	7.08	16.8	25.6	<0.255	24.9	<0.765	<0.255	<0.765	23.6	37.5	<0.0835
SB-5	0.5 - 1.0	1/23/2014	33.5	15.3	921	0.267	4.89	50.9	13.6	1,840	4,760	50.1	73.9	<0.773	0.448	<0.773	28.5	3,420	7.14
SB-5	6.5 - 7.0	1/23/2014	<0.758	2.03	58.0	<0.253	<0.505	36.1	9.11	10.3	5.17	0.361	28.1	<0.758	<0.253	<0.758	27.7	20.5	<0.0805
SB-6	0.5 - 1.0	1/23/2014	<0.758	4.69	87.1	<0.253	0.657	30.7	4.34	37.3	249	1.10	22.3	<0.758	<0.253	<0.758	21.1	447	0.876
SB-6	7.0 - 7.5	1/23/2014	<0.725	1.37	42.8	<0.242	<0.483	37.3	3.52	6.15	1.77	0.607	22.6	<0.725	<0.242	<0.725	23.1	15.5	<0.0835
SB-7	0.5 - 1.0	1/24/2014	4.88	8.3	99.4	0.265	1.59	42	3.79	1,100	1,340	<0.250	21.7	<0.750	<0.250	<0.750	27	515	3.34
SB-7	7.0 - 7.5	1/24/2014	<0.735	1.98	55.4	0.294	<0.490	42.7	7.28	14.8	13.7	<0.245	31.6	<0.735	<0.245	<0.735	28.8	29.1	<0.0835
SB-8	0.5 - 1.0	1/23/2014	12.0	12.7	513	<0.244	7.19	44.9	8.09	3,890	2,380	6.22	47.2	<0.732	1.31	<0.732	26.4	2,800	8.10
SB-8	6.0 - 6.5	1/23/2014	<0.735	1.45	57.9	<0.245	<0.490	32.1	11.0	11.1	3.88	<0.245	27.0	<0.735	<0.245	<0.735	25.4	20.6	<0.0835
SB-9	2.5 - 3.0	1/23/2014	<0.743	5.23	219	<0.248	0.518	35.3	7.16	130	287	15.3	44.4	<0.743	0.776	<0.743	31.3	256	<0.0875
SB-9	6.0 - 6.5	1/23/2014	<0.714	1.25	51.0	<0.238	<0.476	31.3	5.53	7.99	2.53	<0.238	22.2	<0.714	<0.238	<0.714	20.3	17.3	<0.0835
SB-9	11.5 - 12.0	1/23/2014	<0.754	1.03	74.7	0.273	<0.503	73.4	7.54	11.8	2.62	<0.251	44.9	<0.754	<0.251	<0.754	36.1	24.8	<0.0845
SB-10	0.5 - 1.0	1/24/2014	<0.718	2.51	125	0.317	<0.478	7.95	7.3	29.1	5.37	<0.239	8.61	<0.718	<0.239	<0.718	26.6	86.1	0.139
SB-10	6.0 - 6.5	1/24/2014	<0.758	<0.758	28.5	<0.253	<0.505	29.4	1.9	11.1	1.32	<0.253	9.56	<0.758	<0.253	<0.758	18.4	11.6	<0.0845
April 2016 Event																			
SB-11	0.5-1.0	4/8/2016	3.1	5.7	210	0.22	3.1	91	6.1	210	890	0.75	28	0.26 J	0.33 J	<0.54	29	910	2.2
SB-11	3.5-4.0	4/8/2016	0.55	1.4	57	0.16	0.36	29	3.4	10	10	0.21 J	16	<0.53	0.23 J	<0.53	19	55	0.079
SB-12	0.5-1.0	4/8/2016	3.6	5.2	300	0.27	3.3	42	6.9	780	510	1.9	26	<0.52	0.43 J	<0.52	27	730	3.6
SB-12	3.5-4.0	4/8/2016	0.28 J	1.1	69	0.17	0.33	25	3.4	6.8	2.5	0.22 J	16	<0.52	0.13 J	<0.52	18	28	0.031
SB-14	0.5-1.0	4/7/2016	3.8	3.4	200	0.46	2.5	27	18	330	470	0.71	46	<0.48	0.47 J	<0.48	31	580	0.94
SB-14	3.5-4.0	4/7/2016	0.5	0.88	42	0.16	0.29	26	3.2	4.3	1.5	0.10 J	13	<0.46	0.10 J	0.24 J	18	13	0.0081 J
SB-15	0.5-1.0	4/7/2016	1.1	2.6	130	0.62	0.68	15	8.0	22	33	0.23	16	<0.54	0.12 J	<0.54	26	83	0.55
SB-15	3.5-4.0	4/7/2016	0.66	1.7	49	0.15	0.28	25	3.5	4.9	3.5	0.080 J	12	<0.55	<0.27	0.20 J	18	13	0.020
SB-16	0.5-1.0	4/7/2016	4.7	4.7	210	0.61	1.9	20	7.8	440	640	0.46	21	<0.54	0.44 J	<0.54	26	890	7.5
SB-16	3.5-4.0	4/7/2016	0.59	0.84	50	0.17	0.3	26	3.5	4.0	1.4	0.14 J	14	<0.49	0.11 J	0.22 J	19	14	0.014 J
SB-17	0.5-1.0	4/8/2016	0.55	1.7	69	0.30	0.60	51	7.5	8.7	5.1	0.32	38	0.17 J	0.14 J	0.26 J	32	26	0.035
SB-17	3.5-4.0	4/8/2016	0.44 J	0.98	78	0.17	0.33	25	3.8	5.7	3.0	0.20 J	17	0.18 J	0.11 J	<0.51	18	21	0.029
SB-18	0.5-1.0	4/8/2016	13	16	220	0.26	3.2	30	5.6	840	1,500	0.59	27	0.74	0.94 J	2.8	28	1,900	1.7
SB-18	3.5-4.0	4/8/2016	0.60	1.3	47	0.17	0.31	25	3.7	6.2	3.4	0.21 J	15	0.40 J	0.19 J	<0.54	18	20	0.024
SB-19	0.5-1.0	4/6/2016	1.7	11	310	0.21	0.76	28	5.4	56	1,900	0.15 J	20	<0.48	<0.24	0.41 J	26	190	0.20
SB-19	3.5-4.0	4/6/2016	<0.49	0.82	67	0.17	0.018 J	25	3.4	5.9	2.3	0.082 J	15	<0.49	<0.24	0.23 J	20	16	0.017
SB-22	0.5-1.0	4/6/2016	1.5	4.3	110	0.22	0.31	32	5.7	33	260	0.10 J	23	<0.50	<0.25	<0.50	27	170	0.12
SB-22	3.5-4.0	4/6/2016	0.54	1.2	77	0.17	0.048 J	26	4.9	11	3.1	0.071 J	17	0.21 J	<0.25	<0.50	19	22	0.047
SB-22	7.0-7.5	4/6/2016	0.79	3.6	59	0.20	0.051 J	34	7.0	11	4.0	<0.23	24	0.30 J	<0.23	<0.46	31	32	0.063
SB-22	11.5-12.0	4/6/2016	1.8	0.83	63	0.24	0.16 J	56	5.3	8.7	3.1	<0.24	30	<0.48	<0.24	<0.48	28	43	0.024
SB-23	0.5-1.0	4/7/2016	8.0	15	360	0.27	6.1	26	7.5	280	2,300	0.85	32	7.8	0.76	<0.47	30	2,400	NA
SB-23	3.5-4.0	4/7/2016	0.54	1.3	65	0.17	0.35	27	3.6	5.5	2.4	0.21 J	15	1.7	0.047 J	<0.52	20	18	NA
SB-24	0.5-1.0	4/8/2016	<																

Table 5
Organochlorine Pesticides in Soil
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sample ID Location	Sample Depth (bgs)	(ft)	Date Sampled	Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endrin	Endrin Aldehyde	Gamma-Chlordane	Heptachlor Epoxide
			Tier 1 ESLs	0.48	2.7	1.9	1.9	0.00017	0.0046	0.00065	--	--	0.00042
			Applicable ESLs	2.2	12.0	8.5	8.5	0.00017	0.0046	0.00065	--	--	0.00042
January 2014 Event													
SB-2	1.5 - 2.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-3	0.5 - 1.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-4	0.5 - 1.0		1/24/2014	<0.05	0.026	<0.005	0.028	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-5	0.5 - 1.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	0.23
SB-5	6.5 - 7.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-6	0.5 - 1.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-7	0.5 - 1.0		1/24/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-8	0.5 - 1.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	0.07
SB-8	6.0 - 6.5		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-9	2.5 - 3.0		1/23/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
SB-10	0.5 - 1.0		1/24/2014	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005
April 2016 Event													
SB-14	0.5-1.0		4/7/2016	0.072 CJ	<0.033	0.042 C	<0.033	0.018 C	<0.017	0.022 J	<0.033 #	<0.017	<0.017
SB-14	3.5-4.0		4/7/2016	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033 #	<0.0017	<0.0017
SB-15	0.5-1.0		4/7/2016	<0.0017	<0.0033	0.0028 J	0.011	<0.0017	<0.0017	0.0012 J	<0.0033 #	0.0034	<0.0017
SB-15	3.5-4.0		4/7/2016	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017 #	<0.0033	<0.0033 #	<0.0017 #	<0.0017
SB-16	0.5-1.0		4/7/2016	0.012 J	<0.034	0.30	<0.034	0.055 C	0.029 C	0.063 C	0.13 C #	0.13 C #	0.056 C
SB-16	3.5-4.0		4/7/2016	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033 #	<0.0017 #	<0.0017
SB-18	0.5-1.0		4/8/2016	<0.034	<0.067	<0.067	0.023	<0.034	0.0055 CJ	<0.067	<0.067	<0.034	<0.034
SB-18	3.5-4.0		4/8/2016	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0017	<0.0017
			Tier 1 ESLs	0.48	2.7	1.9	1.9	0.00017	0.0046	0.00065	--	--	0.00042
			Applicable ESLs	2.2	12.0	8.5	8.5	0.00017	0.0046	0.00065	--	--	0.00042

Legend:

ft bgs = feet below ground surface
 DDD = Dichlorodiphenyldichloroethane
 DDE = Dichlorodiphenyldichloroethylene
 DDT = Dichlorodiphenyltrichloroethane
 ESL = Environmental Screening Level
 --- = No screening level established
 SB-# = Soil Boring Location
 < = Analyte not detected at or above the stated laboratory reporting limit
 NA = Not analyzed
 C = Lab qualifier. Presence confirmed, but RPD between columns exceeds 40%.
 J = Lab qualifier. Estimated value.
 # = CCV drift outside limits: average CCV drift within limits per method requirements

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).
 Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8081A.
 Pesticides not listed were not detected above laboratory reporting limits.
 Tier-1 ESL = Tier 1 Environmental Screening Level for Shallow Soils, San Francisco Bay Regional Water Quality Control Board, *ESL Workbook*, Tier-1 ESL Table, February 2016.
 Applicable ESL = Appropriate ESL based on current and future site use as a Commercial/Industrial site using the Soil Summary Table from the San Francisco Bay Regional Water Quality Control Board *ESL Workbook*, February 2016.

