



May 18, 2022  
Project No. 22-483

Dauntless Development  
Attn: Mr. Shaun Gilbert  
2419 Michigan Ave., Suite E  
Santa Monica, CA 90404

**Subject: PRELIMINARY FINDINGS OF ADDITIONAL ENVIRONMENTAL SITE  
ASSESSMENT ACTIVITIES**  
101 Garden Street  
Santa Barbara, California

Mr. Gilbert,

GeoEnviro Services, Inc. (GESI) completed additional environmental site assessment activities at the 4.5-acre property located south of the intersection of Garden Street and E. Yanonali Street with the street address of 101 Garden Street, Santa Barbara, CA (Site).

This letter report summarizes the preliminary findings of the additional assessment activities.

### **SCOPE OF WORK COMPLETED**

The following activities were completed:

1. Project correspondence, scheduling, and notifications to the Santa Barbara County Environmental Health Services.
2. Site survey for evaluation of unexploded ordinance (UXO) prior to completion of the proposed soil boring on March 29, 2022. No UXO was identified.
3. Completion of 20 soil borings on March 30 and 31, 2022 each to a depth of 8 feet (SB1 through SB20) using Geoprobe hydraulic push equipment for the collection of soil samples from depths of 3, 5, and 8 feet in depth.
4. Continued advancement of 17 of the 20 soil borings to approximately 15 feet for the placement of temporary 1' diameter PVC well casing for the collection of groundwater samples. Groundwater samples were collected from 16 of the 17 locations. No water was able to be collected in SB1 after 3 attempts at 3 locations distanced approximately 40 feet from one another in the norther portion of the Site due to the presence of a thick clay layer.
5. Laboratory analysis of 60 soil samples for Total Petroleum Hydrocarbons (TPH) as gasoline (TPH-G) and Volatile Organic Compounds (VOCs) by EPA Method 8260B, TPH as diesel fuel (TPH-D) and oil (TPH-O) by EPA Method 8015M, Title 22 Metals, and semi-volatile

## **Preliminary Findings of Additional Site Assessment Activities**

101 Garden Street, Santa Barbara, CA

May 18, 2022, Project No. 22-483

---

organic compounds (SVOCs) including creosote and pentachlorophenol by EPA Method 8270.

6. Laboratory analysis of 15 groundwater samples for VOCs by EPA Method 8260B, Title 22 Metals and SVOCs.
7. Collection of soil vapor samples on April 4, 2022, from 14 temporary vapor probes each from 5 ft. in depth.
8. Analysis of 14 soil vapor samples plus one duplicate for VOCs by EPA Method 8260B onsite using a mobile laboratory.
9. Professional survey on April 4, 2022, of the locations and elevations of each of the 20 soil borings and 14 temporary vapor probe locations.

## **PRELIMINARY FINDINGS**

### **Soil Sample Analytical Results for TPH, VOCs and SVOCs**

The soil sample laboratory analytical results for TPH, VOCs, and SVOC are summarized on Table 1. Table 1 also includes the previous soil samples results from November 2016. For comparison purposes, the bottom of Table 1 includes a listing of the Environmental Screening Levels (ESLs) as published by the California Regional Water Quality Control Board, San Francisco Region (RWQCB-SFR), January 2019. As shown on Table 1, no significant concentrations of TPH, VOCs, or SVOC were detected in the previous or current soil samples analyzed with the following exceptions:

- Soil sample GP23-8' (November 2016) located on the eastern portion of the Site in the vicinity of a former UST, contained TPH-G at a concentration of 156 milligrams per kilogram (mg/kg), above the Tier 1 ESL of 100 mg/kg; and a naphthalene concentration of 3.01 mg/kg, above the Tier 1 ESL of 0.042 mg/kg.
- Soil sample SB12-3' (March 2022) located in the central portion of the Site to the east of Building #1 contained TPH-O at a concentration of 11,000 mg/kg, above the Tier 1 ESL of 1,600 mg/kg.
- Soil sample SB15-5' (March 2022) located in the western portion of the Site to the west of building #3, contained a TPH-D at a concentration of 6,600 mg/kg and TPH-O at a concentration of 4,500 mg/kg, above the Tier 1 ESLs of 260 mg/kg and 1,600 mg/kg, respectively.

### **Soil Sample Analytical Results for CCR Title 22 Metals**

The soil sample laboratory analytical results for CCR Title 22 Metals are summarized on Table 2. Table 2 also includes the previous soil samples results from November 2016. For comparison purposes, the bottom of Table 2 includes a listing of the RWQCB-SFR Tier 1 ESLs. As shown on Table 2, no significant concentrations of Title 22 Metals were detected in the previous or current soil samples analyzed with the following exception:

---

## **Preliminary Findings of Additional Site Assessment Activities**

101 Garden Street, Santa Barbara, CA

May 18, 2022, Project No. 22-483

---

- Soil sample SB6-5' (March 2022) located in the northern portion of the Site contained a total lead concentration of 220 mg/kg, above the Tier 1 ESL of 160 mg/kg.

