PORT OF OAKLAND

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By Alameda County Environmental Health at 9:05 am, Jul 23, 2014

July 22, 2014

Mr. Keith Nowell
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: **CNG Fueling Station, Second and Brush Streets, Oakland, California, Alameda County Site RO0002692**

Dear Mr. Nowell:

Please find attached the *Work Plan to Investigate Petroleum Contamination at the CNG Fueling Station, Second and Brush Streets, Oakland, California*, dated July 22, 2014, prepared by Baseline Environmental Consulting.

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

Sincerely,

Colleen Liang
Associate Environmental Scientist
Port of Oakland

Cc: Michele Heffes, Port of Oakland
Diane Heinze, Port of Oakland

22 July 2014
12315-25.02224

Ms. Diane Heinze
Port of Oakland
530 Water Street
Oakland, CA 94607

Subject: **Work Plan to Investigate Petroleum Contamination at the CNG Fueling Station, Second and Brush Streets, Oakland, California (Alameda County Site RO0002962)**

Dear Diane:

This letter presents a work plan to investigate the nature and extent of petroleum contamination discovered in 2007 during the construction of the CNG fueling station located on the vacated section of Second Street, between Brush and Market Streets ("Site") (Figure 1). The Site is a portion of Assessor Parcel 1-111-5-1 which was acquired by the Port of Oakland ("Port") in 1970 (Figure 2).

Contamination has also been identified on another portion of this Assessor Parcel, formerly occupied by the Port's Harbor Facilities. Because of a possible property transaction involving the Harbor Facilities portion in the near future, the Port is not proposing to conduct further investigation on that portion at this time. Soil, groundwater, and soil gas samples have been collected from the former Harbor Facilities portion of Assessor Parcel 1-111-5-1 and the available analytical data are summarized in the tables provided in Attachment A.

SITE HISTORY

To identify possible sources of contamination discovered during construction of the CNG station, we reviewed relevant site histories already prepared for the former Harbor Facilities and historical Sanborn maps and aerial photographs for the remainder of the parcel. For the purpose of discussion, Assessor Parcel 1-111-5-1 is divided into three portions: (1) city block bounded by Third, Market, Second, and Brush streets ("Harbor Facilities" portion); (2) city block bounded by Second, Market, and Brush streets and the Embarcadero ("National Ice and Cold Storage" portion); and (3) the vacated Second Street right-of-way between Market and Brush streets ("vacated Second Street") (Figure 2). The historical shoreline was located approximately along the southern side of the current Embarcadero.

The CNG fueling station consists of a fueling island located within the vacated Second Street, and a cinder block enclosure containing compressors and other equipment that spans the southern edge of the vacated Second Street and the National Ice and Cold Storage portion (Figure 3). Contamination was encountered during excavation in the equipment enclosure, but apparently not in the trenches dug between the enclosure and the fueling island or at the fueling island itself.

Harbor Facilities Portion

Environmental Resources Management ("ERM") prepared a Phase I site assessment for the Harbor Facilities portion in 2013.[1] The ERM Phase I report identified the following Recognized Environmental Conditions or potential issues for the Harbor Facilities portion of the parcel:

1. One 1,000-gallon diesel underground storage tank ("UST") and one 10,000-gallon gasoline UST removed under the oversight of the Oakland Fire Services Agency in 2003.

2. Industrial and commercial uses that included blacksmith and carpenter shops, junk yard, machine shop, truck repair and cleaning facility, paint and varnish facility, and the Port's former operations which included vehicle repair, fueling, and washing, and a paint shop.

3. A chlorinated solvent plume has been migrating in the direction of the parcel based on groundwater data from the Safety Kleen Corporation facility, located upgradient and one city block north of the Assessor Parcel.

In addition to ERM's findings, limited Port records indicate that an additional 500-gallon diesel UST was removed around 1986. This UST was located on the northern edge of the vacated Second Street, approximately 50 feet north of where contamination was discovered during construction of the CNG station (Figure 2). As part of the same project, existing 8,000-gallon and 2,000-gallon USTs were replaced with the 10,000-gallon and 1,000-gallon USTs at the same location; these replacement USTs were subsequently removed in 2003.

[1] ERM, 2013, *Phase I Environmental Site Assessment, Former Port of Oakland Facilities Operation and Maintenance Property, 205/209 Brush Street, Oakland, California*, prepared for Pacific Gas and Electric Company, dated June.

Based on the Phase I findings, ERM performed a Phase II investigation on the Harbor Facilities portion which was documented in a 2014 report.[2] The data from this investigation are summarized in Attachment A.

National Ice and Cold Storage Portion

No Phase I site assessment has been conducted for the National Ice and Cold Storage portion of the parcel. BASELINE reviewed historical Sanborn Fire Insurance Maps from 1889, 1902, 1912, 1951, 1952, 1957, 1958, 1961, 1967, and 1970, and aerial photographs from 1930 to the present to identify historical land uses on this portion.

The earliest Sanborn maps from 1889, 1902, and 1912 show one or two structures used for hay storage. Then there is a gap of nearly 40 years before the 1951 Sanborn map. The 1951 map shows that several buildings associated with the National Ice and Cold Storage Company had been constructed. These buildings were constructed some time prior to 1930 as they were present in a 1930 aerial photograph.

Coinciding with the location where contamination was found during the CNG station construction, the Sanborn maps from 1951 through 1961 Sanborn maps indicate the presence of an "Eng Rm" and an adjacent room or structure labeled with "60 HP motor" (Figure 3). These structures were no longer present in the 1967 Sanborn map although the rest of the buildings associated with National Ice and Cold Storage operation within the block appeared to have still been present but were vacant.

During 2007 when contamination was found while excavating within the footprint of the equipment enclosure for the CNG station, a large concrete block that may have been part of some foundation structure was encountered in the southeastern corner of the final excavation.[3] The concrete block extended to about 7 feet below the ground surface ("bgs") and seemed to coincide with the engine/motor room(s) as shown in the Sanborn maps (Figure 3).

Vacated Second Street

The vacated Second Street between Brush and Market streets was an 80.5-feet wide public roadway, and was vacated sometime around 1970. After acquiring the property in 1970, the Port constructed a parking lot across the entire vacated Second Street. This

[2] ERM, 2014, *Phase II Environmental Site Investigation, Port of Oakland, 205-209 Brush Street, Oakland, California*, prepared for Pacific Gas and Electric Company, March.

[3] R&M Environmental and Infrastructure Engineering, 2007, Photo #9 in *Removal Action Oversight and Documentation at Downtown Oakland CNG Station, 205/209 Brush Street, Oakland, CA 94607,* prepared for the Port, 16 October.

parking lot extended about 40 feet south of the vacated Second Street into the National Ice and Cold Storage portion of the parcel.

A large number of utilities run along the vacated Second Street, including a 105-inch EBMUD sewer interceptor, a large storm drain, and a natural gas transmission line, in addition to various smaller water, fire water, and electrical lines.

CONTAMINATION ENCOUNTERED DURING CNG FUELING STATION CONSTRUCTION

The compressed natural gas station was constructed in 2007 and consists of a cement block enclosure containing compressors and pressure tanks, and a fueling island (Figures 2 and 4). The enclosure measures approximately 22 feet by 62 feet and is partially within the vacated Second Street and partially on the National Ice and Cold Storage portion. The fueling island is in the vacated Second Street. Soil samples collected in the CNG station area are shown in Figure 4 and the list of soil samples collected and analyses performed and the results are summarized in Tables 1 through 4.

Prior to construction in 2006, two geotechnical borings were installed to 35 feet bgs to support the design of the CNG station.[4] One boring was installed in the vacated Second Street near the fueling island and one within the enclosure footprint (B-1 and B-2 on Figure 4). Three samples from each boring from unspecified depths were analyzed for metals, total petroleum hydrocarbons ("TPH") and benzene, toluene, ethylbenzene, and xylenes ("BTEX"). The samples either did not contain any constituents above laboratory reporting limits or contained only trace concentrations of TPH and/or BTEX (Table 2).

Contamination was first noticed by the contractor when digging trenches within the enclosure footprint for pipes and conduits leading to the fueling island. Two grab soil samples were initially collected from 2.0 and 2.5 feet bgs (samples #1 and #2 in Figure 4). The samples contained low concentrations of volatile organic compounds ("VOCs") and TPH (Tables 2 and 3). Metals were also analyzed and concentrations were not elevated (Table 4).

The Port notified the Oakland Fire Department/Fire Prevention Bureau and retained a contractor to remove the impacted soil and a consultant to oversee and document field

[4] Geolabs, Inc., 2006, *Geotechnical Engineering Services, Clean Energy CNG Fueling Station, Second and Brush Streets, Oakland, California*, 18 December.

activities. Excavation to remove impacted soil and confirmation sampling were conducted under the oversight of an Oakland Fire Department inspector.[5]

The main part of the impacted soil excavated within the enclosure footprint was from a rectangular area measuring about 22 feet by 42 feet and extended to a depth of 7 feet bgs, which corresponded to the groundwater table at the time. At the southeastern corner, a large concrete block that extended to 7 feet bgs was encountered. The eastern edge of the impacted soils was defined by a trench measuring 4 feet by 9 feet excavated to 4 feet bgs where contamination was not observed.

Eleven confirmation soil samples from the edges and bottom of the final excavation, eight from the sidewalls and three from the bottom ("RM-" series in Figure 4 except for RM-B1 which was subsequently excavated when the excavation was extended to 7 feet bgs). The sidewalls samples were collected from 3 feet bgs and the bottom samples from 7 feet bgs. All the samples were analyzed for metals, TPH, BTEX, and VOCs. Elevated TPH and xylene concentrations were found in two of the three bottom confirmation samples (RM-B2 and RM-B4) and one southern sidewall sample (RM-S2) (Tables 2 and 3). Some of the confirmation samples also contained other VOC compounds at low concentrations (Table 3). Metal concentrations are summarized in Table 4).

Approximately 200 cubic yards of soil was classified as a nonhazardous waste and disposed of at Altamont Landfill in Livermore, California. The excavation was backfilled with crushed virgin aggregate.

Other small areas were excavated during construction including the eastern edge of the equipment enclosure to 3 feet bgs, trench for pipes and conduit between the enclosure and fueling island to 3 feet bgs, and the fueling island footprint to 2 feet bgs (Figure 4). As no soil was removed and no confirmation samples were collected from these areas, it is presumed that no contamination was observed.

WORK PLAN TO INVESTIGATION EXTENT OF CONTAMINATION IN CNG FUELING STATION AREA

This work plan was developed to attempt to identify the original source and assess the extent and magnitude of soil and groundwater impacts initially discovered during CNG station construction. There are three known plausible sources of contamination: (1) release associated with the engine/motor room(s) of the historical National Ice and Cold Storage facilities; (2) migration via groundwater of historical releases from the former

[5] R&M Environmental and Infrastructure Engineering, 2007, *Removal Action Oversight and Documentation at Downtown Oakland CNG Station, 205/209 Brush Street, Oakland, CA 94607,* prepared for the Port, 16 October.

diesel UST located about 50 feet northeast of the CNG station on the north side of vacated Second Street; and/or (3) migration via groundwater of historical releases from the former USTs located in the Harbor Facilities portion located about 120 feet north of the CNG station.