Bold values indicate detections at or above the laboratory reporting limit.

Values shaded gray indicate concentrations detected above the Applicable ESLs.

Table 6
 Polychlorinated Biphenyls in Soil
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
		Tier 1 ESLs	0.25	0.25	0.25	0.25	0.25	0.25	0.25
		Applicable ESLs	1.0	1.0	1.0	1.0	1.0	1.0	1.0
January 2014 Event									
SB-2	1.5 - 2.0	1/23/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-3	0.5 - 1.0	1/23/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-4	0.5 - 1.0	1/24/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-5	0.5 - 1.0	1/23/2014	<5	<5	<5	<5	<5	32	8.1
SB-5	6.5 - 7.0	1/23/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-6	0.5 - 1.0	1/23/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-7	0.5 - 1.0	1/24/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-8	0.5 - 1.0	1/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	11	3.1
SB-8	6.0 - 6.5	1/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05
SB-9	2.5 - 3.0	1/23/2014	<0.05	<0.05	<0.05	<0.05	<0.05	0.094	0.054
SB-10	0.5 - 1.0	1/24/2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
April 2016 Event									
SB-14	0.5-1.0	4/7/2016	<0.160	<0.330	<0.160	<0.160	<0.160	10	0.55
SB-14	3.5-4.0	4/7/2016	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012
SB-15	0.5-1.0	4/7/2016	<0.084	<0.170	<0.084	<0.084	<0.084	2.4	0.3
SB-15	3.5-4.0	4/7/2016	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012
SB-16	0.5-1.0	4/7/2016	<0.420	<0.840	<0.420	<0.420	<0.420	17	2.4
SB-16	3.5-4.0	4/7/2016	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012
SB-18	0.5-1.0	4/8/2016	<0.012	<0.024	<0.012	<0.012	<0.012	0.1	0.04
SB-18	3.5-4.0	4/8/2016	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012
		Tier 1 ESLs	0.25	0.25	0.25	0.25	0.25	0.25	0.25
		Applicable ESLs	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Legend:

ft bgs = feet below ground surface

C/I = Commercial/Industrial

ESL = Environmental Screening Level

--- = No screening level established

SB-# = Soil Boring Location

< = Analyte not detected at or above the stated laboratory reporting limit

NA = Not analyzed

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).

Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8082.

PCBs not listed were not detected above laboratory reporting limits.

Tier-1 ESL = Tier 1 Environmental Screening Level for Shallow Soils, San Francisco Bay Regional Water Quality Control Board, ESL Workbook, Tier-1 ESL Table, February 2016.

Applicable ESL = Appropriate ESL based on current and future site use as a Commercial/Industrial site using the Soil Summary Table from the San Francisco Bay Regional Water Quality Control Board *ESL Workbook*, February 2016.

Bold values indicate detections at or above the laboratory reporting limit.

Values shaded light gray indicate concentrations detected above the Applicable ESLs.

Table 7
Total Petroleum Hydrocarbons and Volatile Organic Compounds in Groundwater
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval / Screen (ft bgs)	Date Sampled	TPH-d*	TPH-mo*	TPH-g*	Acetone	Benzene	Carbon Disulfide	Toluene	Ethylbenzene	p/m-Xylenes	o-Xylene	Methyl tert-butyl ether (MTBE)	Naphthalene	Trichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	Isopropylbenzene	para-Isopropyl toluene	Propylbenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene
	Tier-1 ESL		100	50,000 ¹	100	1,500	1	--	40	13	20	20	5	0.17	5	5	0.5	14	--	--	5,600	--	--	--	--	--	--
	ESL Direct Exposure		150	50,000	220	14,000	1	--	150	30	190	190	13	0.17	5	5	0.5	100	--	--	5,600	--	--	--	--	--	--
	C/I Groundwater ESLs for Vapor Intrusion		--	--	--	290,000,000	9.7	--	30,000	110	11,000	11,000	11,000	170	49	180	53	100,000	--	--	13,000,000	--	--	--	--	--	--
	MCLs		--	--	--	--	5	--	1,000	700	10,000	10,000	--	--	5	--	5	600	--	--	--	--	--	--	--	--	--
January 2014 Event																											
SB-2	5-15	1/24/2014	19,000 SG,HD	480 SG,HD	63,000	<2000	1,800	<1000	15,000	6,800	26,000	10,000	<100	1,400	<100	<100	<50	<100	9,900	2,900	<1000	390	<100	1,500	760	150	<100
SB-2-DUP	5-15	1/24/2014	14,000 SG,HD	360 SG,HD	14,000	<200	1,300	<100	3,100	1,300	3,100	1,500	18	<100	<10	<10	<5.0	<10	560	160	<100	63	<10	140	17	<10	<10
SB-3	5-15	1/24/2014	<50	<250	120	<20	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-4	5-15	1/27/2014	<50	<250	<50	<20	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-5	7-12	1/24/2014	53 SG,HD	<250	140	<20	0.54	<10	5.7	2.7	11	3.6	<1.0	<10	<1.0	<1.0	<0.50	<1.0	4.0	1.2	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-6	7-12	1/24/2014	<50	<250	<50	<20	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-7	5-15	1/24/2014	<50	<250	<50	<20	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-8	5-15	1/24/2014	<50	<250	<50	<20	<0.50	<10	4.2	1.8	4.6	1.0	<1.0	<10	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SB-9	5-10	1/24/2014	60,000 SG,HD	<250	130,000	<2000	10,000	<1000	38,000	6,300	24,000	10,000	160	<1,000	<100	<100	<50	<100	6,600	1,800	<1000	220	<100	810	370	<100	<100
April 2016 Event																											
SB-13	2-12	4/7/2016	31 J	<310	25 J	3.9 J	<0.5	<0.5	<0.5	0.3 J	0.8	<0.5	<0.5	<2.0	<0.5	0.3 J	0.2 J	<0.5	0.6	0.2 J	<10	0.8	<0.5	0.9	<0.5	0.2 J	<0.5
SB-14	2-12	4/7/2016	440 Y	410	<50	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	0.2 J	<0.5	<0.5	<0.5	<0.5	<0.5	0.6 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-15	2-12	4/7/2016	3,300 Y	2,100	490	8.4 J	110	<1.3	110	4.5	15	7.3	0.5 J	<5.0	<1.3	<1.3	0.3 J	<1.3	1.4	0.5 J	<25	<1.3	<1.3	0.3 J	<1.3	<1.3	<1.3
SB-16	2-12	4/7/2016	4,600 Y	3,900	130	9.0 J	0.9	<0.5	6.9	1.5	6.6	2.6	<0.5	0.3 J	<0.5	<0.5	<0.5	<0.5	2.4	0.8	1.5 J	0.2 J	<0.5	0.5	0.2 J	0.2 J	<0.5
SB-19	5-15	4/6/2016	1,100 Y	800	2,600	9.0 J	7.9	<0.5	0.3 J	2.0	3.9	0.8	1.1	2.7	<0.5	<0.5	0.1 J	0.2 J	11	1.8	1.6 J	36	8.5	70	44	33	1.9
SB-19-DUP	5-15	4/6/2016	170,000 Y	18,000	23,000 Y	<100	4.9 J	<5.0	<5.0	1.7 J	2.1 J	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	7.2	1.9 J	<100	25	14	50	40	34	1.6 J
SB-20	2-12	4/11/2016	2,800	1,600	3,300	19 J	0.7 J	<1.7	1.4 J	1.5 J	2.8	0.8 J	220	1.0 J	<1.7	<1.7	0.5 J	<1.7	0.7 J	<1.7	6.0 J	37	<1.7	99	15	7.7	1.8
SB-21	2-12	4/7/2016	710 Y	290 J	69	3.8 J	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1 J	<0.5	<0.5	<0.5	<0.5	<0.5	0.1 J
SB-22	5-15	4/6/2016	940 Y	1,200	<50	<10	<0.5	0.2 J	0.3 J	<0.5	0.2 J	<0.5	4.0	<2.0	<0.5	<0.5	<0.5	<0.5	0.1 J	<0.5	0.4 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-23	2-12	4/7/2016	23 J	<300	<50	4.4 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-25	2-12	4/7/2016	99,000	20,000	450,000	<6,300	33,000	<310	56,000	6,300	23,000	9,600	<310	1,000 J	<310	<310	<310	<310	7,300	2,300	<6,300	320	<310	1,000	240 J	120 J	<310
SB-26	5-15	4/6/2016	1,000 Y	1,600	<50	4.0 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<2.0	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Tier-1 ESLs		100	50,000 ¹	100	1,500	1	--	40	13	20	20	5	0.17	5	5	0.5	14	--	--	5,600	--	--	--	--	--	--
	ESL Direct Exposure		150	50,000	220	14,000	1	--	150	30	190	190	13	0.17	5	5	0.5	100	--	--	--	--	--	--	--	--	--
	C/I Groundwater ESLs for Vapor Intrusion		--	--	--	290,000,000	9.7	--	30,000	110	11,000	11,000	11,000	170	49	180	53	100,000	--	--	--	--	--	--	--	--	--
	MCLs		--	--	--	--	5	--	1,000	700	10,000	10,000	--	--	5	--	5	600	--	--	--	--	--	--	--	--	--

Legend:
ft bgs = feet below ground surface
TPH-d = Total Petroleum Hydrocarbons as Diesel
TPH-mo = Total Petroleum Hydrocarbons as Motor Oil
TPH-g = Total Petroleum Hydrocarbons as Gasoline
C/I = Commercial/Industrial
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
-- = No screening level established
SB-# = Soil Boring Location
< = Analyte not detected at or above the stated laboratory reporting limit
NA = Not Analyzed
J = Lab Qualifier - Estimated Value

Qualifiers:
HD - The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
SG - The sample extract was subjected to Silica Gel treatment prior to analysis.

Notes:
All concentrations reported in micrograms per liter (µg/L).
* = Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8015B Modified (M).
Samples were analyzed by USEPA Method 8260B.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), *ESL Workbook*, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = Commercial/Industrial Environmental Screening Level where Groundwater is not a Current or Potential Drinking Water Resource, San Francisco Bay RWQCB, *ESL Workbook*, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, *ESL Workbook*, Table GW-3, February 2016.
MCLs = Commercial/Industrial Regional Screening Level, EPA Region 9 RSL Summary Table, November 2013.
Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the ESLs.
1 - Tier 1 for TPH-mo based on gross contamination level as TPH-mo is not soluble in water.