### **Soil Vapor Sample Analytical Results for VOCs**

The soil vapor sample laboratory analytical results for VOCs are summarized on Table 3. For comparison purposes, the bottom of Table 3 includes a listing of the RWQCB-SFR Tier 1 ESLs and the Commercial ESLs. As shown on Table 3, no significant concentrations of VOCs were detected in the soil vapor samples analyzed with the following exceptions:

- Soil vapor samples SV-5, SV-7, SV-8, SV-8 DUP, and SV-9 located in the central and western portions of the Site contained benzene concentrations ranging from 0.019 micrograms per liter (ug/L) to 0.474 ug/L, above the Commercial ESL of 0.014 ug/L. Soil vapor sample SV-8 and SV-8 DUP also contained ethylbenzene of 1.604 ug/L and 1.611 ug/L, respectively, above the Commercial ESL of 0.16 ug/L.
- Soil vapor sample SV-6 located in the eastern portion of the Site contained benzene at a concentration of 0.013 ug/L, above the Tier 1 ESL of 0.0032 ug/L.
- Soil vapor samples SV-5 and SV-9 located in the central portion of the Site contained Tetrachloroethene (PCE) concentrations of 0.066 and 0.017 ug/L, above the Tier 1 ESL of 0.015 ug/L.

### **Groundwater Sample Analytical Results for TPH, VOCs, SVOCs**

The groundwater laboratory analytical results for TPH, VOCs, and SVOC are summarized on Table 4. For comparison purposes, the bottom of Table 4 includes a listing of the RWQCB-SFR Tier 1 ESLs. As shown on Table 4, no significant concentrations of TPH, VOCs, or SVOCs were detected in the groundwater samples analyzed with the following exceptions:

- Groundwater samples SB2-W, SB6-W, SB10-W located in the northern portion of the Site contained MTBE at concentrations of 3.0 ug/L, 12 ug/L and 8.0 ug/L, respectively, above the Tier 1 ESL of 5.0 ug/L.
- Groundwater sample SB9-W located on the east-central portion of the Site contained a cis-1,2-Dichloroethene concentration of 8.2 ug/L, above the Tier 1 ESL of 6 ug/L.
- Groundwater sample SB16-W located in the south-central portion of the Site contained a trichloroethene concentration of 6.2 ug/L, above the Tier 1 ESL of 5.0 ug/L.

### **Groundwater Sample Analytical Results for CCR Title 22 Metals**

The groundwater laboratory analytical results for CCR Title 22 Metals are summarized on Table 5. For comparison purposes, the bottom of Table 5 includes a listing of the RWQCB-SFR Tier 1 ESLs. As shown on Table 5, no significant concentrations of CCR Title 22 Metals were detected in the groundwater samples analyzed with the following exceptions:

## **Preliminary Findings of Additional Site Assessment Activities**

101 Garden Street, Santa Barbara, CA

May 18, 2022, Project No. 22-483

---

- The majority of the groundwater samples analyzed contained dissolved arsenic, barium, and lead above the Tier 1 ESLs. Although the groundwater samples were filtered of sediment by the laboratory prior to extraction for analysis, The reported concentrations of arsenic, barium, and lead are likely to be the results of laboratory procedures during extraction or are naturally occurring concentrations.
- Groundwater samples SB13-W, SB17-W, and SB18-W located in the southern portion of the Site contained beryllium concentrations of 5.0 ug/L, 5.3 ug/L, and 6.0 ug/L, slightly above the Tier 1 ESL of 4.0 ug/L.
- Groundwater sample SB16-W located in the southern portion of the Site contained a selenium concentration of 68 ug/L, slightly above the Tier 1 ESL of 50 ug/L.

### **Discussion of Findings**

Based on the findings of the additional site assessment activities the following preliminary discussion is provided.

- Concentrations of TPH, VOCs, SVOCs, and metals in the soil appear to be generally acceptable for the planned development except for localized areas of TPH and lead that can be excavated and properly disposed once structures and materials have been removed from the Site.
- Concentrations of several VOCs including benzene and ethylbenzene were detected in soil vapor samples collected at depths of 5 feet at several location in the west-central portion of the Site slightly exceeding the Commercial ESLs. PCE was detected in two soil vapor sample slightly exceeding the Tier 1 ESL. Further delineation should be considered and may potentially be required by SBCEHS. Overall, the concentrations appear to sufficiently low and localized to not warrant site remediation. However, site mitigation is likely to be necessary such are the installation of the vapor barrier beneath the proposed building foundations. It should be noted that with building demolition, localized soil remediation by excavation (for removal of TPH and lead impacted soil), and site grading, VOC concentrations in the soil vapor will diminish.
- Low concentrations of VOCs were detected in the groundwater that were slightly above the Tier 1 ESLs. The Tier 1 ESL are equivalent to drinking water maximum contaminant levels (MCLs). The groundwater data will be provided to SBCEHS for their review and approval of no additional assessment or remediation of the groundwater. However, if groundwater dewatering is required, water treatment or transportation and proper disposal of extracted groundwater would likely be necessary.

**Preliminary Findings of Additional Site Assessment Activities**

101 Garden Street, Santa Barbara, CA

May 18, 2022, Project No. 22-483

---

GESI appreciates the opportunity to provide this preliminary report. If you have any questions, comments, or require additional information, please do not hesitate to contact us at (805) 620-0550 or [jschaaf@geoenviroservices.com](mailto:jschaaf@geoenviroservices.com).