We propose to install 5 borings within the vacated Second Street and in the National Ice and Cold Storage portion. Borings CNG-B1 and CNG-B2 are proposed to assess the possibility that releases from the historical USTs on the Harbor Facilities portion may have migrated via groundwater to the CNG station area (Figure 4). Borings CNG-B3 through CNG-B5 are proposed to assess the lateral extent of contamination encountered during construction. No borings are proposed in the middle of the vacated Second Street due to the large number and sizes of utilities in the former street right-of-way, and the potential explosion hazard associated with working near the CNG fueling island; in addition, trenching for pipes and conduits connecting the equipment enclosure to the fueling island during construction did not identify contamination between the enclosure and fueling island.

The borings would be drilled using hollow-stem auger to a depth of about 15 feet bgs. The lithology would be logged by a Professional Geologist or Engineer using the Uniform Soil Classification System. Soil samples would be collected using modified California samplers with stainless steel liners from approximately 1, 5, and 7 feet bgs. After the borings have been advanced to about 15 feet bgs, a casing with a pre-pack screen section would be inserted into the borehole to facilitate the collection of grab groundwater samples. Once the groundwater samples have been collected, the boreholes would be sealed with cement grout to the surface.

Soil samples would be analyzed for TPH gas gasoline, TPH as diesel and motor oil (with and without silica gel cleanup) by EPA Method 8015M, polynuclear aromatic hydrocarbons ("PAHs") by EPA Method 8270, and VOCs by EPA Method 8260. In addition, the shallowest soil sample would be analyzed for Title 22 metals to assess the surficial fill. Groundwater samples would be analyzed for TPH as gasoline, TPH as diesel and motor oil (with and without silica gel cleanup), PAHs, and VOCs.

Prior to field work, boring permits would be obtained from the Alameda County Public Works Agency, and Underground Surface Alert would be notified. A private utility locating firm would also be retained to clear the proposed boring locations. If deemed prudent, the top five feet of the borings may be hand augered to check for utilities.

Equipment would be decontaminated by high pressure washing or scrubbing in an Alconox solution followed by rinsing with potable/deionized water. All soil cuttings and decontamination water would be placed in 55-gallon drums, profiled, and properly disposed of by a Port contractor.

A report would be prepared to document the investigation with an evaluation of the nature, source, and extent of soil and groundwater contamination in the area of the CNG station.

Please contact us if you have any questions about this proposed work plan. Thank you.

Sincerely,

Lydia Huang
Senior Engineer
P.E. No. 43995

Enclosures:

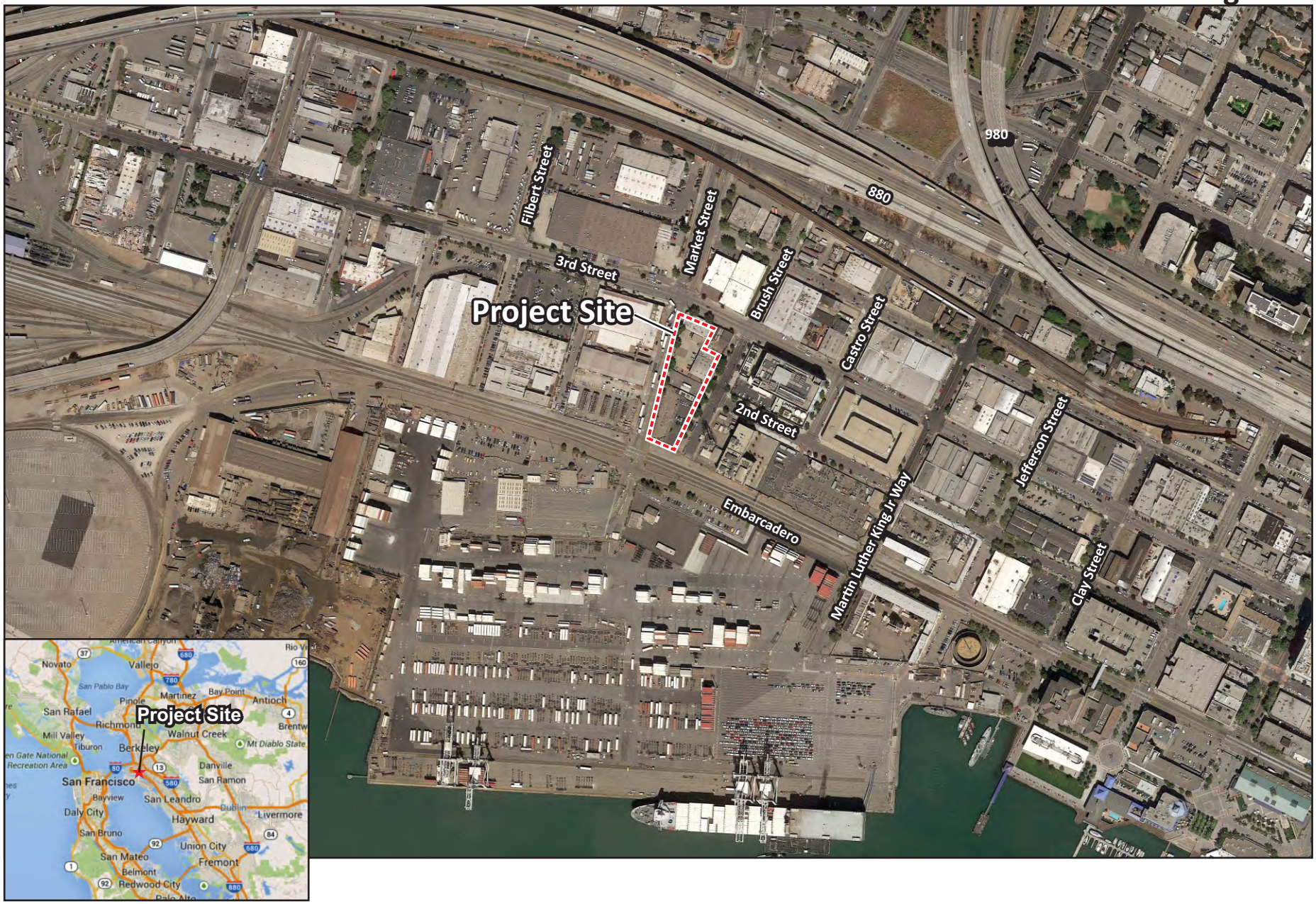
Figure 1: Regional Location
Figure 2: Site Layout
Figure 3: 1951 Sanborn Map
Figure 4: CNG Excavation

Table 1: List of Soil Samples and Analyses
Table 2: Summary of TPH and BTEX Concentrations in Soil
Table 3: Summary of VOC Concentrations in Soil
Table 4: Summary of Metal Concentrations in Soil

Attachment A: Summary of Data from Harbor Facilities Portion

REGIONAL LOCATION

Figure 1

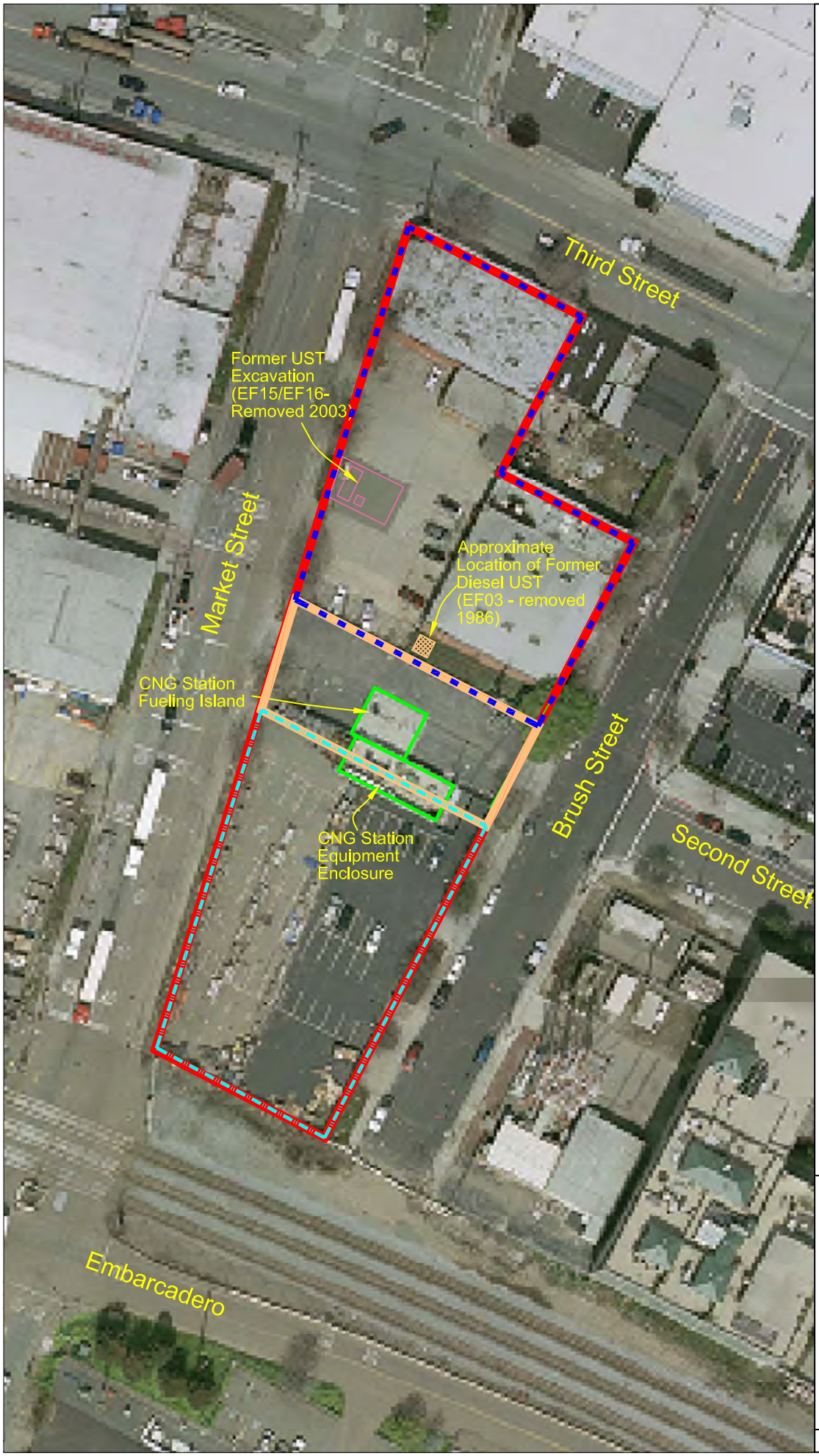


0 500 Feet

CNG Fueling Station, Second and Brush Streets
Oakland, California

BASELINE ENVIRONMENTAL CONSULTING

12315-25.02224.Fig1.cdr 6/26/14



Legend

- Assessor Parcel 1-111-5-1
- Former Harbor Facility Portion
- National Ice and Cold Storage Portion
- Vacated Second Street Right-of-Way
- CNG Fueling Station