Table 8
Semivolatile Organic Compounds in Groundwater
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval/ Screen Interval (ft bgs)	Date Sampled	Acenaphthene	Anthracene	Benzo (a) Anthracene	Benzo (a) Pyrene	Benzo (b) Fluoranthene	Benzo (g,h,i) Perylene	Benzo (k) Fluoranthene	Benzoic Acid	Chrysene	Dibenzofuran	Fluoranthene	Fluorene	Indeno (1,2,3-c,d) Pyrene	2-Methylnaphthalene	1-Methylnaphthalene	2-Methylphenol	3/4-Methylphenol	2,4-Dimethylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene
		Tier-1 ESL	20	0.73	0.027	0.014	0.012	0.1	0.017	---	0.049	---	8	3.9	0.034	2.1	---	---	---	100	0.17	4.6	5	2
		ESL Direct Exposure	530	1,800	0.034	0.2	0.012	---	0.017	---	0.17	---	800	290	0.034	36	---	---	---	100	0.17	---	4,200	120
		C/I Groundwater ESLs for Vapor Intrusion	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170	---	---	---
		MCLs	---	---	---	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
January 2014 Event																								
SB-2	5 - 15	1/24/2014	<97	120	170	100	<97	<97	98	<480	140	<97	460	<97	<97	390	210	<97	<97	<97	780	520	<97	430
SB-2-DUP	5 - 15	1/24/2014	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<48	<9.6	<9.6	<9.6	<9.6	<9.6	19	11	11	17	16	59	12	18	18
SB-3	5 - 15	1/24/2014	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<50	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
SB-4	5 - 15	1/27/2014	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<48	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
SB-5	7 - 12	1/24/2014	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<49	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
SB-6	7 - 12	1/24/2014	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<50	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
SB-7	5 - 15	1/24/2014	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<49	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
SB-8	5 - 15	1/24/2014	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<48	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7
SB-9	5 - 10	1/24/2014	<49	<49	<49	<49	<49	<49	<49	<240	<49	<49	<49	<49	<49	180	99	76	130	<49	550	<49	<49	<49
April 2016 Event																								
SB-13	2-12	4/7/2016	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
SB-14	2-12	4/7/2016	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	39 J	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
SB-15	2-12	4/7/2016	<29	<29	<29	<29	<29	<29	<29	<150	<29	<29	<29	<29	<29	<29	<29	<29	<29	<29	<29	<29	<29	<29
SB-16	2-12	4/7/2016	<28	<28	<28	<28	<28	<28	<28	<140	<28	<28	<28	<28	<28	<28	<28	<28	<28	<28	<28	<28	<28	<28
SB-19	5-15	4/6/2016	<310	<310	<310	<310	<310	<310	<310	<1,600	<310	<310	<310	<310	<310	<310	<310	<310	<310	<310	<310	<310	<310	<310
SB-19- DUP	5-15	4/6/2016	<100	<100	<100	<100	<100	<100	<100	<510	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-20	2-12	4/12/2016	<19	<19	<19	<19	<19	<19	<19	<96	<19	<19	<19	<19	<19	26	17 J	<19	<19	<19	<19	<19	<19	<19
SB-21	2-12	4/7/2016	<20	<20	<20	<20	<20	<20	<20	64 J	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	7.7 J	<20
SB-22	5-15	4/6/2016	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<49	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
SB-23	2-12	4/7/2016	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SB-25	2-12	4/7/2016	<370	<370	<370	<370	<370	<370	<370	<1,900	<370	<370	<370	<370	<370	180 J	99 J	<370	<370	<370	500	73 J	<370	<370
SB-26	5-15	4/6/2016	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<48	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6
		Tier-1 ESL	20	0.73	0.027	0.014	0.012	0.1	0.017	---	0.049	---	8	3.9	0.034	2.1	---	---	---	100	0.12	4.6	5	2
		ESL Direct Exposure	530	1,800	0.034	0.2	0.012	0.1	0.017	---	0.17	---	800	290	0.034	36	---	---	---	100	0.12	---	4,200	120
		C/I Groundwater ESLs for Vapor Intrusion	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170	---	---	---
		MCLs	---	---	---	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Legend:

ft bgs = feet below ground surface
C/I = Commercial/Industrial
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
SB-# = Soil Boring Location
< = Analyte not detected at or above the stated laboratory reporting limit
NA = Not Analyzed
J = Lab Qualifier - Estimated Value

Notes:

All concentrations reported in micrograms per liter (µg/L).
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8270C.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), ESL Workbook, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = Commercial/Industrial Environmental Screening Level where Groundwater is not a Current or Potential Drinking Water Resource, San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.

ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, ESL Workbook, Table GW-3, February 2016.
MCLs = Commercial/Industrial Regional Screening Level, EPA Region 9 RSL Summary Table, November 2013.

Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the ESLs.

Table 9
Total Metals in Groundwater
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval / Screen Interval (ft bgs)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
		Tier-1 ESL	6	10	1,000	2.7	0.25	50	3	3.1	2.5	100	8.2	5	0.19	2	19	81	0.051
		ESL Direct Exposure	6	10	1,000	4	5	50	6	300	15	100	12	30	94	2	50	5,000	1.2
		MCLs	6	10	2,000	4	5	100	--	1,300	15	--	--	50	--	2	--	--	2
January 2014 Event																			
SB-2	5 - 15	1/24/2014	<15	18.3	299	<10	<10	<10	<10	<10	<10	<10	16.7	<15	<5	<15	<10	11.9	<0.5
SB-2-DUP	5 - 15	1/24/2014	<15	18.9	225	<10	<10	<10	<10	<10	<10	<10	15.7	<15	<5	<15	<10	12.9	<0.5
SB-3	5 - 15	1/24/2014	<15	<10	14.5	<10	<10	14.2	457	<10	<10	<10	983	<15	8.95	<15	<10	1,260	<0.5
SB-4	5 - 15	1/27/2014	<15	<10	36.1	<10	<10	<10	<10	<10	<10	<10	<10	<15	<5	<15	<10	21	<0.5
SB-5	7 - 12	1/24/2014	<15	<10	159	<10	<10	<10	<10	<10	<10	17.1	<10	<15	<5	<15	<10	27.1	<0.5
SB-6	7 - 12	1/24/2014	<15	<10	156	<10	<10	<10	<10	<10	<10	<10	11.7	<15	<5	<15	<10	19.6	<0.5
SB-7	5 - 15	1/24/2014	<15	<10	64.8	<10	<10	<10	<10	<10	<10	13.4	<10	<15	<5	<15	<10	11.7	<0.5
SB-8	5 - 15	1/24/2014	<15	<10	116	<10	<10	<10	<10	<10	<10	24	165	<15	<5	<15	<10	15.5	<0.5
SB-9	5 - 10	1/24/2014	<15	24.8	179	<10	<10	<10	<10	<10	<10	<10	<10	<15	6.37	<15	<10	18.3	<0.5
April 2016 Event																			
SB-13	2-12	4/7/2016	<10	<5.0	72	<2.0	<5.0	2.8 J	3.4 J	<5.0	2.7 J	10	5.4	7.6 J	<5.0	2.1 J	1.2 J	5.5 J	<0.20
SB-14	2-12	4/7/2016	<10	<5.0	220	<2.0	<5.0	<5.0	4.7 J	<5.0	3.8 J	20	20	3.7 J	3.6 J	<10	<5.0	7.6 J	<0.20
SB-15	2-12	4/7/2016	<10	8.4	180	<2.0	<5.0	4.3 J	2.7 J	<5.0	3.0 J	26	14	<10	<5.0	2.8 J	2.9 J	<20	<0.20
SB-16	2-12	4/8/2016	<10	7.5	440	<2.0	<5.0	4.7 J	2.2 J	<5.0	<5.0	19	52	<10	1.9 J	<10	<5.0	<20	<0.20
SB-19	5-15	4/6/2016	<10	<5.0	180	<2.0	<5.0	<5.0	4.0 J	3.8 J	<5.0	20	27	<10	<5.0	<10	7.9	7.4 J	<0.20
SB-19-Dup	5-15	4/6/2016	3.0 J	<5.0	200	<2.0	<5.0	1.5 J	4.4 J	<5.0	<5.0	18	27	<10	<5.0	<10	4.1 J	<20	<0.20
SB-20	2-12	4/12/2016	<10	<5.0	150	<2.0	<5.0	1.6 J	29	<5.0	<5.0	8.7	33	<10	<5.0	<10	<5.0	45	<0.20
SB-21	2-12	4/7/2016	<10	<5.0	64	4.3	7.4	13	480	<5.0	2.9 J	4.2 J	1,200	7.3 J	3.5 J	9.1 J	4.9 J	4,900	0.16 J
SB-22	5-15	4/6/2016	<10	<5.0	51	<2.0	<5.0	<5.0	34	<5.0	<5.0	4.5 J	60	<10	1.1 J	8.7 J	1.9 J	17 J	<0.20
SB-23	2-12	4/8/2016	<10	<5.0	88	<2.0	<5.0	<5.0	3.3 J	<5.0	<5.0	4.9 J	7.0	5.9 J	<5.0	4.7 J	1.0 J	20	<0.20
		Tier-1 ESL	6	10	1,000	2.7	0.25	50	3	3.1	2.5	100	8.2	5	0.19	2	19	81	0.051
		ESL Direct Exposure	6	10	1,000	4	5	50	6	300	15	100	12	30	94	2	50	5,000	1.2
		MCLs	6	10	2,000	4	5	100	--	1,300	15	--	--	50	--	2	--	--	2

Legend:

ft bgs = feet below ground surface
C/I = Commercial/Industrial
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
SB-# = Soil Boring Location
< = Analyte not detected at or above the stated laboratory reporting limit
NA = Not Analyzed
J = Lab Qualifier - Estimated Value

Notes:

All concentrations reported in micrograms per liter (µg/L).
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 6010/7000 series.
Samples were field filtered.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), ESL Workbook, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = Commercial/Industrial Environmental Screening Level where Groundwater is not a Current or Potential Drinking Water Resource, San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, ESL Workbook, Table GW-3, February 2016.
MCLs = Commercial/Industrial Regional Screening Level, EPA Region 9 RSL Summary Table, November 2013.
Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the ESLs.