Sincerely,

**GEOENVIRO SERVICES, INC.**



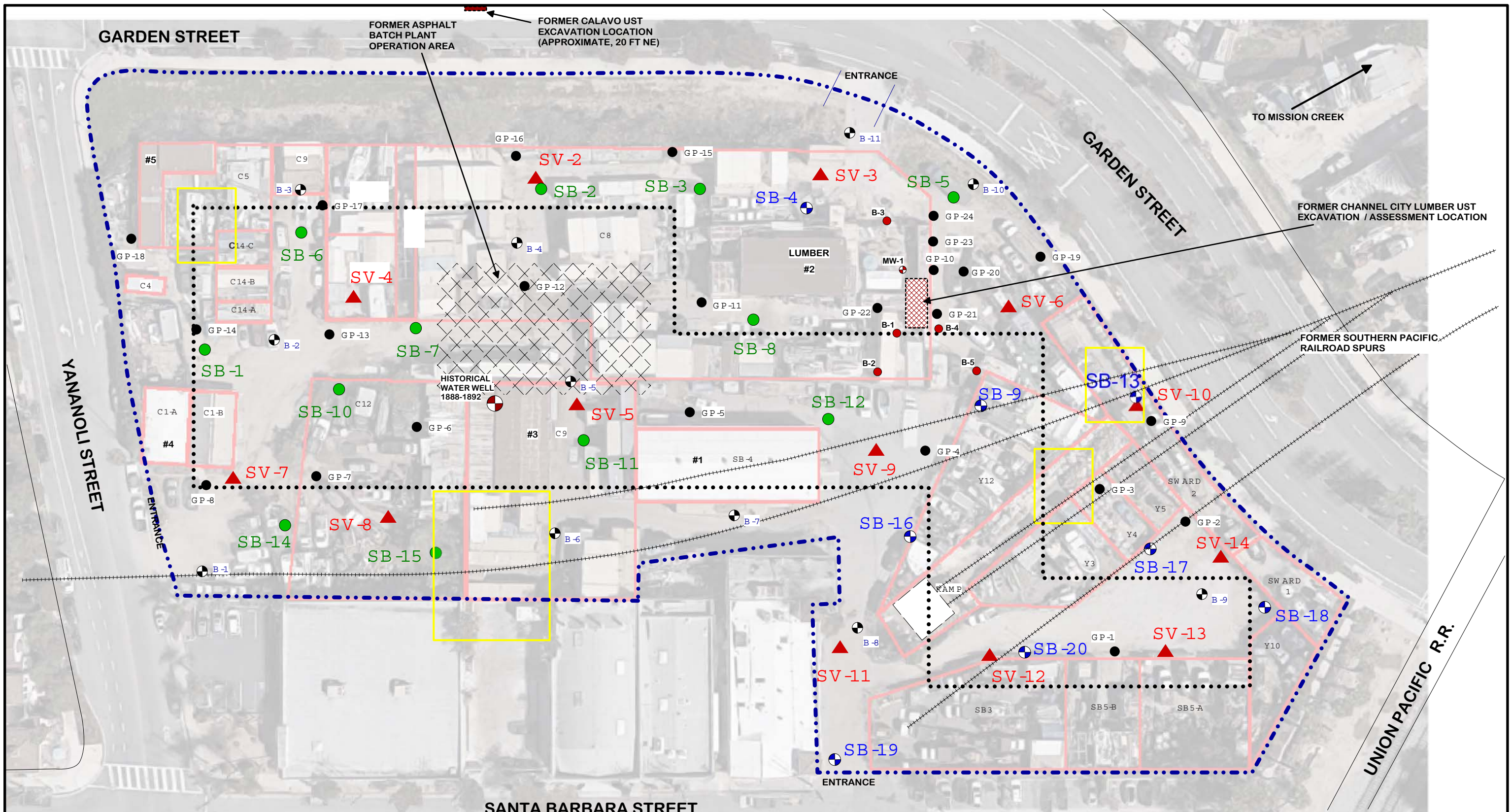
Joseph P. Schaaf, P.G., C.Hg.  
Principal Geologist

JPS/WP



Attachment: Site map with Soil Boring and Vapor Sample Locations  
Tables 1 through 5 with a Summary of Laboratory Analytical Results





TO MISSION CREEK

FORMER CHANNEL CITY LUMBER UST EXCAVATION / ASSESSMENT LOCATION

FORMER SOUTHERN PACIFIC RAILROAD SPURS

UNION PACIFIC R.R.

SANTA BARBARA STREET

**GEOENVIRO SERVICES, INC.**

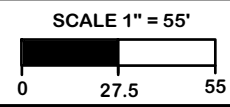
SITE MAP WITH HISTORICAL AND RECENT ASSESSMENT LOCATIONS

101 GARDEN STREET  
SANTA BARBARA, CALIFORNIA

MAY 2022 **FIGURE 2**

LEGEND	
SB-19	SOIL AND GROUNDWATER COLLECTION LOCATION (GESI2022)
SB-2	SOIL COLLECTION LOCATION (GESI2022)
SV-11	SOIL VAPOR COLLECTION LOCATION (GESI2022)
GP-1	HISTORICAL SOIL SAMPLE LOCATION (GESI, 2016)
B-1	HISTORICAL SOIL AND GROUNDWATER SAMPLE LOCATION (Rincon Consultants, 2012)
B-1	HISTORICAL SOIL SAMPLE LOCATION (FUGRO, 1993 - no data)
MW-1	HISTORICAL GW MONITORING WELL LOCATION (FUGRO installed 1993, abandoned 1994)
MW-1	
[Red hatched box]	FORMER GASOLINE UST LOCATION (removed 1992)
[Yellow box]	FORMER RAILROAD SPUR AREA
[Grey box]	FRAMED STRUCTURE ON SITE
[Blue box]	TEMPORARY STRUCTURE AND/OR DENSELY OCCUPIED AREA ON SITE
[Dotted line]	PROPOSED UNDERGROUND PARKING AND HOTEL FOOTPRINT
[Blue dashed line]	HOTEL PROJECT PROPERTY BOUNDARY