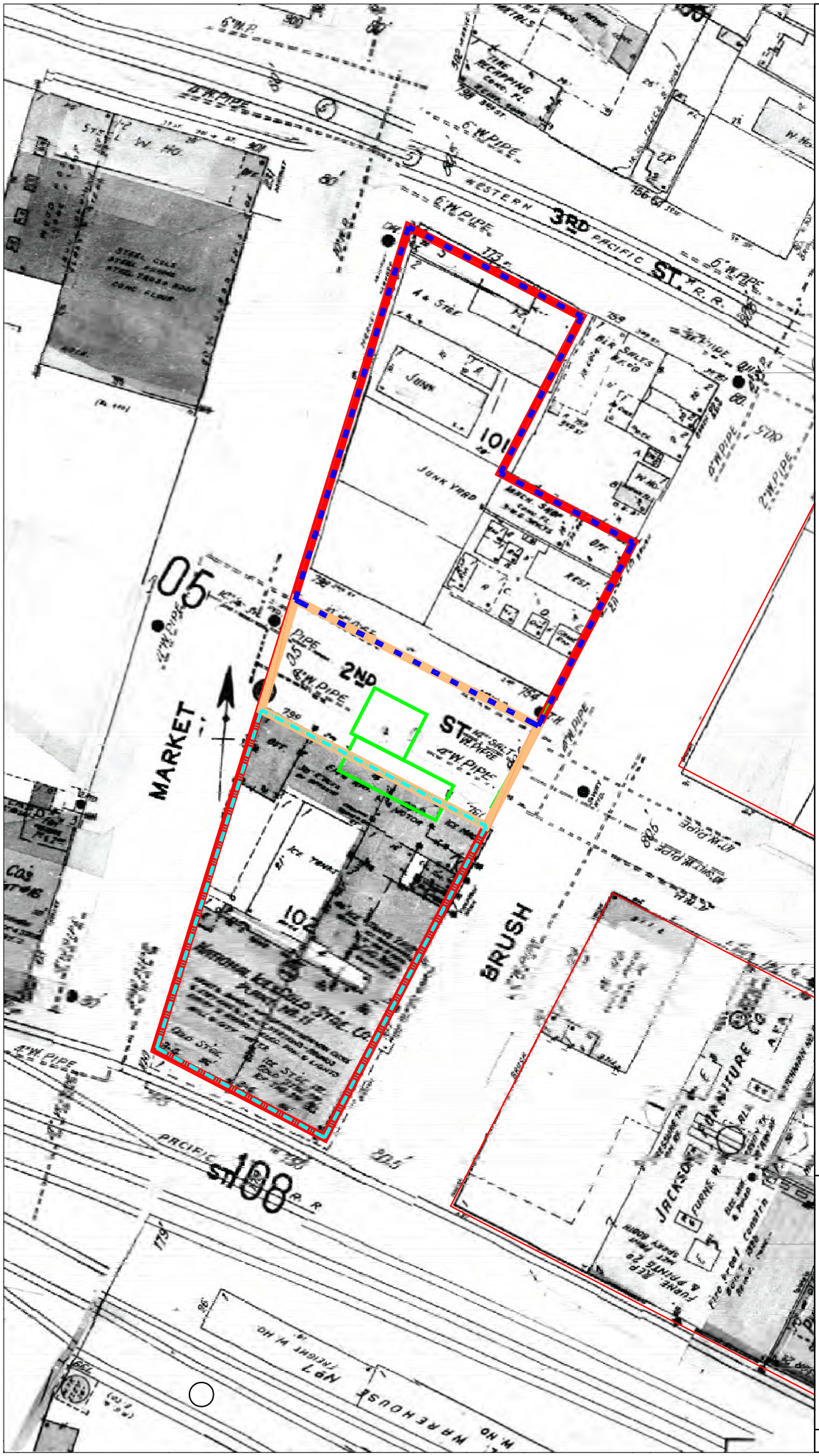
Base: 2012 Aerial

0 80 Feet

BASELINE ENVIRONMENTAL CONSULTING

Figure 2
Site Layout
CNG Fueling Station,
Oakland, California

12315-25.02224.F2.draft1.dwg - 7/7/2014


Legend
Assessor Parcel 1-111-5-1
Former Harbor Facility Portion
National Ice and Cold Storage Portion
Vacated Second Street Right-of-Way
CNG Fueling Station
Base: 1951 Sanborn Map
0
80 Feet
BASELINE ENVIRONMENTAL CONSULTING
Figure 3
1951 Sanborn Map
CNG Fueling Station,
Oakland, California
12315-25.02224.F3.draft1.dwg - 7/7/2014

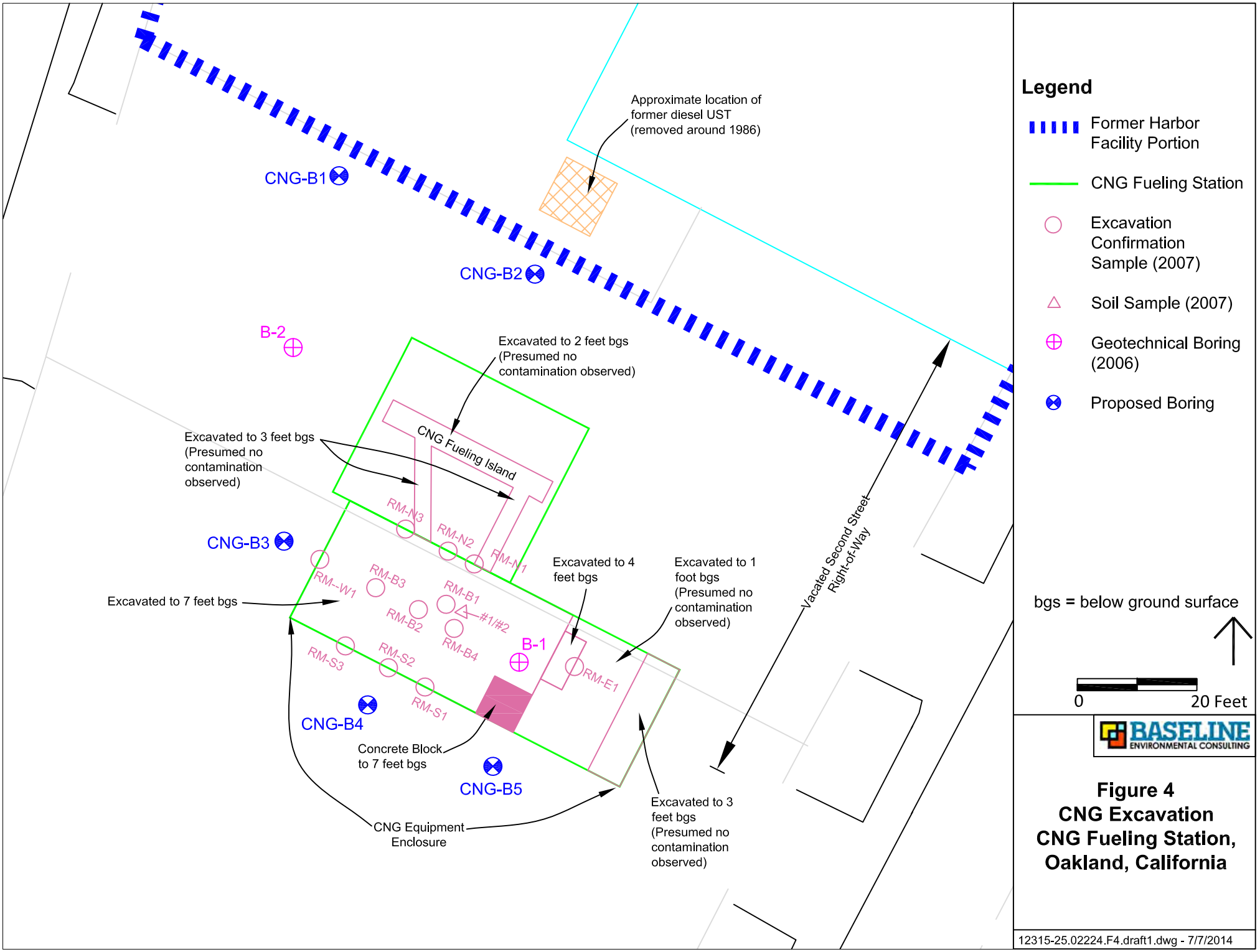


Figure 4
CNG Excavation
CNG Fueling Station,
Oakland, California

12315-25.02224.F4.draft1.dwg - 7/7/2014

TABLE 1: LIST OF SOIL SAMPLES AND ANALYSES
CNG Station, Second and Brush Streets, Oakland, California

Sample ID	Sample Depth (feet bgs)	Sample Date	Source	Metals	TPH	BTEX/VOC
B-1 (1-1-3)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
B-1 (1-2-4)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
B-1 (1-3-3)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
B-2 (2-2-3)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
B-2 (2-3-4)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
B-2 (2-4-3)	Unknown	11/10/2006	GeoLabs, 2006		X	BTEX
#1	2.0	4/16/2007	R&M, 2007	X	X	BTEX/VOC
#2	2.5	4/16/2007	R&M, 2007	X	X	BTEX/VOC
RM-B1	5.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-B2	7.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-B3	7.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-B4	7.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-S1	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-S2	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-S3	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-N1	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-N2	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-N3	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-E1	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC
RM-W1	3.0	4/25/2007	R&M, 2007	X	X	BTEX/VOC

Notes:
Sample locations are shown in Figure 4.
bgs = below ground surface.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8021.
VOCs = Volatile organic compounds analyzed by EPA Method 8260.
X = sample analyzed for constituents.

Sources:

GeoLabs, Inc., 2006, Letter Report, Geotechnical Engineering Services, Clean Energy CNG Fueling Station, Second and Brush Streets, Oakland, California, 18 December.

R&M Environmental and Infrastructure Engineering, Inc., 2007, Removal Action Oversight and Documentation at Downtown Oakland CNG Station, 205/209 Brush Street, Oakland, CA 94607, 16 October.