Table 10
 Volatile Organic Compounds in Soil Vapor
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	Acetone	2-Butanone	Ethanol	2-Propanol	Hexane	Cyclohexane	2,2,4-Trimethylpentane	Benzene	Heptane	Naphthalene	Toluene	Tetrachloroethene	Trichloroethene	1,1,1-Trichloroethane	m,p-Xylene
		Tier 1 ESL	15,000,000	2,600,000	--	--	--	--	--	48	--	41	160,000	240	240	520,000	52,000
		Applicable ESL	31,000,000	22,000,000	--	--	--	--	--	420	--	360	1,300,000	2,100	3,000	4,400,000	440,000
SVP-4	5.5	1/27/2014	11	<4.6	<9.7	NA	NA	NA	NA	<1.6	NA	<27	<1.9	4.2	<2.8	<2.8	<8.9
SVP-4-DUP	5.5	1/27/2014	16	<4.5	<9.5	NA	NA	NA	NA	<1.6	NA	<26	<1.9	4.3	<2.7	<2.8	<8.8
SVP-7	5.5	1/27/2014	25	41	<9.4	NA	NA	NA	NA	3.3	NA	<26	<1.9	3,600	8	130	<8.7
SVP-1	5.5	4/15/2016	<24	<12	40	<10	<3.6	3.8	<4.8	<3.3	<4.2	NA	7.3	660	<5.5	96	9.2
SVP-2	5.5	4/15/2016	<25	<12	46	11	<3.7	<3.6	<4.9	<3.3	<4.3	NA	5.9	880	<5.6	42	5.0
SVP-3	5.5	4/15/2016	<510	<640	<410	<530	65,000 E	26,000	520,000 E	890	10,000	NA	230	<370	<290	<290	<230
SVP-5	5.5	4/15/2016	<25	<12	50	<10	<3.8	<3.7	<5.0	<3.4	<4.4	NA	11	450	<5.7	87	9.5

Legend:

ft bgs = feet below ground surface
 C/I = Commercial/Industrial
 ESL = Environmental Screening Level
 CHHSL = California Human Health Screening Level
 RSL = Regional Screening Level
 --- = No screening level established
 SVP-# = Soil Vapor Probe Location
 < = Analyte not detected at or above the stated laboratory reporting limit
 E = Exceeds instrument calibration range
 NA = Not Analyzed

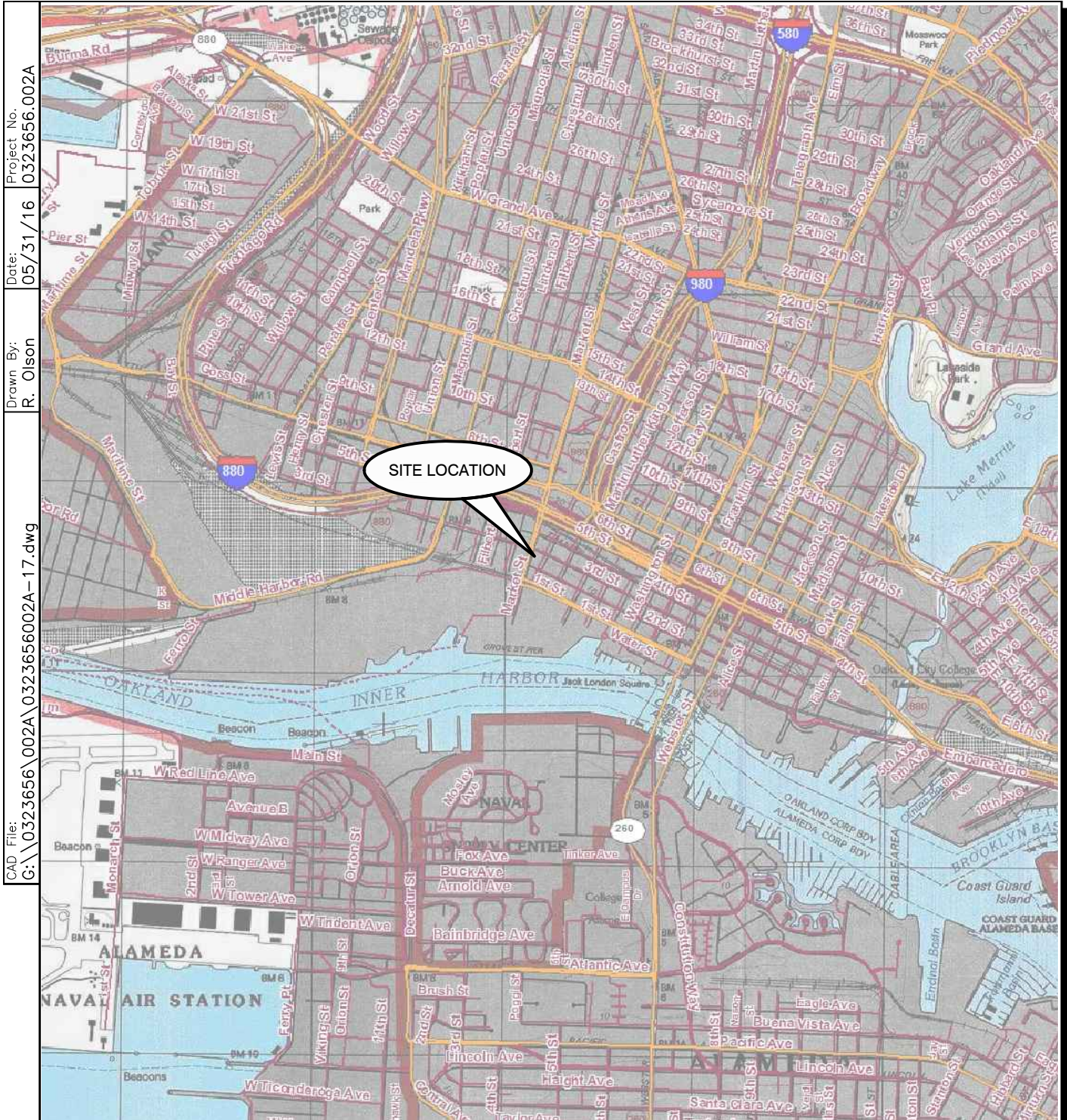
Notes:

All concentrations reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).
 Samples were analyzed by United States Environmental Protection Agency (USEPA) Method TO-15.
 Tier-1 ESL = Tier 1 Environmental Screening Level for Shallow Soils, San Francisco Bay Regional Water Quality Control Board, ESL Workbook, Tier-1 ESL Table, February 2016.
 Applicable ESL = Appropriate ESL based on current and future site use as a Commercial/Industrial site using the Vapor Summary Table from the San Francisco Bay Regional Water Quality Control Board ESL Workbook, February 2016.

Bold values indicate detections at or above the laboratory reporting limit.

Values shaded gray indicate concentrations detected above the Applicable ESLs.

Figures



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 Date: 05/31/16
 Drawn By: R. Olson
 CAD File: C:\0323656\002A\0323656002A-17.dwg

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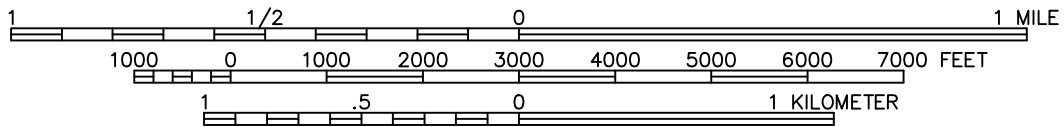
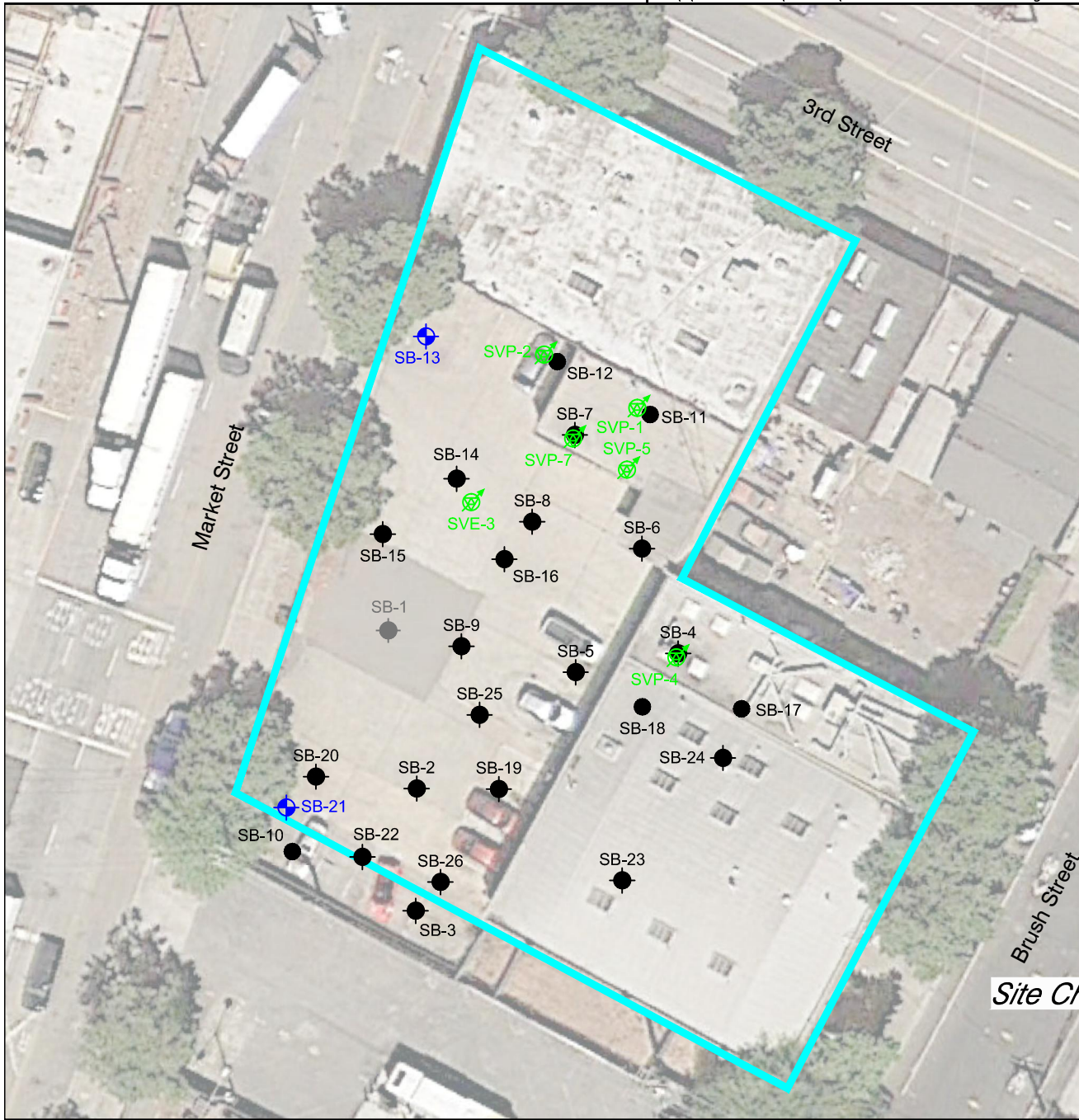







Figure 1
Site Location Map
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California

References:
 TOPO!® Software
 U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
 Oakland West, California
 Dated: 1997



Legend

-  Groundwater Sampling Location
-  Soil Sampling Location
-  Soil and Grab Groundwater Sampling Location
-  Soil Vapor Point
-  Site Boundary