DRAWN BY: RKS  
REVISION: MAY 13, 2022  
CLIENT: GARDEN PALMS, LLC  
JOB No. 16-300



**TABLE 1**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOR TPH-G, TPH-D, TPH-O, VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Depth (feet)	Date Sampled	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	TPH-C (mg/kg)	VOCs (mg/kg)	PAHs (mg/kg)
<b>NOVEMBER 2016</b>								
GP1-1.5	1.5	11/14/2016	--	<50	<b>53.2</b>	<50	--	ND
GP1-3	3.0	11/14/2016	<0.5	<10	<b>86.5</b>	--	ND	--
GP1-8	8.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP2-3	3.0	11/14/2016	<0.5	<10	<b>145</b>	--	ND	--
GP3-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP4-1.5	1.5	11/14/2016	--	<50	<b>110</b>	<50	--	--
GP4-3	3.0	11/14/2016	<0.5	<10	<b>576</b>	--	ND	--
GP4-5	5.0	11/14/2016	--	<10	<50	--	ND	--
GP5-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP6-1.5	1.5	11/15/2016	--	<50	<50	<50	--	--
GP6-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP7-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP8-1.5	1.5	11/15/2016	--	<b>196</b>	<b>1,340</b>	<50	--	--
GP8-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP9-1.5	1.5	11/14/2016	--	<50	<b>203</b>	<50	--	--
GB9-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP10-1.5	1.5	11/14/2016	<0.5	<10	<b>1,020</b>	--	ND	--
GP10-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	ND
GP10-5	5.0	11/14/2016	<0.5	<10	<50	--	ND	ND
GP10-8	8.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP10-10	10.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP11-1.5	1.5	11/14/2016	--	<50	<b>54.8</b>	<50	--	--
GP11-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	ND
GP12-1.5	1.5	11/14/2016	<0.5	<10	<50	--	Ethylbenzene 0.00616 o-Xylenes 0.0254 m- & p-Xylenes 0.0428	--
GP13-1.5	1.5	11/14/2016	<0.5	<10	<50	<50	o-Xylenes 0.00368 m- & p-Xylenes 0.00928	ND
GP14-3	3.0	11/15/2016	<0.5	<b>43.1</b>	<b>302</b>	--	ND	ND
GB14-5	5.0	11/15/2016	<0.5	<10	<b>86.3</b>	--	ND	--
GP15-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	ND
GP16-1.5	1.5	11/14/2016	--	<50	<50	<50	--	--
GP16-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	--
GP17-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	ND
GB17-5	5.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP18-1.5	1.5	11/15/2016	--	<50	<50	<50	--	--
GP18-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP19-1.5	1.5	11/14/2016	--	<50	<50	<50	--	--
GP19-3	3.0	11/14/2016	<0.5	<10	<50	--	ND	Chrysene 0.116 Fluoranthene 0.135 Phenanthrene 0.130 Pyrene 0.231
GP19-8	8.0	11/14/2016	<0.5	<10	<50	--	ND	--