TABLE 2: SUMMARY OF TPH AND BTEX CONCENTRATIONS IN SOIL
CNG Station, Second and Brush Streets, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	TPH as Gasoline	TPH as Diesel (without silica gel cleanup)	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene
Commercial/Industrial ESL			**500**	**110**	**1.2**	**4.7**	**9.3**	**11**	**11**
B-1 (1-1-3)	11/10/2006	Unknown	<0.99	**1.4**	<0.005	<0.005	<0.005	<0.005	<0.005
B-1 (1-2-4)	11/10/2006	Unknown	**1.6**	**15**	<0.0051	<0.0051	<0.0051	<0.0051	**0.0079**
B-1 (1-3-3)	11/10/2006	Unknown	<0.94	<1.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
B-2 (2-2-3)	11/10/2006	Unknown	<1.1	<1.0	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
B-2 (2-3-4)	11/10/2006	Unknown	<1.0	**15**	**0.0075**	<0.005	**0.0076**	<0.005	<0.005
B-2 (2-4-3)	11/10/2006	Unknown	<0.95	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
~~#1~~	~~4/16/2007~~	~~2~~	~~**1.9**~~	~~**13**~~	~~<0.0051~~	~~**0.0074**~~	~~<0.0051~~	~~**0.023**~~	~~**0.014**~~
~~#2~~	~~4/16/2007~~	~~2.5~~	~~**9.1**~~	~~**39**~~	~~<0.0051~~	~~<0.0051~~	~~<0.0051~~	~~<0.0051~~	~~**0.036**~~
~~RM-B1~~	~~4/25/2007~~	~~5~~	~~**4500**~~	~~**800**~~	~~<0.5~~	~~<0.5~~	~~<0.5~~	~~**8.0**~~	~~**24**~~
RM-B2	4/25/2007	7	**960**	**110**	<0.13	<0.13	<0.13	<0.13	**4.4**
RM-B3	4/25/2007	7	<1.0	**1.2**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
RM-B4	4/25/2007	7	**6500**	**990**	<1.0	<1.0	<1.0	**30**	**34**
RM-S1	4/25/2007	3	**14**	**83**	<0.0048	<0.0048	<0.0048	<0.0048	**0.069**
RM-S2	4/25/2007	3	**4400**	**1300**	<0.50	<0.50	<0.50	<0.50	**23**
RM-S3	4/25/2007	3	**4.4**	**12**	<0.0051	<0.0051	<0.0051	<0.0051	**0.028**
RM-N1	4/25/2007	3	**190**	**61**	<0.13	**1.7**	<0.13	<0.13	<0.13
RM-N2	4/25/2007	3	**6.4**	**5.7**	**0.011**	<0.0052	<0.0052	**0.0094**	**0.036**
RM-N3	4/25/2007	3	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.0061**
RM-E1	4/25/2007	3	<0.95	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
RM-W1	4/25/2007	3	**3.6**	**16**	<0.0050	<0.0050	<0.0050	<0.0050	**0.015**

Notes:
Sample locations are shown in Figure 4.
bgs = below ground surface.
mg/kg = milligrams per kilograms.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
Results shown in strikeout text indicate soil represented by sample was excavated.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8021.
TPH analyzed by EPA Method 8015 and BTEX analyzed by EPA Method 8021.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:

RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Updated December 2013.

TABLE 3: SUMMARY OF VOC CONCENTRATIONS IN SOIL
CNG Station, Second and Brush Streets, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene	MTBE	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	Acetone	Isopropylbenzene	Naphthalene	n-Butylbenzene	para-Isopropyl Toluene	Propylbenzene	sec-Butylbenzene	Tetrachloroethene
Commercial/Industrial ESL or RSL			**1.2**	**4.7**	**9.3**	**11**	**11**	**8.4**	**240**	**12000**	**13**	**0.5**	**9900**	**4.8**	**58000**	**none**	**22000**	**120000**	**2.6**
~~#1~~	~~4/16/2007~~	~~2~~	~~**0.0052**~~	~~<0.0047~~	~~<0.0047~~	~~**0.015**~~	~~**0.0062**~~	~~<0.0047~~	~~**0.022**~~	~~**0.0081**~~	~~**0.016**~~	~~**0.054**~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~
~~#2~~	~~4/16/2007~~	~~2.5~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~<0.0047~~	~~**0.0075**~~	~~**0.0056**~~	~~<0.0094~~	~~**0.027**~~	~~**0.0074**~~	~~**0.014**~~	~~**0.0051**~~	~~**0.006**~~	~~**0.0092**~~	~~**0.0078**~~	~~<0.0047~~
~~RM-B1~~	~~4/25/2007~~	~~5~~	~~<5.0~~	~~<5.0~~	~~<5.0~~	~~<5.0~~	~~<5.0~~	~~<5.0~~	~~**24**~~	~~**6.3**~~	~~<10~~	~~<25~~	~~**5.3**~~	~~<5.0~~	~~<5.0~~	~~<5.0~~	~~**7.8**~~	~~<5.0~~	~~<5.0~~
RM-B2	4/25/2007	7	<10	<10	<10	<10	<10	<10	<10	<10	<20	<50	<10	<10	<10	<10	<10	<10	<10
RM-B3	4/25/2007	7	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.024	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
RM-B4	4/25/2007	7	<10	<10	<10	**33**	<10	<10	**60**	**21**	<20	<50	<10	<10	<10	<10	**13**	<10	<10
RM-S1	4/25/2007	3	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.050	**0.14**	<0.025	**0.031**	<0.025	<0.025	**0.028**	**0.041**	<0.025
RM-S2	4/25/2007	3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
RM-S3	4/25/2007	3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.012**	**0.07**	<0.0048	**0.0075**	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
RM-N1	4/25/2007	3	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.023	<0.0046	**0.024**	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
RM-N2	4/25/2007	3	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.25	<0.63	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
RM-N3	4/25/2007	3	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	**0.039**	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
RM-E1	4/25/2007	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	**0.026**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
RM-W1	4/25/2007	3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	**0.031**	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048

Notes:
Sample locations are shown in Figure 4.
bgs = below ground surface.
mg/kg = milligrams per kilograms.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL (or RSL if ESL is not available).
Results shown in strikeout text indicate soil represented by sample was excavated.
VOCs = Volatile organic compounds analyzed by EPA Method 8260.
Except for BTEX and MTBE, only compounds analyzed by EPA Method 8260 identified above laboratory reporting limits in at least one sample are listed in this table.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).
RSL = Regional Screening Levels for commercial/industrial land use (U.S. EPA, 2014).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.
U.S. EPA, 2014, Region 9, Regional Screening Levels for Chemical Contaminants at Superfund Sites, Updated May 2014.

TABLE 4: SUMMARY OF METAL CONCENTRATIONS IN SOIL
CNG Station, Second and Brush Streets, Oakland, California (mg/kg)

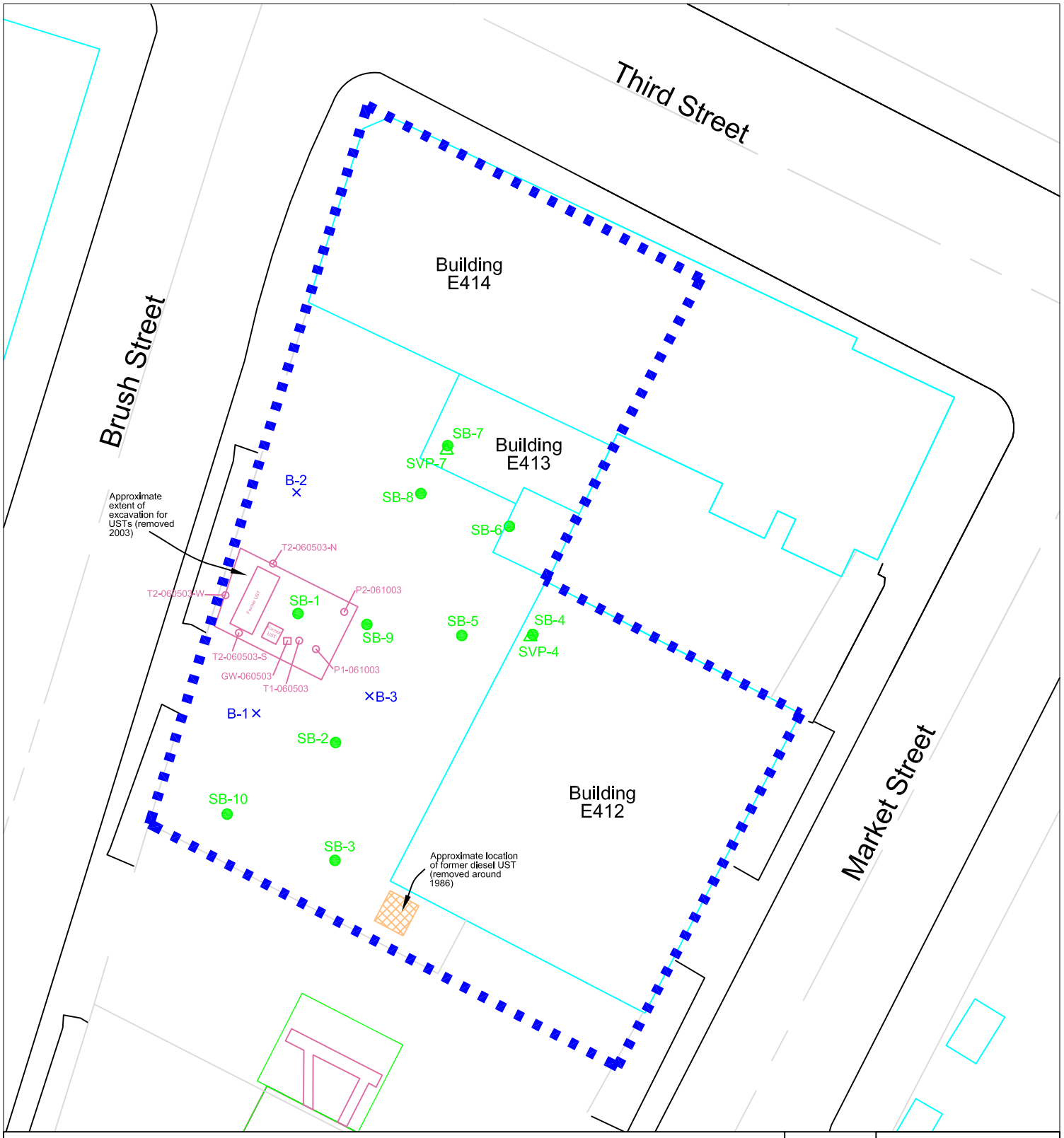
Sample ID	Sample Date	Sample Depth (feet bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Commercial/Industrial ESL			**40**	**1.6**	**1500**	**8**	**12**	**750**	**80**	**230**	**320**	**10**	**40**	**150**	**10**	**40**	**10**	**200**	**600**
~~#1~~	~~4/16/2007~~	~~2~~	~~<0.5~~	~~**1.5**~~	~~**73**~~	~~**0.17**~~	~~<0.26~~	~~**28**~~	~~**3.8**~~	~~**8.3**~~	~~**19**~~	~~**0.13**~~	~~<0.26~~	~~**16**~~	~~<0.5~~	~~<0.26~~	~~<0.5~~	~~**20**~~	~~**21**~~
~~#2~~	~~4/16/2007~~	~~2.5~~	~~<0.5~~	~~**1.6**~~	~~**55**~~	~~**0.17**~~	~~<0.25~~	~~**30**~~	~~**4.2**~~	~~**6.1**~~	~~**1.7**~~	~~**0.038**~~	~~<0.25~~	~~**17**~~	~~<0.5~~	~~<0.25~~	~~<0.5~~	~~**21**~~	~~**14**~~
~~RM-B1~~	~~4/25/2007~~	~~5~~	~~<0.5~~	~~**3.8**~~	~~**26**~~	~~**0.25**~~	~~<0.25~~	~~**57**~~	~~**5.6**~~	~~**20**~~	~~**4.2**~~	~~**0.022**~~	~~**1.2**~~	~~**37**~~	~~<0.5~~	~~<0.25~~	~~<0.5~~	~~**47**~~	~~**42**~~
RM-B2	4/25/2007	7	<0.5	**1.5**	**53**	**0.15**	<0.25	**25**	**3.1**	**5.9**	**1.5**	**0.041**	<0.25	**14**	<0.5	<0.25	<0.5	**20**	**14**
RM-B3	4/25/2007	7	<0.5	**1.9**	**51**	**0.21**	<0.25	**33**	**3.7**	**7.9**	**1.5**	**0.13**	<0.25	**23**	<0.5	<0.25	<0.5	**26**	**18**
RM-B4	4/25/2007	7	<0.5	**2.9**	**59**	**0.23**	<0.25	**33**	**6.3**	**8.2**	**1.8**	**0.024**	<0.25	**26**	<0.5	<0.25	<0.5	**27**	**18**
RM-S1	4/25/2007	3	<0.5	**2.3**	**58**	**0.19**	<0.25	**35**	**4.0**	**7.4**	**1.7**	**0.033**	<0.25	**21**	<0.5	<0.25	<0.5	**24**	**17**
RM-S2	4/25/2007	3	<0.5	**2.3**	**60**	**0.18**	<0.25	**31**	**3.7**	**24**	**14**	**0.19**	<0.25	**18**	<0.5	<0.25	<0.5	**22**	**31**
RM-S3	4/25/2007	3	<0.5	**1.7**	**75**	**0.15**	<0.25	**26**	**3.2**	**6.3**	**4.2**	**0.029**	<0.25	**15**	<0.5	<0.25	<0.5	**19**	**18**
RM-N1	4/25/2007	3	<0.5	**1.8**	**61**	**0.17**	<0.25	**28**	**3.3**	**6.3**	**2.0**	<0.020	<0.25	**16**	<0.5	<0.25	<0.5	**20**	**16**
RM-N2	4/25/2007	3	<0.5	**1.3**	**45**	**0.14**	<0.25	**24**	**2.9**	**5.0**	**1.9**	<0.021	<0.25	**14**	<0.5	<0.25	<0.5	**18**	**14**
RM-N3	4/25/2007	3	**0.60**	**1.0**	**50**	**0.15**	<0.25	**26**	**3.2**	**5.2**	**2.0**	<0.020	<0.25	**15**	<0.5	<0.25	<0.5	**19**	**14**
RM-E1	4/25/2007	3	<0.5	**1.3**	**59**	**0.17**	<0.25	**25**	**3.2**	**5.9**	**5.8**	**0.058**	<0.25	**12**	<0.5	<0.25	<0.5	**18**	**16**
RM-W1	4/25/2007	3	<0.5	**2.2**	**71**	**0.21**	<0.25	**24**	**3.9**	**8.5**	**35**	**0.1**	**0.28**	**15**	<0.5	<0.25	<0.5	**17**	**26**