Aerial Photo Source: © 2009 Google Earth
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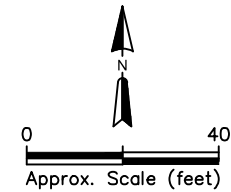
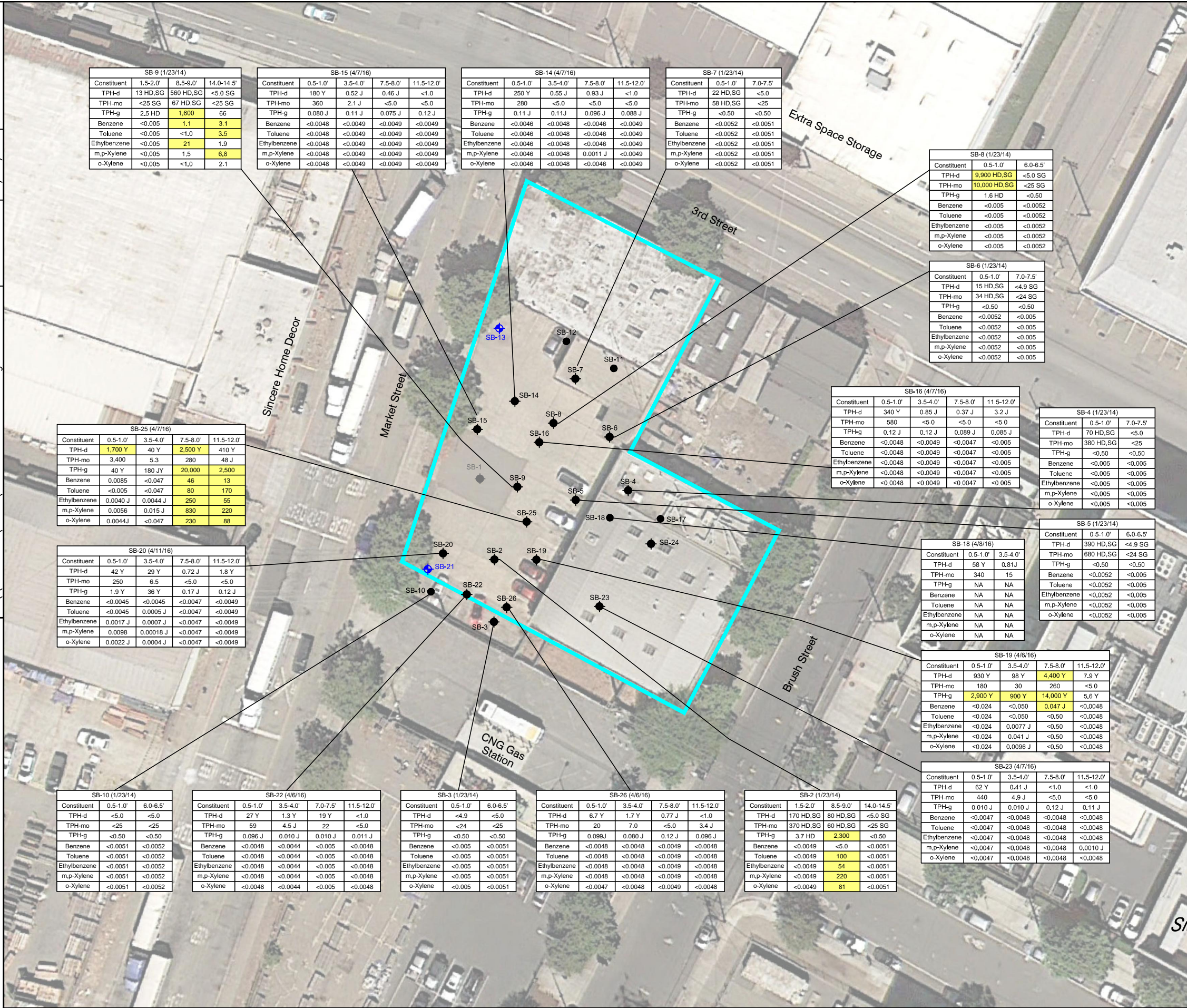


Figure 2
*Soil and Groundwater
Sampling Locations - Phase I
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California*



Legend

- Site Boundary
- Groundwater Sampling Location
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-16 (4/7/14)	Constituent	0.5-1.0'	Sample Depth (ft. bgs)	Concentration in mg/kg
	TPH-d	340 Y		

Chemical Constituent

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs

TPH-d	1,100
TPH-mo	5,100
TPH-g	500
Benzene	0.044
Toluene	2.9
Ethylbenzene	1.4
m,p-Xylenes	2.3
o-Xylene	2.3

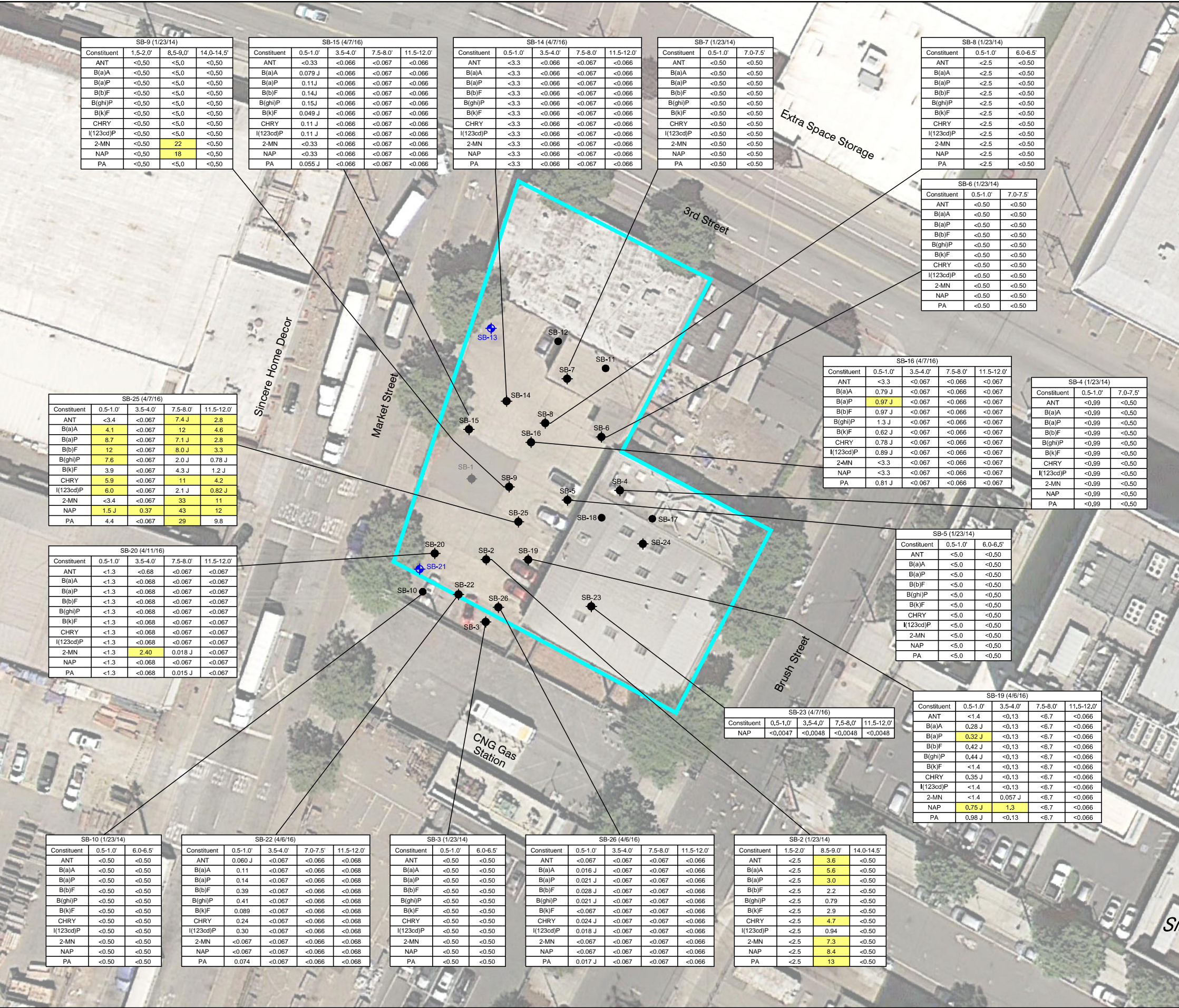
NA Not Available
 HD Chromatographic Pattern was Inconsistent with Profile of Reference Fuel Standard
 SG Sample Extract was Subjected to Silica Gel Treatment Prior to Analysis
 J Lab Qualifier - Estimated Value
 Y Lab Qualifier - Estimated Value, Chromatogram did not Resemble Standard Hydrocarbon Pattern

TPH-g Total Petroleum Hydrocarbons as Gasoline
 TPH-d Total Petroleum Hydrocarbons as Diesel
 TPH-mo Total Petroleum Hydrocarbons as Motor Oil
 ESL Environmental Screening Level

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

Approx. Scale (feet)

Figure 3
 TPH and VOCs in Soil
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



Legend

- Site Boundary
- Groundwater Sampling Location
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-22 (4/6/14)	Constituent	0.5-1.0'	Sample Depth (ft. bgs)
	ANT	0.060 J	Concentration in mg/kg

Chemical Constituent

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs

Anthracene	2.8
Benzo(a)Anthracene	2.9
Benzo(a)Pyrene	0.29
Benzo(b)Fluoranthene	2.9
Benzo(g,h,i)Perylene	2.5
Benzo(k)Fluoranthene	29
Chrysene	3.8
Indeno(1,2,3-c,d)Pyrene	2.9
2-Methylnaphthalene	0.25
Naphthalene	0.033
Phenanthrene	11

J Lab Qualifier - Estimated Value

- ANT Anthracene
- B(a)A Benzo(a)Anthracene
- B(a)P Benzo(a)Pyrene
- B(b)F Benzo(b)Fluoranthene
- B(ghi)P Benzo(g,h,i)Perylene
- B(k)F Benzo(k)Fluoranthene
- CHRY Chrysene
- I(123-c,d)P Indeno(1,2,3-c,d)Pyrene
- 2-MN 2-Methylnaphthalene
- NAP Naphthalene
- PA Phenanthrene