**TABLE 1**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOR TPH-G, TPH-D, TPH-O, VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Depth (feet)	Date Sampled	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	TPH-C (mg/kg)	VOCs (mg/kg)	PAHs (mg/kg)
<b>NOVEMBER 2016</b>								
GP20-3	3.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP20-5	5.0	11/15/2016	<0.5	<10	<50	--	ND	ND
GP21-5	5.0	11/15/2016	<0.5	<10	<50	--	Acetone 0.0712 m- & p-Xylenes 0.00436	--
GP21-8	8.0	11/15/2016	<0.5	<10	<50	--	ND	--
GP22-3	3.0	11/15/2016	<0.5	<10	<50	-	ND	--
GP23-5	5.0	11/15/2016	<b>0.672</b>	<10	<50	--	ND	ND
GP23-8	8.0	11/15/2016	<b>156</b>	<10	<50	--	n-Butylbenzene 1.7 sec-Butylbenzene 0.552 Isopropylbenzene 0.576 Naphthalene 3.01 n-Propylbenzene 2.42	--
GP24-5	5.0	11/15/2016	<0.5	<10	<50	--	ND	--
<b>MARCH 2022</b>								
SB1-3	3.0	3/31/2022	<0.042	<2.2	<7.0	--	Toluene 0.00083	ND
SB1-5	5.0	3/31/2022	<0.045	<2.2	<7.0	--	Ethylbenzene 0.0013 Toluene 0.0017	ND
SB1-8	8.0	3/31/2022	<0.041	<2.2	<7.0	--	ND	ND
SB2-3	3.0	3/31/2022	<0.076	<2.2	<b>54</b>	--	Ethylbenzene 0.0020 Toluene 0.0017	ND
SB2-5	5.0	3/31/2022	<0.041	<2.2	<7.0	--	ND	ND
SB2-8	8.0	3/31/2022	<0.045	<2.2	<7.0	--	ND	ND
SB3-3	3.0	3/31/2022	<0.045	<50	<b>250</b>	--	ND	ND
SB3-5	5.0	3/31/2022	<0.040	<2.2	<7.0	--	ND	ND
SB3-8	8.0	3/31/2022	<0.043	<2.2	<7.0	--	Toluene 0.00085	ND
SB4-3	3.0	3/30/2022	<0.045	<2.2	<b>39</b>	--	ND	ND
SB4-5	5.0	3/30/2022	<0.044	<2.2	<7.0	--	ND	ND
SB4-8	8.0	3/30/2022	<0.042	<2.2	<7.0	--	ND	ND
SB5-3	3.0	3/30/2022	<0.047	<2.2	<7.0	--	ND	ND
SB5-5	5.0	3/30/2022	<0.042	<2.2	<7.0	--	ND	ND
SB5-8	8.0	3/30/2022	<0.040	<2.2	<7.0	--	ND	ND
SB6-3	3.0	3/31/2022	<0.047	<2.2	<7.0	--	Ethylbenzene 0.0018 Toluene 0.0024	ND
SB6-5	5.0	3/31/2022	<0.044	<2.2	<b>22</b>	--	Ethylbenzene 0.0015 Toluene 0.0018	ND
SB6-8	8.0	3/31/2022	<0.0043	<2.2	<7.0	--	MTBE 0.0018	ND
SB7-3	3.0	3/31/2022	<0.051	<2.2	<7.0	--	ND	ND
SB7-5	5.0	3/31/2022	<0.042	<2.2	<7.0	--	ND	ND
SB7-8	8.0	3/31/2022	<0.040	<2.2	<7.0	--	Naphthalene 0.0015	ND
SB8-3	3.0	3/31/2022	<0.17	<2.2	<7.0	--	ND	ND
SB8-5	5.0	3/31/2022	<0.045	<2.2	<7.0	--	ND	ND
SB8-8	8.0	3/31/2022	<0.045	<2.2	<7.0	--	ND	ND
SB9-3	3.0	3/30/2022	<b>2.1</b>	<b>61</b>	<b>560</b>	--	Styrene 1.6	
SB9-5	5.0	3/30/2022	<0.042	<11	160	--	ND	ND



**TABLE 1**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOR TPH-G, TPH-D, TPH-O, VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Depth (feet)	Date Sampled	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	TPH-C (mg/kg)	VOCs (mg/kg)	PAHs (mg/kg)
<b>NOVEMBER 2016</b>								
SB9-8	8.0	3/30/2022	<0.041	<2.2	<7.0	--	ND	ND
SB10-3	3.0	3/31/2022	<0.048	<2.2	<7.0	--	ND	ND
SB10-5	5.0	3/31/2022	<0.044	<2.2	<7.0	--	ND	ND
SB10-8	8.0	3/31/2022	<0.042	<2.2	<7.0	--	ND	ND
SB11-3	3.0	3/31/2022	<0.042	<2.2	<7.0	--	ND	ND
SB11-5	5.0	3/31/2022	<0.043	<2.2	<7.0	--	ND	ND
SB11-8	8.0	3/31/2022	<0.043	<2.2	20	--	ND	ND
SB12-3	3.0	3/30/2022	<1.4	<280	<b>11,000</b>	--	ND	ND
SB12-5	5.0	3/30/2022	<0.044	<2.2	<7.0	--	ND	ND
SB12-8	8.0	3/30/2022	<0.049	<2.2	<7.0	--	ND	ND
SB13-3	3.0	3/30/2022	0.097	<b>19</b>	<b>51</b>	--	Toluene 0.0024	ND
SB13-5	5.0	3/30/2022	<b>0.063</b>	<22	<b>500</b>	--	Ethylbenzene 0.0068 Toluene 0.0046	Fluoranthene 0.53 Phenanthrene 0.46 Pyrene 0.79
SB13-8	8.0	3/30/2022	<0.043	<2.2	<7.0	--	Toluene 0.0026 Trichloroethene 0.0052	ND
SB14-3	3.0	3/31/2022	<0.043	<2.2	<7.0	--	Benzene 0.0037	ND
SB14-5	5.0	3/31/2022	<0.043	<2.2	<7.0	--	ND	ND
SB14-8	8.0	3/31/2022	<0.045	<2.2	<7.0	--	ND	ND
SB15-3	3.0	3/31/2022	<b>0.22</b>	<b>17</b>	<b>49</b>	--	n-Butylbenzene 0.0017 Ethylbenzene 0.029 n-Propylbenzene 0.0082 Toluene 0.023 1,2,4-Trimethylbenzene 0.0011 Total Xylenes 0.0025	Anthracene 0.069 bis(2Ethylhexyl)phthalate 0.98 Fluoranthene 0.34 Phenanthrene 0.29 Pyrene 0.31
SB15-5	5.0	3/31/2022	<0.041	<b>6,600</b>	<b>4,500</b>	--	ND	ND
SB15-8	8.0	3/31/2022	<b>0.066</b>	<2.2	<7.0	--	ND	ND
SB16-3	3.0	3/30/2022	<b>0.060</b>	<11	<b>210</b>	--	Ethylbenzene 0.0053 Toluene 0.0032	ND
SB16-5	5.0	3/30/2022	<0.042	<2.2	<7.0	--	ND	ND
SB16-8	8.0	3/30/2022	<0.041	<2.2	<7.0	--	Trichloroethene 0.0041	ND
SB17-3	3.0	3/30/2022	<0.51	<21	<b>260</b>	--	Ethylbenzene 0.0059 Toluene 0.0037	ND
SB17-5	5.0	3/30/2022	<b>0.13</b>	<2.2	<b>23</b>	--	Ethylbenzene 0.016 n-Propylbenzene 0.0034 Toluene 0.0086	ND
SB17-8	8.0	3/30/2022	<0.066	<2.2	<7.0	--	ND	ND
SB18-3	3.0	3/30/2022	<0.058	<2.2	<b>65</b>	--	Ethylbenzene 0.0037 Toluene 0.0026	ND
SB18-5	5.0	3/20/2022	<b>0.1</b>	<22	<b>380</b>	--	Ethylbenzene 0.0039 Toluene 0.0025	ND
SB18-8	8.0	3/20/2022	<0.041	<2.2	<7.0	--	ND	ND
SB19-3	3.0	3/30/2022	<b>0.11</b>	<21	<b>260</b>	--	Ethylbenzene 0.0031 Toluene 0.0027	ND
SB19-5	5.0	3/30/2022	<0.042	<2.2	<7.0	--	ND	ND
SB19-8	8.0	3/30/2022	<1.1	<2.2	<7.0	--	ND	ND