Notes:
Sample locations are shown in Figure 4.
bgs = below ground surface.
mg/kg = milligrams per kilograms.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
Results shown in strikeout text indicate soil represented by sample was excavated.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

ATTACHMENT A

Summary of Data from Harbor Facilities Portion



Legend

- Former Harbor Facilities Portion
- CNG Fueling Station
- Soil Boring (ERM 2014)
- Soil Gas Sample (ERM 2014)
- Confirmation Soil Sample (Geomatrix 2003)
- Grab Groundwater Sample (Geomatrix 2003)
- Soil Boring (Iris 2001)

0 40 Feet

BASELINE ENVIRONMENTAL CONSULTING

Figure A-1
Former Harbor Facilities
Oakland, California

12315-25.02224.F-A1.draft1.dwg - 7/7/2014

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TABLE A-1: LIST OF SOIL SAMPLES AND ANALYSES
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Depth (feet bgs)	Sample Date	Source	Metals	TPH	BTEX/MTBE /VOC	SVOC	PCB	OCP
B-1-1.0-1.5	1.0 - 1.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-1-2.0-2.5	2.0 - 2.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-1-5.0-5.5	5.0 - 5.5	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-1-7.5-8.0	7.5 - 8.0	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-1-9.5-10.0	9.5 - 10.0	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-2-1.0-1.5	1.0 - 1.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-2-2.0-2.5	2.0 - 2.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-2-5.0-5.5	5.0 - 5.5	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-3-1.0-1.5	1.0 - 1.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-3-3.0-3.5	3.0 - 3.5	10/18/2001	IRIS, 2001	X	X	BTEX			
B-3-4.5-5.0	4.5 - 5.0	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-3-7.5-8.0	7.5 - 8.0	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-3-9.5-10.0	9.5 - 10.0	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-1 COMP	1.0 - 10.0	10/18/2001	IRIS, 2001				X	X	X
B-2 COMP	1.0 - 7.0	10/18/2001	IRIS, 2001				X	X	X
B-3 COMP	1.0 - 7.0	10/18/2001	IRIS, 2001				X	X	X
T1-060503	7.0	6/5/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
T2-060503-N	7.0	6/5/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
T2-060503-W	7.0	6/5/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
T2-060503-S	7.0	6/5/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
P1-061003	7.0	6/10/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
P2-061003	8.0	6/10/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
COMP #1A-#1D	stockpile	6/17/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
COMP #2A-#2D	stockpile	6/17/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
SB-2 - 1.5 - 2.0	1.5 - 2.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-2 - 8.5 - 9.0	8.5 - 9.0	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-2 - 14.0 - 14.5	4.0 - 14.5	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-3 - 0.5 - 1.0	0.5 - 1.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-3 - 6.0 - 6.5	6.0 - 6.5	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-4 - 0.5 - 1.0	0.5 - 1.0	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-4 - 7.0 - 7.5	7.0 - 7.5	1/24/2014	ERM, 2014	X	X	VOC	X		
SB-5 - 0.5 - 1.0	0.5 - 1.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-5 - 6.5 - 7.0	6.5 - 7.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-6 - 0.5 - 1.0	0.5 - 1.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-6 - 7.0 - 7.5	7.0 - 7.5	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-7 - 0.5 - 1.0	0.5 - 1.0	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-7 - 7.0 - 7.5	7.0 - 7.5	1/24/2014	ERM, 2014	X	X	VOC	X		
SB-8 - 0.5 - 1.0	0.5 - 1.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-8 - 6.0 - 6.5	6.0 - 6.5	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-9 - 2.5 - 3.0	2.5 - 3.0	1/23/2014	ERM, 2014	X	X	VOC	X	X	X
SB-9 - 6.0 - 6.5	6.0 - 6.5	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-9 - 11.5 - 12.0	1.5 - 12.0	1/23/2014	ERM, 2014	X	X	VOC	X		
SB-10 - 0.5 - 1.0	0.5 - 1.0	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-10 - 6.0 - 6.5	6.0 - 6.5	1/24/2014	ERM, 2014	X	X	VOC	X		

TABLE A-1: LIST OF SOIL SAMPLES AND ANALYSES
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
MTBE = Methyl tert-buyl ether.
VOCs = Volatile organic compounds.
SVOCs = Semi-volatile organic compounds.
OCPs = Organochlorine pesticides.
PCBs = Polychlorinated biphenyls.
X = sample analyzed for constituents.

Sources:
Iris Environmental, 2001, Letter, Data Summary Tables and Figures, Third and Brush Street Site, Port of Oakland, Oakland, California, 19 November.

Geomatrix Consultants, 2003, Underground Storage Tank Removal, 209 Brush Street, Oakland, California, 30 July.

ERM, 2014, Phase II Environmental Site Investigation, Port of Oakland, 205-209 Brush Street, Oakland, California, March.

TABLE A-2: SUMMARY OF TPH, BTEX, and MTBE CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	TPH as Gasoline	TPH as Diesel (silica gel cleanup)	TPH as Motor Oil (silica gel cleanup)	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene	MTBE
	Commercial/Industrial ESL		500	110	500	1.2	4.7	9.3	11	11	8.4
B-1-1.0-1.5	10/18/2001	1.0 - 1.5	**1.0**	**1300**	**2000**	<0.0045	<0.0045	**0.016**	**0.0066**	<0.0045	--
B-1-2.0-2.5	10/18/2001	2.0 - 2.5	**14**	**5900**	**3400**	**0.29**	<0.0054	**0.023**	**0.015**	**0.012**	--
B-1-5.0-5.5	10/18/2001	5.0 - 5.5	<1	**6900**	**4000**	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
B-1-7.5-8.0	10/18/2001	7.5 - 8.0	<1.1	**1.8**	<5	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0049
B-1-9.5-10.0	10/18/2001	9.5 - 10.0	<1	<1	<5	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.005
B-2-1.0-1.5	10/18/2001	1.0 - 1.5	<1	**3.0**	**18**	<0.0051	<0.0051	**0.013**	**0.0079**	<0.0051	--
B-2-2.0-2.5	10/18/2001	2.0 - 2.5	<1.1	**8.2**	**22**	<0.0054	**0.0083**	**0.035**	**0.03**	**0.0085**	--
B-2-5.0-5.5	10/18/2001	5.0 - 5.5	<0.91	<1	<5	<0.0045	<0.0045	**0.0066**	**0.0057**	<0.0045	<0.005
B-3-1.0-1.5	10/18/2001	1.0 - 1.5	**1.5**	**6.4**	**13**	<0.0047	**0.007**	<0.0047	**0.0083**	<0.0047	--
B-3-3.0-3.5	10/18/2001	3.0 - 3.5	**5.4**	**16**	<5	**0.058**	**0.023**	**0.012**	**0.03**	**0.018**	--
B-3-4.5-5.0[1]	10/18/2001	4.5 - 5.0	**0.99**	**9.8**	<5	**0.0097**	**0.0023**	**0.0017**	**0.0022**	**0.0013**	<0.0051
B-3-7.5-8.0[2]	10/18/2001	7.5 - 8.0	**11000**	**2600**	<200	**40**	**150**	**30**	**310**	**100**	<10
B-3-9.5-10.0[3]	10/18/2001	9.5 - 10.0	**1400**	**210**	**35**	**8.8**	**23**	**74**	**96**	**37**	<2.5
~~T1-060503~~	~~6/5/2003~~	~~7.0~~	~~**11000**~~	~~**620**~~	--	~~**57**~~	~~**270**~~	~~**880**~~	~~**1100**~~	~~**410**~~	~~<25~~
T2-060503-N	6/5/2003	7.0	**4.3**	**1.4**	--	**0.0055**	<0.005	<0.005	<0.005	<0.005	**0.0059**
T2-060503-W	6/5/2003	7.0	<1.1	<1	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	**0.14**
T2-060503-S	6/5/2003	7.0	**2200**	**720**	--	**0.92**	**23**	<0.71	**34**	**6.6**	<0.71
P1-061003	6/10/2003	7.0	**33**	**1.3**	--	<0.028	**0.23**	<0.028	**0.61**	**0.21**	<0.028
P2-061003	6/10/2003	8.0	**190**	**90**	--	**0.44**	**11**	<0.36	**5.5**	<0.36	<0.36
~~COMP #1A-#1D~~	~~6/17/2003~~	~~stockpile~~	~~**340**~~	~~**180**~~	~~--~~	~~<0.17~~	~~**0.27**~~	~~<0.17~~	~~**2.8**~~	~~**1.9**~~	~~<0.17~~
~~COMP #2A-#2D~~	~~6/17/2003~~	~~stockpile~~	~~**110**~~	~~**67**~~	~~--~~	~~<0.13~~	~~<0.13~~	~~<0.13~~	~~**0.15**~~	~~**0.13**~~	~~<0.13~~
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	**3.7**	**170**	**370**	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
SB-2 - 8.5 - 9.0	1/23/2014	8.5 - 9.0	**2300**	**80**	**65**	<5	**54**	**100**	**220**	**81**	<5
SB-2 - 14.0 - 14.5	1/23/2014	4.0 - 14.5	<0.50	<5.0	<25	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.50	<4.9	<24	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-3 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.50	<5.0	<25	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.50	**70**	**380**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-4 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.50	<5.0	<25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.50	**390**	**680**	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.50	<4.9	<24	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.50	**15**	**34**	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-6 - 7.0 - 7.5	1/23/2014	7.0 - 7.5	<0.50	<4.9	<24	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.50	**22**	**58**	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-7 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.50	<5.0	<25	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-8 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	**1.6**	**9900**	**10000**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.50	<5.0	<25	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	**2.5**	**13**	<25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-9 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	**1600**	**560**	**67**	**1.1**	**21**	<1	**1.5**	<1	<1
SB-9 - 11.5 - 12.0	1/23/2014	1.5 - 12.0	**66**	<5.0	<25	**3.1**	**1.9**	**3.5**	**6.8**	**2.1**	<0.51
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.50	<5.0	<25	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-10 - 6.0 - 6.5	1/24/2014	6.0 - 6.5	<0.50	<5.0	<25	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052