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

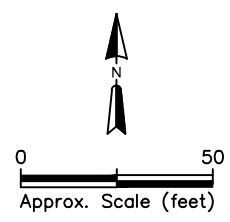
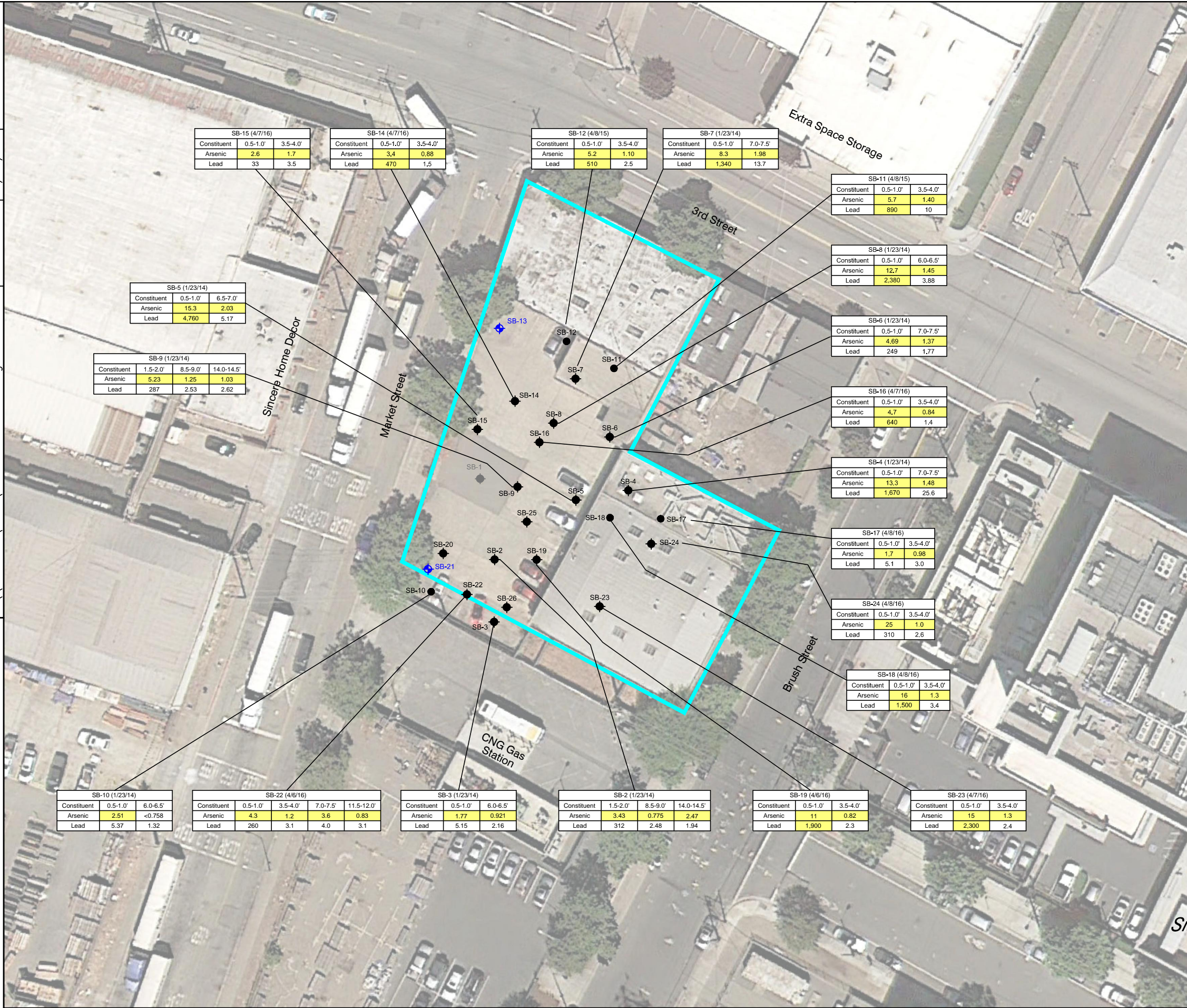


Figure 4
 SVOCs in Soil
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



Legend

- Site Boundary
- ◆ Groundwater Sampling Location
- Soil Sampling Location
- ◆ Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-16 (4/7/14)
Constituent 0.5-1.0'
Arsenic 4.7

Sample Depth (ft. bgs)
 Concentration in mg/kg

Chemical Constituent

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs

Arsenic	0.31
Lead	320

NA Not Available
 J Lab Qualifier - Estimated Value

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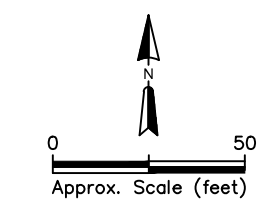
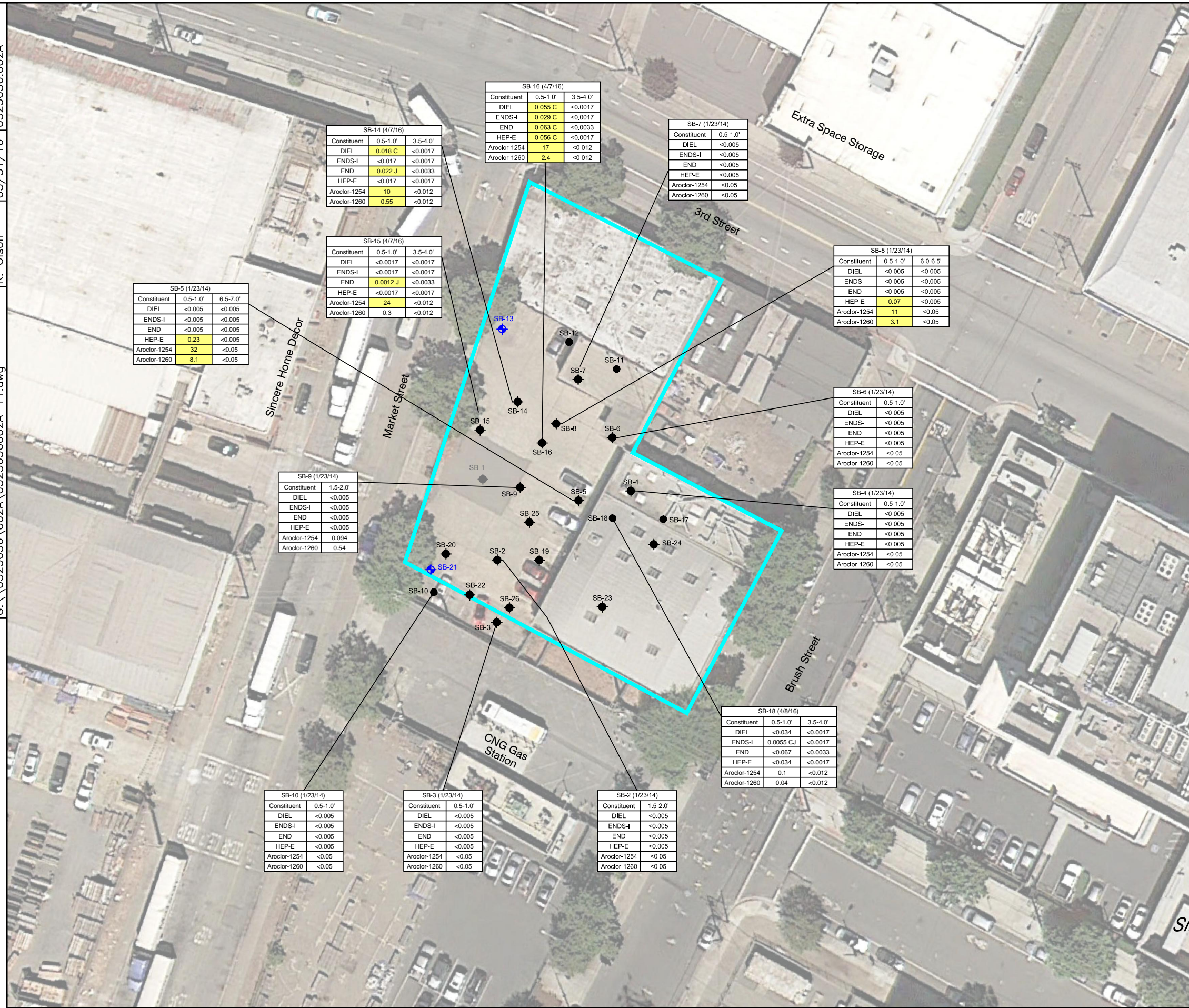


Figure 5
 Metals in Soil
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



Legend

- Site Boundary
- ◆ Groundwater Sampling Location
- Soil Sampling Location
- ◆ Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-2 (1/23/14)		
Constituent	1.5-2.0'	
HEP-E	<0.005	

Sample Depth (ft. bgs)

Concentration in mg/kg

Chemical Constituent

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs

Dieldrin	0.0023
Endosulfan I	0.0046
Endrin	0.00065
HEP-E	0.00042
Anoclor-1254	1.0
Anoclor-1260	1.0

NA Not Available
C Lab Qualifier, Presence Confirmed but RPD between columns exceeds 40%
J Lab Qualifier, Estimated Value
ESL Environmental Screening Level
DIEL Dieldrin
ENDS-I Endosulfan I
END Endrin
HEP-E Heptachlor epoxide

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

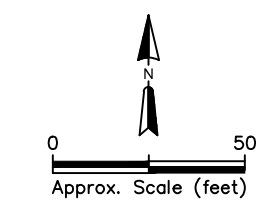
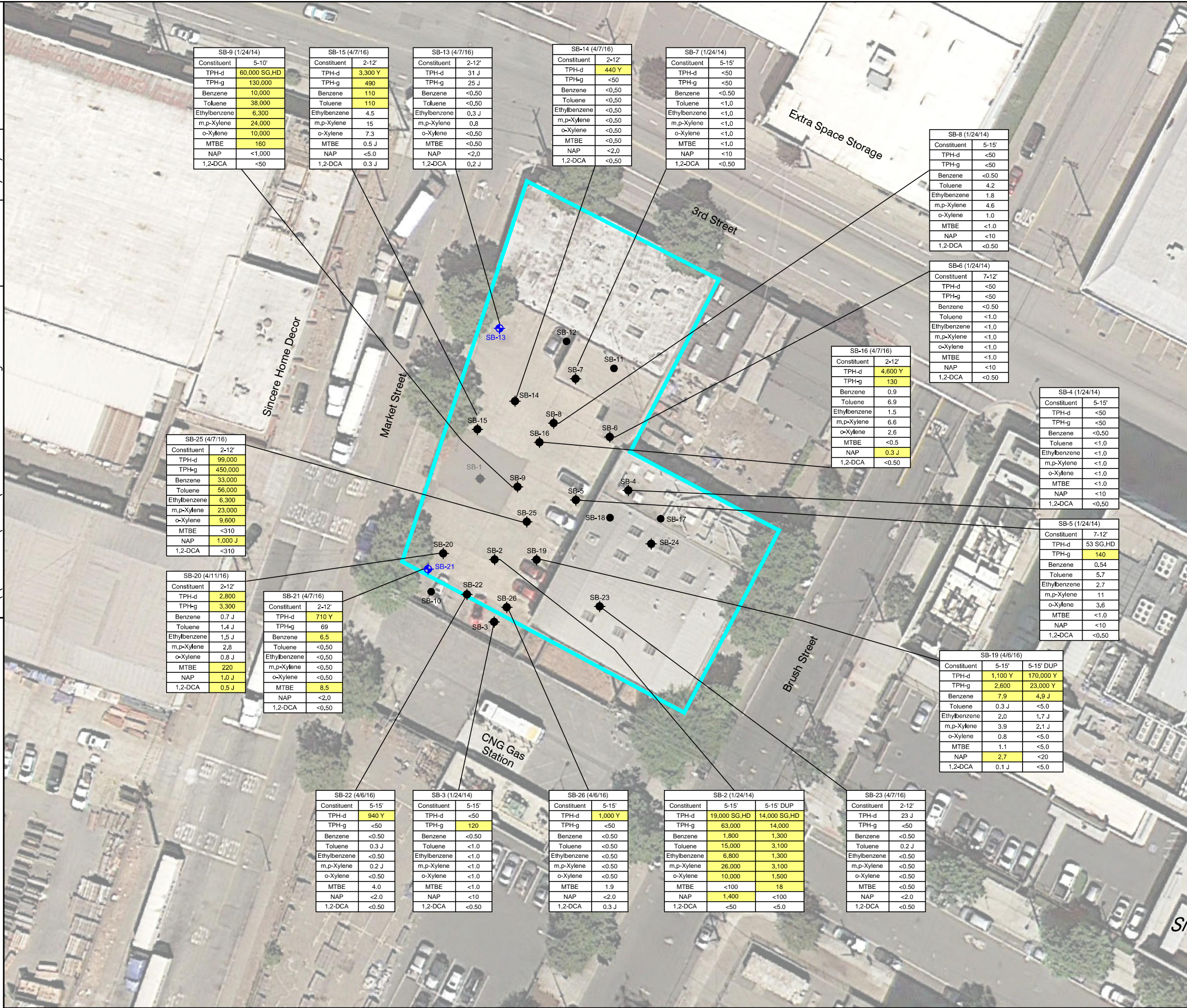


Figure 6
Pesticides and PCBs in Soil
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California



Legend

- Site Boundary
- Groundwater Sampling Location
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-16 (4/7/16)	
Constituent	2-12'
Benzene	0.9

Sample Screen Interval (ft. bgs)
Concentration in µg/L

Chemical Constituent

Yellow shading indicates concentrations above Tier 1 ESLs.

Tier 1 ESLs

TPH-d	100
TPH-g	100
Benzene	1.0
Toluene	40
Ethylbenzene	13
m,p-Xylenes	20
o-Xylene	20
MTBE	5.0
NAP	0.17
1,2-DCA	0.5

- NA Not Available
- HD Chromatographic Pattern was Inconsistent with Profile of Reference Fuel Standard
- SG Sample Extract was Subjected to Silica Gel Treatment Prior to Analysis
- J Lab Qualifier - Estimated Value
- Y Lab Qualifier - Estimated Value, Chromatogram did not Resemble Standard Hydrocarbon Pattern
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-mo Total Petroleum Hydrocarbons as Motor Oil
- MTBE Methyl Tert-butyl Ether
- NAP Naphthalene
- 1,2-DCA 1,2-Dichloroethane
- ESL Environmental Screening Level

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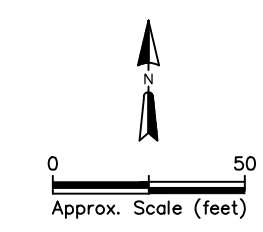
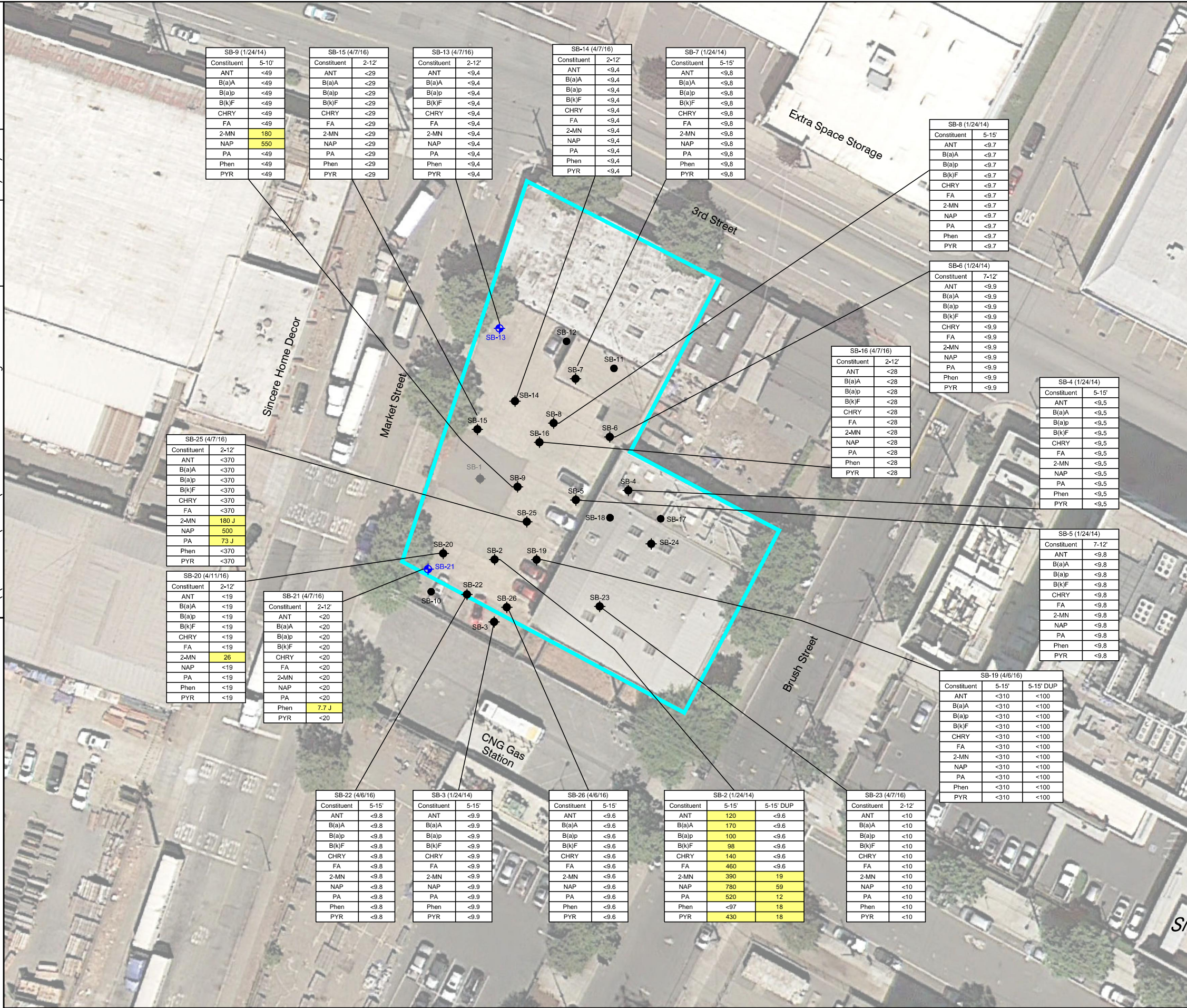


Figure 7
 TPH and VOCs in Groundwater
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



Legend

- Site Boundary
- Groundwater Sampling Location
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-16 (4/7/16)	
Constituent	2-12'
ANT	<28

Sample Screen Interval (ft. bgs)
 Concentration in µg/L
 Chemical Constituent

Yellow shading indicates concentrations above Tier 1 ESLs.

Tier 1 ESLs

Anthracene	0.73
Benzo(a)Anthracene	0.027
Benzo(a)Pyrene	0.014
Benzo(b)Fluoranthene	0.017
Benzo(g,h,i)Perylene	0.049
Benzo(k)Fluoranthene	8.0
Chrysene	2.1
Indeno(1,2,3-c,d)Pyrene	0.17
2-Methylnaphthalene	4.6
Naphthalene	5.0
Phenanthrene	2.0

- J Lab Qualifier - Estimated Value
- ANT Anthracene
 - B(a)A Benzo(a)Anthracene
 - B(a)P Benzo(a)Pyrene
 - B(k)F Benzo(k)Fluoranthene
 - CHRY Chrysene
 - FA Fluoranthene
 - 2-MN 2-Methylnaphthalene
 - NAP Naphthalene
 - PA Phenanthrene
 - Phen Phenol
 - PYR Pyrene

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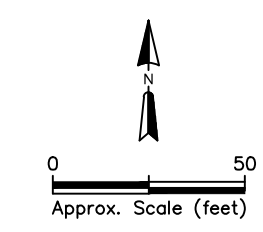
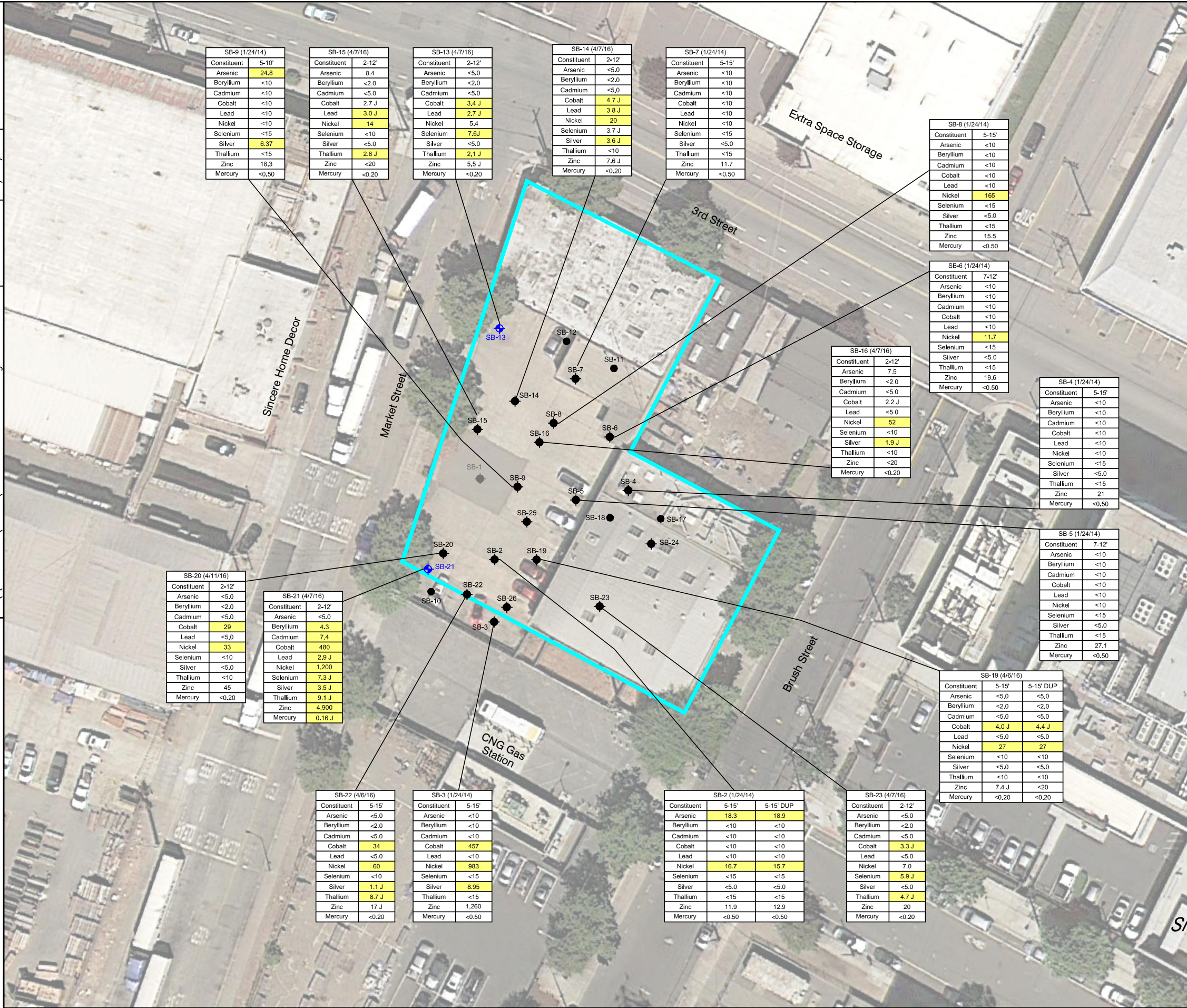


Figure 8
SVOCs in Groundwater
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



Legend

- Site Boundary
- Groundwater Sampling Location
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location

Sample Identifier and Date of Sample

SB-16 (4/7/16)	
Constituent	2-12'
Arsenic	7.5

Sample Screen Interval (ft. bgs)
 Concentration in µg/L
 Chemical Constituent

Yellow shading indicates concentrations above Tier 1 ESLS.