TABLE A-2: SUMMARY OF TPH, BTEX, and MTBE CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
mg/kg = milligrams per kilograms.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
MTBE = Methyl tert-buyl ether.
TPH analyzed by EPA Method 8015. BTEX and MTBE analyzed by EPA Methods 8021 or 8260.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2(

TABLE A-3: SUMMARY OF VOC CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene	MTBE	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	Acetone	Isopropylbenzene	Naphthalene	n-Butylbenzene	para-Isopropyl Toluene	Propylbenzene	sec-Butylbenzene	Tetrachloroethene
Commercial/Industrial ESL			1.2	4.7	9.3	11	11	8.4	240	12000	13	0.50	9900	4.8	58000	none	22000	120000	2.6
B-1-5.0-5.5	10/18/2001	5.0 - 5.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.01	<0.02	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
B-1-7.5-8.0	10/18/2001	7.5 - 8.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.02	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
B-1-9.5-10.0	10/18/2001	9.5 - 10.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-2-5.0-5.5	10/18/2001	5.0 - 5.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-3-4.5-5.0	10/18/2001	4.5 - 5.0	**0.010**	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	**0.013**	<0.0051	**0.016**	**0.075**	<0.0051	**0.035**	**0.014**	<0.0051	**0.012**	**0.0066**	<0.0051
B-3-7.5-8.0	10/18/2001	7.5 - 8.0	**24**	**120**	**40**	**320**	**84**	<10	**320**	**79**	<20	<40	**15**	**86**	**38**	**15**	**51**	**12**	<10
B-3-9.5-10.0	10/18/2001	9.5 - 10.0	**7.8**	**24**	**79**	**96**	**38**	<2.5	**47**	**15**	<5	<10	<2.5	**6.5**	**4.1**	<2.5	**7.6**	<2.5	<2.5
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.049	<0.12	**0.0052**	<0.049	<0.0049	<0.0049	**0.015**	<0.0049	<0.0049
SB-2 - 8.5 - 9.0	1/23/2014	8.5 - 9.0	<5.0	**54**	**100**	**220**	**81**	<5.0	**99**	**32**	<50	<120	<5.0	<50	**8.1**	<5.0	**17**	<5.0	<5.0
SB-2 - 14.0 - 14.5	1/23/2014	4.0 - 14.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.13	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-3 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.13	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-4 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.13	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.13	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-6 - 7.0 - 7.5	1/23/2014	7.0 - 7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.13	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	**0.006**
SB-7 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.13	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-8 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.12	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.13	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.13	<0.005	<0.05	<0.005	<0.005	**0.0082**	<0.005	<0.005
SB-9 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	**1.1**	**21**	<1.0	**1.5**	<1.0	<1.0	**2.5**	**1.0**	<10	<25	**8.8**	**24**	**17**	<1.0	**36**	**5.5**	<1.0
SB-9 - 11.5 - 12.0	1/23/2014	1.5 - 12.0	**3.1**	**1.9**	**3.5**	**6.8**	**2.1**	<0.51	**2.8**	**0.85**	<5.1	<13	<0.51	<5.1	<0.51	<0.51	<0.51	<0.51	<0.51
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.13	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SB-10 - 6.0 - 6.5	1/24/2014	6.0 - 6.5	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.13	<0.0052	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052

TABLE A-3: SUMMARY OF VOC CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
mg/kg = milligrams per kilograms.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL (or RSL if ESL is not available).
VOCs = Volatile organic compounds.
Except for MTBE, only compounds analyzed by EPA Method 8260 identified above laboratory reporting limits in at least one sample are listed in this table.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).
RSL = Regional Screening Levels for commercial/industrial land use (U.S. EPA, 2014).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.
U.S. EPA, 2014, Region 9, Regional Screening Levels for Chemical Contaminants at Superfund Sites, Updated May 2014.

TABLE A-4: SUMMARY OF SVOC CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	1-Methylnaphthalene	2-Methylnaphthalene	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
Commercial/Industrial ESL			none	0.25	19	13	2.8	1.3	0.13	1.3	27	1.3	13	0.38	40	8.9	1.3	4.8	11	85
B-1 COMP	10/18/2001	1.0 - 10.0	--	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3
B-2 COMP	10/18/2001	1.0 - 7.0	--	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
B-3 COMP	10/18/2001	1.0 - 7.0	--	**0.92**	<0.33	<0.33	**0.34**	**0.63**	**0.54**	**0.48**	<0.33	**0.54**	**0.62**	<0.33	**1.3**	<0.33	<0.33	**1.1**	**1.3**	**1.7**
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
SB-2 - 8.5 - 9.0	1/23/2014	8.5 - 9.0	**3.9**	**7.3**	**1.7**	<0.5	**3.6**	**5.6**	**3.0**	**2.2**	**0.79**	**2.9**	**4.7**	<0.5	**12**	**1.9**	**0.94**	**8.4**	**13**	**13**
SB-2 - 14.0 - 14.5	1/23/2014	4.0 - 14.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-3 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	**1.4**	<0.99	<0.99	<0.99	<0.99	**1.4**
SB-4 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-6 - 7.0 - 7.5	1/23/2014	7.0 - 7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-7 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-8 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-9 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	**12**	**22**	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	**18**	<5.0	<5.0
SB-9 - 11.5 - 12.0	1/23/2014	1.5 - 12.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-10 - 6.0 - 6.5	1/24/2014	6.0 - 6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE A-4: SUMMARY OF SVOC CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Notes:

Sample locations are shown in Figure A-1.

bgs = below ground surface.

-- = not analyzed or not reported.

<xx = compound not identified above the laboratory reporting limit.

mg/kg = milligrams per kilograms.

Bolded values indicate compound quantified above the laboratory reporting limits.

Yellow highlighted values indicate concentration exceeds ESL.

SVOCs = Semi-volatile organic compounds.

Except for polynuclear aromatic hydrocarbons, only compounds analyzed by EPA Method 8270 identified above laboratory reporting limits in at least one sample are listed in this table with one exception. Sample SB-2-14.0-14.5 also contained dibenzofuran at 0.92 mg/kg.

ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:

RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-5: SUMMARY OF METAL CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Commercial/Industrial ESL			40	1.6	1500	8	12	750	80	230	320	10	40	150	10	40	10	200	600
B-1-1.0-1.5	10/18/2001	1.0 - 1.5	<2.7	**1.9**	**79**	**0.54**	**1.6**	**20**	**7.1**	**22**	**69**	**0.17**	<0.9	**22**	**0.35**	<0.23	<0.23	**21**	**55**
B-1-2.0-2.5	10/18/2001	2.0 - 2.5	<2.7	**0.95**	**68**	**0.13**	**0.65**	**19**	**2.6**	**9.2**	**31**	**0.19**	<0.9	**14**	**0.24**	<0.23	<0.23	**11**	**36**
B-1-5.0-5.5	10/18/2001	5.0 - 5.5	<2.8	**1.3**	**41**	**0.15**	**0.8**	**23**	**3.7**	**8.7**	**2.2**	**0.039**	<0.94	**16**	<0.23	<0.23	<0.23	**19**	**11**
B-1-7.5-8.0	10/18/2001	7.5 - 8.0	<3	**1.6**	**50**	**0.25**	**1.3**	**32**	**6.4**	**6.7**	**2.2**	**0.019**	<0.99	**30**	**0.31**	<0.25	<0.25	**26**	**14**
B-1-9.5-10.0	10/18/2001	9.5 - 10.0	<2.8	**2.1**	**67**	**0.28**	**1.5**	**43**	**4.4**	**7.5**	**2.8**	<0.017	<0.93	**37**	**0.23**	<0.23	<0.23	**24**	**19**
B-2-1.0-1.5	10/18/2001	1.0 - 1.5	<2.6	**4.1**	**72**	**0.19**	**2.8**	**18**	**17**	**25**	**13**	**0.094**	<0.87	**27**	**0.68**	**0.32**	<0.22	**37**	**55**
B-2-2.0-2.5	10/18/2001	2.0 - 2.5	<2.8	**1.3**	**35**	**0.11**	**1.2**	**14**	**5.0**	**15**	**9.2**	**0.038**	<0.93	**29**	<0.23	<0.23	<0.23	**12**	**28**
B-2-5.0-5.5	10/18/2001	5.0 - 5.5	<2.8	**1.8**	**46**	**0.14**	**1.5**	**19**	**5.0**	**15**	**16**	**0.032**	<0.92	**37**	**0.33**	<0.23	<0.23	**14**	**29**
B-3-1.0-1.5	10/18/2001	1.0 - 1.5	**5.3**	**7.5**	**480**	**0.22**	**7.0**	**33**	**6.4**	**790**	**24000**	**0.99**	**1.9**	**44**	**0.59**	**1.8**	<0.21	**26**	**2800**
B-3-3.0-3.5	10/18/2001	3.0 - 3.5	<3	**1.8**	**63**	**0.19**	**0.92**	**25**	**3.5**	**13**	**36**	**0.18**	<1	**19**	**0.31**	<0.25	<0.25	**16**	**44**
B-3-4.5-5.0	10/18/2001	4.5 - 5.0	<3	**1.0**	**45**	**0.17**	**0.76**	**22**	**2.4**	**5.8**	**3.4**	<0.016	<0.99	**16**	<0.25	<0.25	<0.25	**15**	**12**
B-3-7.5-8.0	10/18/2001	7.5 - 8.0	<2.8	**1.2**	**37**	**0.18**	**0.9**	**29**	**2.2**	**5.7**	**2.2**	**0.037**	<0.95	**20**	<0.24	<0.24	<0.24	**17**	**12**
B-3-9.5-10.0	10/18/2001	9.5 - 10.0	<3	**1.5**	**46**	**0.28**	**1.3**	**29**	**7.9**	**7.2**	**2.7**	**0.02**	<1	**32**	<0.25	<0.25	<0.25	**24**	**15**
~~T1-060503~~	~~6/5/2003~~	~~7.0~~	--	--	--	--	--	--	--	--	~~**4.5**~~	--	--	--	--	--	--	--	--
T2-060503-N	6/5/2003	7.0	--	--	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--
T2-060503-W	6/5/2003	7.0	--	--	--	--	--	--	--	--	**2.8**	--	--	--	--	--	--	--	--
T2-060503-S	6/5/2003	7.0	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--	--	--	--
P1-061003	6/10/2003	7.0	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
P2-061003	6/10/2003	8.0	--	--	--	--	--	--	--	--	**5.2**	--	--	--	--	--	--	--	--
~~COMP #1A-#1D~~	~~6/17/2003~~	~~stockpile~~	--	--	--	--	--	--	--	--	~~**6.9**~~	--	--	--	--	--	--	--	--
~~COMP #2A-#2D~~	~~6/17/2003~~	~~stockpile~~	--	--	--	--	--	--	--	--	~~**21**~~	--	--	--	--	--	--	--	--
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	<0.8	**3.4**	**120**	**0.31**	**0.66**	**23**	**6.0**	**56**	**312**	**4.5**	**0.40**	**23**	<0.8	<0.3	<0.8	**20**	**339**
SB-2 - 8.5 - 9.0	1/23/2014	8.5 - 9.0	<0.7	**0.775**	**60**	<0.2	<0.5	**44**	**7.1**	**8.5**	**2.5**	<0.08	<0.2	**34**	<0.7	<0.2	<0.7	**27**	**22**
SB-2 - 14.0 - 14.5	1/23/2014	4.0 - 14.5	<0.8	**2.5**	**64**	<0.3	<0.5	**39**	**8.0**	**8.9**	**1.9**	<0.08	<0.3	**33**	<0.8	<0.3	<0.8	**28**	**21**
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.8	**1.8**	**61**	<0.3	<0.5	**5.7**	**5.3**	**26**	**5.2**	**0.13**	<0.3	**6.8**	<0.8	<0.3	<0.8	**20**	**66**
SB-3 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.8	**0.92**	**46**	<0.3	<0.5	**28**	**2.5**	**9.3**	**2.2**	<0.08	<0.3	**14**	<0.8	<0.3	<0.8	**18**	**20**
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	**1.2**	**13**	**309**	**0.52**	**5.0**	**36**	**9.7**	**385**	**1670**	**1.6**	<0.3	**43**	<0.8	<0.3	<0.8	**24**	**2080**