Tier 1 ESLS	
Arsenic	10
Beryllium	2.7
Cadmium	0.25
Cobalt	3.0
Lead	2.5
Nickel	8.2
Selenium	5.0
Silver	0.19
Thallium	2.0
Zinc	81
Mercury	0.051

J Lab Qualifier - Estimated Value

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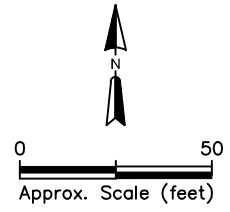
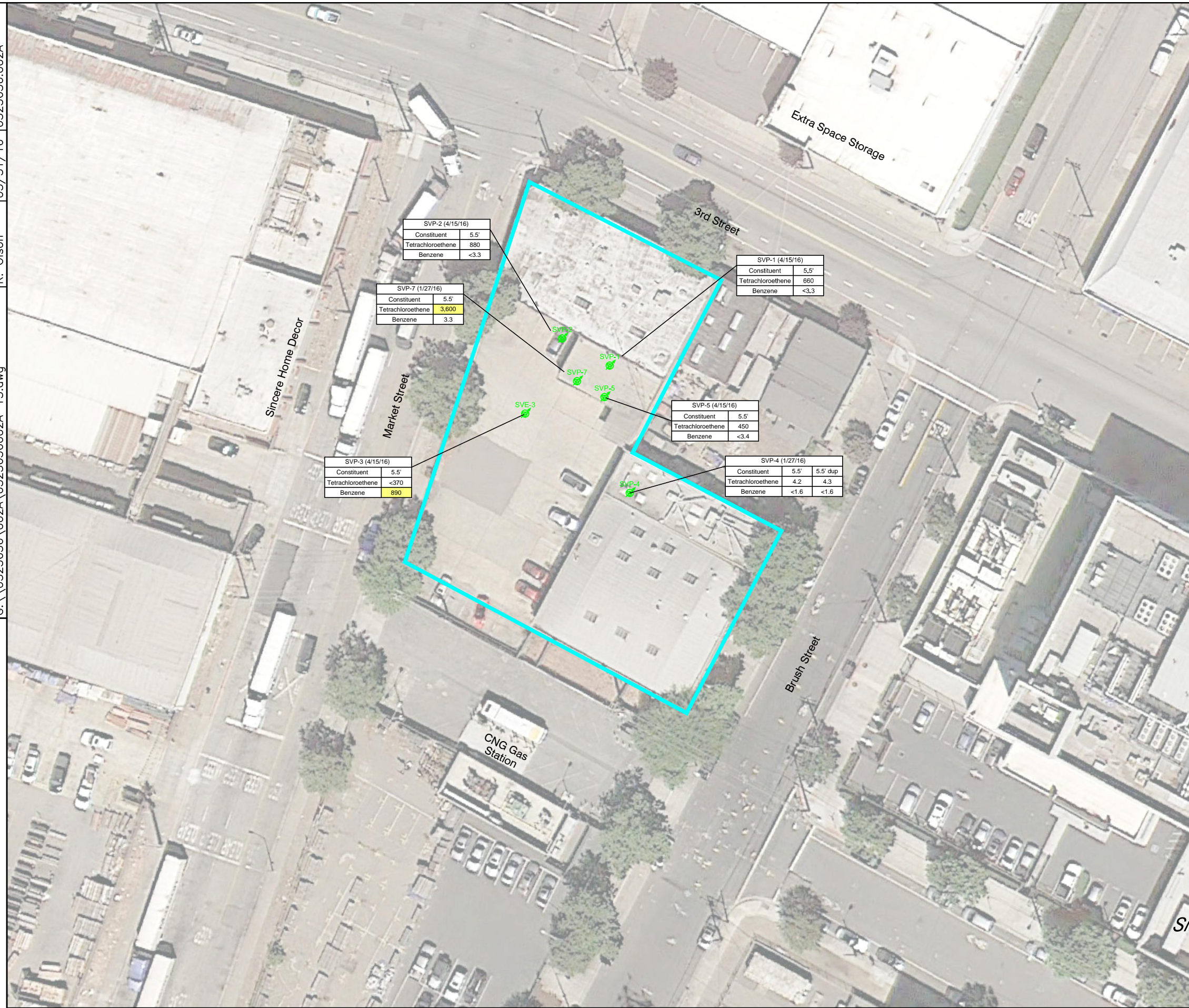


Figure 9
 Metals in Groundwater
 Site Characterization Technical Memorandum
 205 Brush Street
 Oakland, California



SVP-2 (4/15/16)	
Constituent	5.5'
Tetrachloroethene	880
Benzene	<3.3

SVP-7 (1/27/16)	
Constituent	5.5'
Tetrachloroethene	3,600
Benzene	3.3

SVP-3 (4/15/16)	
Constituent	5.5'
Tetrachloroethene	<370
Benzene	890

SVP-1 (4/15/16)	
Constituent	5.5'
Tetrachloroethene	660
Benzene	<3.3

SVP-5 (4/15/16)	
Constituent	5.5'
Tetrachloroethene	450
Benzene	<3.4

SVP-4 (1/27/16)		
Constituent	5.5'	5.5' dup
Tetrachloroethene	4.2	4.3
Benzene	<1.6	<1.6

- Legend**
- Site Boundary
 - Soil Vapor Point

Sample Identifier and Date of Sample

SV-4 (1/27/14)	
Constituent	5.5'
Tetrachloroethene	4.2

Sample Depth (ft. bgs)
Concentration in $\mu\text{g}/\text{m}^3$
Chemical Constituent

Yellow shading indicates concentrations above Commercial/Industrial Direct Exposure ESL.

Applicable ESLs

Tetrachloroethene 2,100
Benzene 420

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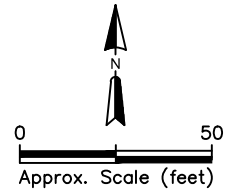
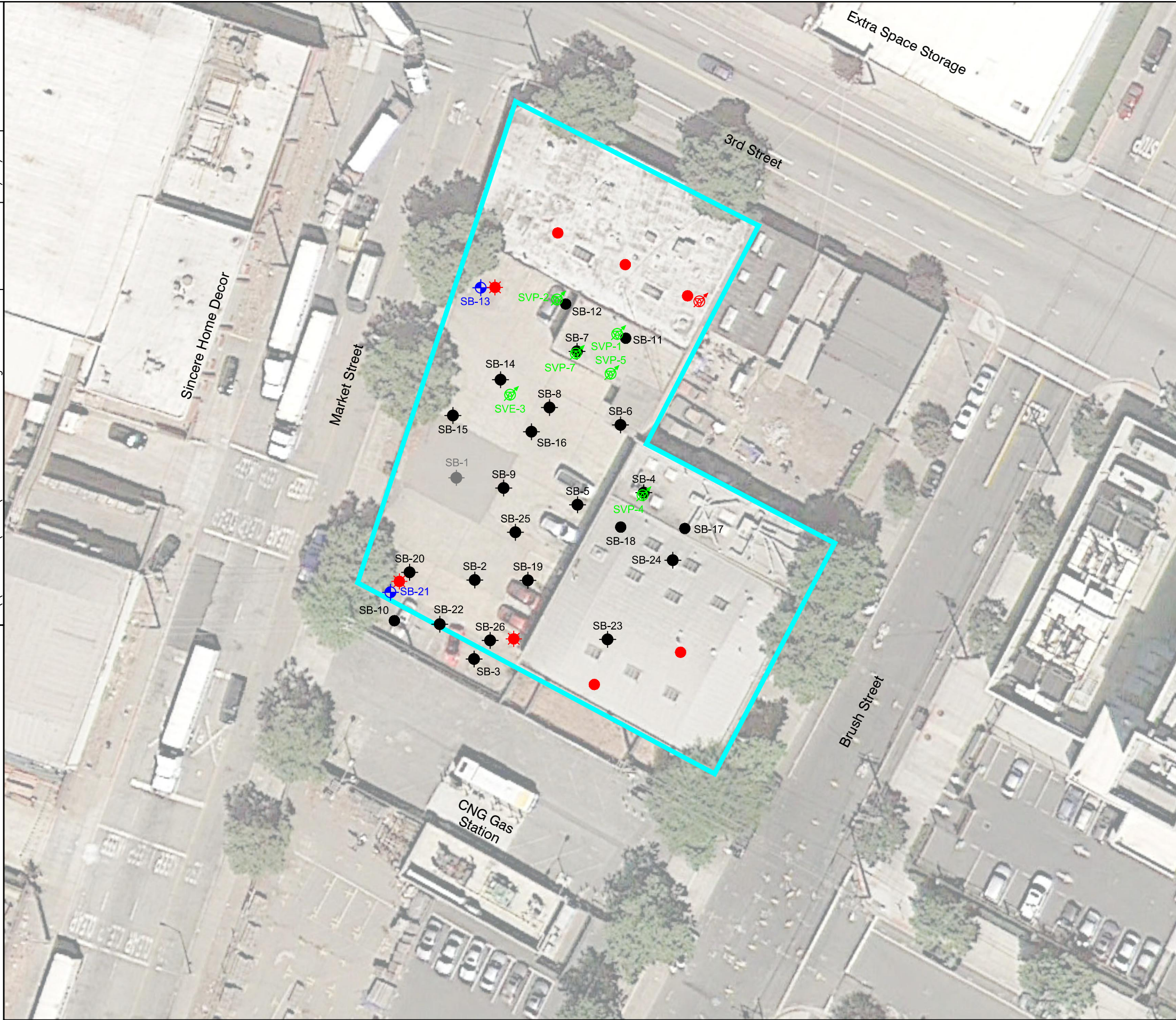










Figure 10
Volatile Organic Compounds in Soil Vapor
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California



- Legend**
-  Proposed Soil Vapor Point Location
 -  Proposed Soil Sampling Location
 -  Proposed Phase 2 CPT Location
 -  Groundwater Sampling Location
 -  Soil Sampling Location
 -  Soil and Grab Groundwater Sampling Location
 -  Soil Vapor Point
 -  Site Boundary

Aerial Photo Source: © 2009 Google Earth
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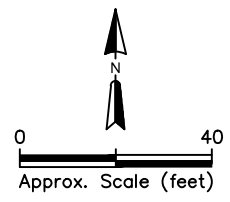


Figure 11
Proposed Sampling Location Map
Site Characterization Technical Memorandum
205 Brush Street
Oakland, California