TABLE A-5: SUMMARY OF METAL CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Commercial/Industrial ESL			40	1.6	1500	8	12	750	80	230	320	10	40	150	10	40	10	200	600
SB-4 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.8	**1.5**	**55**	<0.3	<0.5	**34**	**7.1**	**17**	**26**	<0.08	<0.3	**25**	<0.8	<0.3	<0.8	**24**	**38**
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	**34**	**15**	**921**	**0.27**	**4.9**	**51**	**14**	**1840**	**4760**	**7.1**	**50**	**74**	<0.8	**0.50**	<0.8	**29**	**3420**
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.8	**2.0**	**58**	<0.3	<0.5	**36**	**9.1**	**10**	**5.2**	<0.08	**0.36**	**28**	<0.8	<0.3	<0.8	**28**	**21**
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.8	**4.7**	**87**	<0.3	**0.66**	**31**	**4.3**	**37**	**249**	**0.88**	**1.1**	**22**	<0.8	<0.3	<0.8	**21**	**447**
SB-6 - 7.0 - 7.5	1/23/2014	7.0 - 7.5	<0.8	**1.4**	**43**	<0.2	<0.5	**37**	**3.5**	**6.2**	**1.8**	<0.08	**0.60**	**23**	<0.7	<0.2	<0.7	**23**	**16**
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	**4.9**	**8.3**	**99**	**0.27**	**1.6**	**42**	**3.8**	**1100**	**1340**	**3.3**	<0.3	**22**	<0.8	<0.3	<0.8	**27**	**515**
SB-7 - 7.0 - 7.5	1/24/2014	7.0 - 7.5	<0.7	**2.0**	**55**	**0.29**	<0.5	**43**	**7.3**	**15**	**14**	<0.08	<0.2	**32**	<0.7	<0.2	<0.7	**29**	**29**
SB-8 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	**12**	**13**	**513**	<0.2	**7.2**	**45**	**8.1**	**3890**	**2380**	**8.1**	**6.2**	**47**	<0.7	**1.3**	<0.7	**26**	**2800**
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.7	**1.5**	**58**	<0.2	<0.5	**32**	**11**	**11**	**3.9**	<0.08	<0.2	**27**	<0.7	<0.2	<0.7	**25**	**21**
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	<0.7	**5.2**	**219**	<0.2	**0.52**	**35**	**7.2**	**130**	**287**	<0.09	**15**	**44**	<0.7	**0.80**	<0.7	**31**	**256**
SB-9 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.7	**1.3**	**51**	<0.2	<0.5	**31**	**5.5**	**8.0**	**2.5**	<0.08	<0.2	**22**	<0.7	<0.2	<0.7	**20**	**17**
SB-9 - 11.5 - 12.0	1/23/2014	1.5 - 12.0	<0.8	**1.0**	**75**	**0.27**	<0.5	**73**	**7.5**	**12**	**2.6**	<0.08	<0.3	**45**	<0.8	<0.3	<0.8	**36**	**25**
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.7	**2.5**	**125**	**0.32**	<0.5	**8.0**	**7.3**	**29**	**5.4**	**0.14**	<0.2	**8.6**	<0.7	<0.2	<0.7	**27**	**86**
SB-10 - 6.0 - 6.5	1/24/2014	6.0 - 6.5	<0.8	<0.8	**29**	<0.3	<0.5	**29**	**1.9**	**11**	**1.3**	<0.08	<0.3	**9.6**	<0.8	<0.3	<0.8	**18**	**12**

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
mg/kg = milligrams per kilograms.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-6: SUMMARY OF PCB CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262
	Commercial/Industrial ESL		0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
B-1 COMP	10/18/2001	1.0 - 10.0	**0.21**	<0.024	<0.012	<0.012	<0.012	**4.2**	**0.24**	--
B-2 COMP	10/18/2001	1.0 - 7.0	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012	--
B-3 COMP	10/18/2001	1.0 - 7.0	<0.012	<0.048	<0.012	<0.012	<0.012	**0.73**	**0.11**	--
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<5	<5	<5	<5	<5	**32**	**8.1**	<5
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.05	<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 - 1.0	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	**3.1**	<0.5
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	<0.05	<0.05	<0.05	<0.05	<0.05	**0.094**	**0.054**	<0.05
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:

Sample locations are shown in Figure A-1.

bgs = below ground surface.

-- = not analyzed or not reported.

<xx = compound not identified above the laboratory reporting limit.

mg/kg = milligrams per kilograms.

Bolded values indicate compound quantified above the laboratory reporting limits.

Yellow highlighted values indicate concentration exceeds ESL.

PCBs = Polychlorinated biphenyls.

ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:

RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-7: SUMMARY OF OCP CONCENTRATIONS IN SOIL
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Heptachlor Epoxide	Heptachlor epoxide B
Commercial/Industrial ESL			10	4.0	4.0	0.0023	0.014	0.014
B-1 COMP	10/18/2001	1.0 - 10.0	<0.06	**0.20**	<0.06	**0.15**	--	**0.037**
B-2 COMP	10/18/2001	1.0 - 7.0	<0.06	<0.06	<0.06	<0.06	--	<0.03
B-3 COMP	10/18/2001	1.0 - 7.0	<0.059	<0.059	<0.059	<0.059	--	<0.03
SB-2 - 1.5 - 2.0	1/23/2014	1.5 - 2.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-3 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-4 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	**0.026**	<0.005	**0.028**	<0.005	<0.005	--
SB-5 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	**0.23**	--
SB-5 - 6.5 - 7.0	1/23/2014	6.5 - 7.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-6 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-7 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-8 - 0.5 - 1.0	1/23/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	**0.070**	--
SB-8 - 6.0 - 6.5	1/23/2014	6.0 - 6.5	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-9 - 2.5 - 3.0	1/23/2014	2.5 - 3.0	<0.005	<0.005	<0.005	<0.005	<0.005	--
SB-10 - 0.5 - 1.0	1/24/2014	0.5 - 1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
mg/kg = milligrams per kilograms.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
OCPs = Organochlorine pesticides.
Only compounds analyzed by EPA Method 8081 identified above laboratory reporting limits in at least one sample are listed in this table.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-8: LIST OF GROUNDWATER SAMPLES AND ANALYSES
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California

Sample ID	Sample Date	Source	Metals	TPH	BTEX/MTBE /VOC	SVOC	PCBs	OCP
B-1-WI	10/18/2001	IRIS, 2001		X	BTEX/VOC			
B-2-WI	10/18/2001	IRIS, 2001	X	X	BTEX/VOC			
B-3-WI	10/18/2001	IRIS, 2001		X	BTEX/VOC			
GW-060503	6/5/2003	Geomatrix, 2003	Pb only	X	BTEX/MTBE			
SB-2	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-2-DUP	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-3	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-4	1/27/2014	ERM, 2014	X	X	VOC	X	X	X
SB-5	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-6	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-7	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-8	1/24/2014	ERM, 2014	X	X	VOC	X	X	X
SB-9	1/24/2014	ERM, 2014	X	X	VOC	X	X	X

Notes:
Sample locations are shown in Figure A-1.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
MTBE = Methyl tert-buyl ether.
VOCs = Volatile organic compounds.
SVOCs = Semi-volatile organic compounds.
OCPs = Organochlorine pesticides.
PCBs = Polychlorinated biphenyls.
Pb = Lead.
X = sample analyzed for constituents.

Sources:
Iris Environmental, 2001, Letter, Data Summary Tables and Figures, Third and Brush Street Site, Port of Oakland, Oakland, California, 19 November.

Geomatrix Consultants, 2003, Underground Storage Tank Removal, 209 Brush Street, Oakland, California, 30

ERM, 2014, Phase II Environmental Site Investigation, Port of Oakland, 205-209 Brush Street, Oakland, California, March.

TABLE A-9: SUMMARY OF TPH, BTEX, and MTBE CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Sample ID	Sample Date	TPH as Gasoline	TPH as Diesel (silica gel cleanup)	TPH as Motor Oil (silica gel cleanup)	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene	MTBE
Commercial/Industrial ESL		500	640	640	27	43	130	100	100	1800
B-1-WI	10/18/2001	**250**	--	--	**5.8**	**6.3**	**30**	**26**	**12**	<5
B-2-WI	10/18/2001	**860**	**170**	<300	**78**	**2.0**	**4.1**	**5.7**	**2.3**	**590**
B-3-WI	10/18/2001	**97000**	**11000**	<1,500	**8000**	**2300**	**15000**	**8700**	**3800**	<1,000
GW-060503	6/5/2003	**19000**	**2100**	--	**610**	**700**	**2500**	**2500**	**930**	**1200**
SB-2	1/24/2014	**63000**	**19000**	**480**	**1800**	**6800**	**15000**	**26000**	**10000**	<100
SB-2-DUP	1/24/2014	**14000**	**14000**	**360**	**1300**	**1300**	**3100**	**3100**	**1500**	**18**
SB-3	1/24/2014	**120**	<50	<250	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0
SB-4	1/27/2014	<50	<50	<250	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0
SB-5	1/24/2014	**140**	**53**	<250	**0.54**	**2.7**	**5.7**	**11**	**3.6**	<1.0
SB-6	1/24/2014	<50	<50	<250	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0
SB-7	1/24/2014	<50	<50	<250	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0
SB-8	1/24/2014	<50	<50	<250	<0.5	<1.0	**4.2**	**4.6**	**1**	<1.0
SB-9	1/24/2014	**1E+05**	**60000**	<250	**10000**	**6300**	**38000**	**24000**	**10000**	**160**

Notes:
Sample locations are shown in Figure A-1.
-- = not analyzed or not reported.
<xx = compound not identified above the laboratory reporting limit.
µg/L = micrograms per liter.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
TPH = Total petroleum hydrocarbons.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
MTBE = Methyl tert-buyl ether.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-10: SUMMARY OF VOC CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Sample ID	Sample Date	Benzene	Ethylbenzene	Toluene	m,p-Xylenes	o-Xylene	MTBE	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Isopropylbenzene	Naphthalene	n-Butylbenzene	Propylbenzene	sec-Butylbenzene
Commercial/Industrial ESL		27	43	130	100	100	1800	none	none	none	24	none	none	none
B-1-WI	10/18/2001	**6.3**	**7.4**	**34**	**32**	**13**	<5	**14**	<5	<5	<5	<5	<5	<5
B-2-WI	10/18/2001	**74**	<17	<17	<17	<17	**590**	<17	<17	<17	<17	<17	<17	<17
B-3-WI	10/18/2001	**9300**	**2700**	**19000**	**10000**	**4300**	<1000	**1900**	<1000	<1000	<1000	<1000	<1000	<1000
SB-2	1/24/2014	**1800**	**6800**	**15000**	**26000**	**10000**	<100	**9900**	**2900**	**390**	**1400**	**760**	**1500**	**150**
SB-2-DUP	1/24/2014	**1300**	**1300**	**3100**	**3100**	**1500**	**18**	**560**	**160**	**63**	<100	**17**	**140**	<10
SB-3	1/24/2014	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
SB-4	1/27/2014	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
SB-5	1/24/2014	**0.54**	**2.7**	**5.7**	**11**	**3.6**	<1.0	**4.0**	**1.2**	<1.0	<10	<1.0	<1.0	<1.0
SB-6	1/24/2014	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
SB-7	1/24/2014	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
SB-8	1/24/2014	<0.5	**1.8**	**4.2**	**4.6**	**1.0**	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
SB-9	1/24/2014	**10000**	**6300**	**38000**	**24000**	**10000**	**160**	**6600**	**1800**	**220**	<1000	**370**	**810**	<100

TABLE A-10: SUMMARY OF VOC CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Notes:
Sample locations are shown in Figure A-1.
<xx = compound not identified above the laboratory reporting limit.
µg/L = micrograms per liter.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
Only compounds analyzed by EPA Method 8260 identified above laboratory reporting limits in at least one sample are listed in this table.
VOCs = Volatile organic compounds.
MTBE = Methyl tert-buyl ether.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-11: SUMMARY OF SVOC CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Sample ID	Sample Date	1-Methylnaphthalene	2-Methylnaphthalene	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	2-Methylphenol	3/4-Methylphenol	2,4-Dimethylphenol	Phenol
Commercial/Industrial ESL		none	2.1	23	30	0.73	0.027	0.014	0.056	0.1	0.4	0.35	0.25	8.0	3.9	0.056	24	4.6	2.0	none	none	110	260
SB-2	1/24/2014	**210**	**390**	<97	<97	**120**	**170**	**100**	<97	<97	**98**	**140**	<97	**460**	<97	<97	**780**	**520**	**430**	<97	<97	<97	<97
SB-2-DUP	1/24/2014	**11**	**19**	<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	**59**	**12**	<9.6	**11**	**17**	**16**	**18**
SB-3	1/24/2014	<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	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
SB-4	1/27/2014	<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	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
SB-5	1/24/2014	<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	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
SB-6	1/24/2014	<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	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
SB-7	1/24/2014	<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	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
SB-8	1/24/2014	<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	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7
SB-9	1/24/2014	**99**	**180**	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	**550**	<49	<49	**76**	**130**	<49	<49

Notes:
Sample locations are shown in Figure A-1.
<xx = compound not identified above the laboratory reporting limit.
µg/L = micrograms per liter.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.
Except for polynuclear aromatic hydrocarbons, only compounds analyzed by EPA Method 8270 identified above laboratory reporting limits in at least one sample are listed in this table.
SVOCs = Semi-volatile organic compounds.
ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-12: SUMMARY OF METAL CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Sample ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Commercial/Industrial ESL		30	36	1000	0.53	0.25	180	3.0	3.1	2.5	0.025	240	8.2	5.0	0.19	4.0	19	81
B-2-WI	10/18/2001	<60	**8.4**	**540**	<2	<5	<10	<20	**13**	**19**	**0.21**	<20	<20	**5.0**	<5	**16**	<10	**49**
GW-060503	6/5/2003	--	--	--	--	--	--	--	--	**140**	--	--	--	--	--	--	--	--
SB-2	1/24/2014	<15	**18**	**299**	<10	<10	<10	<10	<10	<10	<0.5	<10	**17**	<15	<5	<15	<10	**11.9**
SB-2-DUP	1/24/2014	<15	**19**	**225**	<10	<10	<10	<10	<10	<10	<0.5	<10	**16**	<15	<5	<15	<10	**12.9**
SB-3	1/24/2014	<15	<10	**15**	<10	<10	**14**	**457**	<10	<10	<0.5	<10	**983**	<15	**9.0**	<15	<10	**1260**
SB-4	1/27/2014	<15	<10	**36**	<10	<10	<10	<10	<10	<10	<0.5	<10	<10	<15	<5	<15	<10	**21**
SB-5	1/24/2014	<15	<10	**159**	<10	<10	<10	<10	<10	<10	<0.5	**17**	<10	<15	<5	<15	<10	**27.1**
SB-6	1/24/2014	<15	<10	**156**	<10	<10	<10	<10	<10	<10	<0.5	<10	**11.7**	<15	<5	<15	<10	**19.6**
SB-7	1/24/2014	<15	<10	**65**	<10	<10	<10	<10	<10	<10	<0.5	**13**	<10	<15	<5	<15	<10	**11.7**
SB-8	1/24/2014	<15	<10	**116**	<10	<10	<10	<10	<10	<10	<0.5	**24**	**165**	<15	<5	<15	<10	**15.5**
SB-9	1/24/2014	<15	**25**	**179**	<10	<10	<10	<10	<10	<10	<0.5	<10	<10	<15	**6.4**	<15	<10	**18.3**

Notes:

Sample locations are shown in Figure A-1.

-- = not analyzed or not reported.

<xx = compound not identified above the laboratory reporting limit.

µg/L = micrograms per liter.

Bolded values indicate compound quantified above the laboratory reporting limits.

Yellow highlighted values indicate concentration exceeds ESL.

ESLs = Environmental Screening Levels for shallow soils where groundwater is not a potential source of drinking water for commercial/industrial land uses (RWQCB, 2013).

References:

RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table B, Updated December 2013.

TABLE A-13: SUMMARY OF OCP and PCB CONCENTRATIONS IN GROUNDWATER
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/L)

Sample ID	Sample Date	All OCPs	All PCBs
SB-2	1/24/2014	ND (<0.097 to <1.9)	ND (<0.97)
SB-2-DUP	1/24/2014	ND (<0.098 to <2.0)	ND (<0.98)
SB-3	1/24/2014	ND (<0.097 to <1.9)	ND (<0.97)
SB-4	1/27/2014	ND (<0.098 to <2.0)	ND (<0.98)
SB-5	1/24/2014	ND (<0.098 to <2.0)	ND (<0.98)
SB-6	1/24/2014	ND (<0.097 to <1.9)	ND (<0.97)
SB-7	1/24/2014	ND (<0.097 to <1.9)	ND (<0.97)
SB-8	1/24/2014	ND (<0.098 to <2.0)	ND (<0.98)
SB-9	1/24/2014	ND (<0.10 to <2.0)	ND (<1.0)

Notes:

Sample locations are shown in Figure A-1.

ND = not detected above laboratory reporting limits.

<xx = compound not identified above the laboratory reporting limit.

µg/L = micrograms per liter.

OCPs = Organochlorine pesticides.

PCBs = Polychlorinated biphenyls.

TABLE A-14: SUMMARY OF VOC CONCENTRATIONS IN SOIL GAS
Harbor Facilities Portion, 205-209 Brush Street, Oakland, California (μg/m3)

Sample ID	Sample Depth (feet bgs)	Sample Date	Acetone	Benzene	2-Butanone	Tetrachloro-ethene	Trichloro-ethene	1,1,1-Trichloro-ethane	All Other VOCs
Commercial/Industrial ESL			1.4E+08	420	2.2E+07	2100	3000	2.2E+07	various
SVP-4	5.5	1/27/2014	**11**	<1.6	<4.6	**4.2**	<2.8	<2.8	ND
SVP-4-DUP	5.5	1/27/2014	**16**	<1.6	<4.5	**4.3**	<2.7	<2.8	ND
SVP-7	5.5	1/27/2014	**25**	**3.3**	**41**	**3,600**	**8.1**	**130**	ND

Notes:
Sample locations are shown in Figure A-1.
bgs = below ground surface.
<xx = compound not identified above the laboratory reporting limit.
µg/m3 = micrograms per cubic meter.
Bolded values indicate compound quantified above the laboratory reporting limits.
Yellow highlighted values indicate concentration exceeds ESL.

ESLs = Environmental Screening Levels for soil gas for evaluation of potential vapor intrusion for commercial/industrial land uses (RWQCB, 2013).
Samples were analyzed by U.S. EPA Method TO-15. Only compounds that were detected above the laboratory reporting limits in at least one sample are listed in this table.

References:
RWQCB, 2013, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, Table E-2, Updated December 2013.

Source:
ERM, 2014, Phase II Environmental Site Investigation, Port of Oakland, 205-209 Brush Street, Oakland, California, March.