**TABLE 1**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOR TPH-G, TPH-D, TPH-O, VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Depth (feet)	Date Sampled	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	TPH-C (mg/kg)	VOCs (mg/kg)	PAHs (mg/kg)
<b>NOVEMBER 2016</b>								
SB20-3	3.0	3/30/2022	<0.048	<55	<b>1,500</b>	--	ND	ND
SB20-5	5.0	3/30/2022	<0.058	<2.2	<b>18</b>	--	ND	ND
SB20-8	8.0	3/20/2022	<0.039	<6.4	<20	--	ND	ND
<b>Tier 1 ESL - RWQCB Reg 9</b>			<b>100</b>	<b>260</b>	<b>1,600</b>		Acetone 0.92 Benzene 0.025 Ethylbenzene 0.43 MTBE 0.028 Naphthalene 0.042 Styrene 92 Toluene 3.2 Trichloroethene 0.085 Xylenes 2.1	Chrysene 3.8 Fluoranthene 60.0 Phenanthrene 11.0 Pyrene 85.0

**Notes**

- TPH-G Total Petroleum Hydrocarbons - Gasoline Range Hydrocarbons C6-C10 by US EPA Method 8260B
- TPH-D Total Petroleum Hydrocarbons - Diesel Range Hydrocarbons C10-C28 by US EPA Method 8015M
- TPH-O Total Petroleum Hydrocarbons - Oil Range Hydrocarbons C28+ by US EPA Region 8015M
- TPH-C Total Petroleum Hydrocarbons - Creosote by US EPA Method 8015M
- VOCs Volatile Organic Compounds by US EPA Method 8260B - for full list, refer to lab reports included in Appendix D
- PAHs Polynuclear Aromatic Hydrocarbons by US EPA Method 8270C
- SVOCs Semi-Volatile Organic Compounds by US EPA Method 8270C - for full list, refer to lab reports included in Appendix D
- mg/kg milligrams per kilogram
- Tier 1 ESL Environmental Screening Level - CA Regional Water Quality Control Board, San Francisco Region (Reg 9), January 2019 (Rev. 1)

Indicates detected concentration in excess of RWQCB-Reg 9 Tier 1 ESL

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS FOR CCR TITLE 22 METALS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**  
**NOVEMBER 2016**

Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	
<b>NOVEMBER 2016</b>																			
GP1-3	3.0	0.920	4.51	1.54	<0.5	13.8 (0.434*)	17.7	2.26	19.2	2.58	<0.05	13.5	44.9	<0.5	<0.5	<0.5	87.0	95.8	
GP1-5						1.25													
GP1-8	8.0	<0.5	2.35	66.6	<0.5	<0.5	15.4	3.84	1.30	5.15	<0.05	<0.5	14.4	<0.5	<0.5	<0.5	19.7	33.6	
GP2-3	3.0	2.46	10.2	162	<0.5	36.4 (3.92*) (0.123**)	30.2 (<0.5***)	3.10	43.8	3.32	0.0706	48.1	111	<0.5	0.867	<0.5	190	186	
GP2-5						23.6 (1.20*) (0.254**)													
GP3-3	3.0	0.525	2.77	91.6	<0.5	6.64	12.4	1.76	11.6	2.39	<0.05	2.95	26.1	<0.5	<0.5	<0.5	47.9	64.2	
GP4-3	3.0	<0.5	0.970	129	0.502	1.50	18.2	8.74	15.1	5.22	<0.05	4.65	31.2	<0.5	<0.5	<0.5	31.5	43.2	
GP5-3	3.0	<0.5	1.55	133	<0.5	<0.5	10.1	3.48	9.5	12.4	0.0889	<0.5	8.64	<0.5	<0.5	<0.5	13.8	161	
GP6-3	3.0	<0.5	5.34	139	<0.5	1.31 (<0.1*)	19.9	5.76	26.3	141 (3.13*)	0.233	1.55	15.9	<0.5	<0.5	<0.5	21.9	258	
GP6-5						0.65				6									
GP7-3	3.0	<0.5	4.35	84.4	<0.5	1.64	16.6	5.79	19.0	35.9	0.0555	0.503	17.9	<0.5	<0.5	<0.5	27.6	72.3	
GP8-3	3.0	<0.5	2.33	75.4	<0.5	0.542	17.2	7.38	12.8	5.86	<0.05	<0.5	17.1	<0.5	<0.5	<0.5	24.5	32.8	
GB9-3	3.0	3.07	8.23	271	<0.5	18.9 (0.659*)	25.5	4.91	25.6	5.65	0.0673	19.5	95.7	<0.5	<0.5	<0.5	137	211	
GP9-5						18.9 (1.52*) (<0.1**)													
GP10-3	3.0	<0.5	0.289	26.0	<0.5	<0.5	6.90	1.44	2.68	3.98	<0.05	<0.5	3.40	<0.5	<0.5	<0.5	13.7	10.6	
GP10-5	5.0	<0.5	2.15	63.6	<0.5	0.790	13.8	4.81	11.9	9.25	0.127	<0.5	12.7	<0.5	<0.5	<0.5	20.2	33.4	
GP11-3	3.0	<0.5	1.38	13.4	<0.5	<0.5	3.58	0.764	1.06	1.54	<0.05	<0.5	2.83	<0.5	<0.5	<0.5	3.28	30.7	
GP12-1.5	1.5	<0.5	2.32	42.7	<0.5	<0.5	16.5	3.04	8.88	5.19	<0.05	<0.5	7.49	<0.5	<0.5	<0.5	29.2	19.1	
GP13-1.5	1.5	<0.5	1.03	73.3	<0.5	<0.5	14.7	11.5	7.57	9.60	<0.05	5.1	11.6	<0.5	<0.5	<0.5	17.3	24.7	
GP14-3	3.0	<0.5	2.84	62.7	<0.5	<0.5	10.9	3.43	8.81	5.78	<0.05	0.754	11.5	<0.5	<0.5	<0.5	19.1	19.6	
GP15-3	3.0	<0.5	2.90	108	<0.5	0.510	17.6	5.94	11.4	4.21	<0.05	0.644	28.5	<0.5	<0.5	<0.5	22.5	67.3	
GP16-3	3.0	<0.5	2.83	103	<0.5	0.585	15.8	6.91	10.9	8.81	0.0903	<0.5	14.8	<0.5	<0.5	<0.5	24.2	64.8	
GP17-3	3.0	<0.5	1.93	115	<0.5	<0.5	18.3	3.01	10.6	4.23	<0.05	0.645	10.4	<0.5	<0.5	<0.5	43.8	17.9	

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS FOR CCR TITLE 22 METALS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**  
**NOVEMBER 2016**

Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
GP18-3	3.0	0.684	3.60	96.3	<0.5	0.585	14.8	9.10	8.71	4.07	<0.05	0.933	20.8	<0.5	<0.5	<0.5	19.1	28.7
GP19-3	3.0	<0.5	2.49	103	<0.5	0.826	14.7	6.36	11.4	5.12	<0.05	0.772	24.2	<0.5	<0.5	<0.5	20.0	30.5
GP20-5	5.0	0.599	1.76	68.5	<0.5	0.714	18.3	5.35	14.0	6.38	<0.05	<0.5	16.0	<0.5	<0.5	<0.5	25.1	46.2
GP21-5	5.0	<0.5	2.52	53.4	<0.5	0.523	15.0	5.73	11.7	5.62	<0.05	<0.5	13.3	<0.5	<0.5	<0.5	22.9	33.2
GP22-3	3.0	<0.5	1.34	18.3	<0.5	<0.5	6.00	1.60	2.13	2.46	<0.05	<0.5	4.22	<0.5	<0.5	<0.5	7.23	13.5
GP23-5	5.0	<0.5	2.65	64.5	<0.5	0.622	16.7	6.71	13.2	5.61	<0.05	<0.5	15.1	<0.5	<0.5	<0.5	25.6	34.9
GP23-8	8.0	<0.5	1.82	90.1	<0.5	<0.5	14.5	5.00	10.5	5.11	<0.05	<0.5	14.7	<0.5	<0.5	<0.5	19.3	28.1
GP24-5	5.0	<0.5	3.31	56.0	<0.5	0.552	15.4	5.60	11.0	5.13	<0.05	<0.5	12.8	<0.5	<0.5	<0.5	22.5	30.7
<b>MARCH 2022</b>																		
SB1-3	3.0	<0.66	5.9	110	0.34	0.47	21	4.3	9.7	4.3	0.056	2.2	21	<2.0	<0.13	<1.3	26	29
SB1-5	5.0	1.0	5.9	110	0.36	0.86	24	6.2	22	43	0.18	2.6	22	<2.0	<0.13	<1.3	32	120
SB1-8	8.0	0.62	2.2	29	0.20	0.13	11	3.4	6.7	3.7	0.041	1.5	9.9	<0.98	<0.067	<0.64	14	19
SB2-3	3.0	<0.66	4.0	68	0.26	0.20	14	3.6	6.2	8.3	0.016	1.9	8.6	<2.0	<0.13	<1.3	19	18
SB2-5	5.0	1.2	4.3	57	0.32	0.16	18	6.4	12	6.8	<0.016	2.1	17	<2.0	<0.13	<1.3	25	34
SB2-8	8.0	<0.66	3.5	62	0.25	0.16	15	4	7	4.4	0.035	1.8	12	<2.0	<0.13	<1.3	19	25
SB3-3	3.0	<0.66	5.3	58	0.36	0.25	13	3.4	11	15	0.023	3.7	11	<2.0	<0.13	<1.3	21	52
SB3-5	5.0	<0.66	3.8	58	0.30	0.25	19	6.2	12	6.0	0.030	2.0	17	<2.0	<0.13	<1.3	25	35
SB3-8	8.0	0.70	4.5	55	0.21	0.28	11	3.4	5.6	4.3	<0.016	1.8	9.2	<2.0	<0.13	<1.3	16	22
SB4-3	3.0	<0.66	3.7	82	0.30	0.28	21	6.2	12	19	0.047	2.0	22	<2.0	<0.13	<1.3	25	48
SB4-5	5.0	<0.66	4.6	62	0.34	0.26	20	6.4	12	6.6	0.025	1.9	20	<2.0	<0.13	<1.3	27	38
SB4-8	8.0	<0.66	4.9	61	0.29	0.20	19	5.8	11	5.6	0.024	2.2	17	<2.0	<0.13	<1.3	24	33
SB5-3	3.0	<0.66	2.3	18	0.21	<0.10	7	1.3	2.7	4.5	0.016	1.1	4	<2.0	<0.13	<1.3	13	9.4
SB5-5	5.0	1.1	3.9	68	0.26	0.19	18	6.3	11	5.1	<0.016	1.9	17	<2.0	<0.13	<1.3	24	32
SB5-8	8.0	1.6	4.8	53	0.22	0.16	15	4.1	8.2	4.8	0.019	1.8	14	<2.0	<0.13	<1.3	20	28
SB6-3	3.0	1.2	5.1	110	0.43	0.37	33	4.1	11	6.8	0.029	3.0	23	<2.0	<0.13	<1.3	84	27
SB6-5	5.0	0.85	17.0	220	0.26	4.00	28	7.1	92	220	0.210	7.6	24	<2.0	0.36	<1.3	25	430
SB6-8	8.0	<0.66	3.8	28	0.24	0.10	14	4.0	6.2	4.4	0.037	2.2	12	<2.0	0.36	<1.3	19	24
SB7-3	3.0	1.1	3.5	68	0.26	0.34	16	4.8	13	20	0.037	2.4	13	<2.0	<0.13	<1.3	21	61
SB7-5	5.0	1.0	9.9	59	0.27	0.27	18	7.4	11	5.7	<0.016	5.5	18	<2.0	<0.13	<1.3	23	32
SB7-8	8.0	<0.60	3.9	36	0.28	0.23	17	5.0	9.0	5.2	0.016	2.0	15	<1.8	<0.12	<1.2	23	29
SB8-3	3.0	<0.66	3.1	65	0.25	0.31	16	4.6	11	11	0.059	2.3	13	<2.0	<0.13	<1.3	22	39
SB8-5	5.0	<0.66	4.6	64	0.32	0.28	21	6.4	12	5.9	0.036	2.0	19	<2.0	<0.13	<1.3	26	35
SB8-8	8.0	1.6	6.3	44	0.28	0.35	20	5.7	12	6.6	0.036	3.3	19	<2.0	0.17	<1.3	27	41

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS FOR CCR TITLE 22 METALS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**  
**NOVEMBER 2016**

Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB9-3	3.0	<0.66	5.0	75	0.24	0.58	15	3.9	10	34	0.15	2.6	15	<2.0	0.17	<1.3	23	45
SB9-5	5.0	<0.66	3.7	72	0.17	1.00	13	8.3	59	56	0.59	3.5	12	2.6	<0.13	<1.3	59	48
SB9-8	8.0	1.3	4.2	67	0.31	0.26	20	6.9	11	5.9	0.093	2.4	19	<2.0	<0.13	<1.3	27	34
SB10-3	3.0	0.42	4.0	57	0.32	0.27	18	5.9	11	6.6	0.030	2.7	18	<0.98	<0.067	<0.64	26	35
SB10-5	5.0	<0.33	2.5	50	0.29	0.26	17	5.3	13	8.1	0.038	1.8	15	<0.98	<0.067	<0.64	22	37
SB10-8	8.0	<0.33	3.9	49	0.26	0.20	14	4.7	8.8	5.1	0.020	2.4	14	<0.98	0.10	<0.64	20	24
SB11-3	3.0	<0.60	3.0	62	0.28	0.18	14	3.5	6.0	6.3	0.037	1.6	10	<1.8	<0.12	<1.2	22	22
SB11-5	5.0	0.74	3.6	65	0.33	0.22	20	6.1	12	6.3	0.018	2.1	18	<2.0	<0.13	<1.3	27	36
SB11-8	8.0	<0.66	4.5	77	0.31	0.33	18	3.6	9.5	5.4	<0.016	2.3	15	2.6	<0.13	<1.3	24	26
SB12-3	3.0	<0.66	2.4	64	0.11	0.51	15	3.5	11	16	0.055	2.9	21	<2.0	<0.13	<1.3	29	76
SB12-5	5.0	0.88	3.6	60	0.21	0.22	15	5.0	9.3	7.4	0.098	1.6	13	<2.0	<0.13	<1.3	20	30
SB12-8	8.0	0.81	4.2	58	0.27	0.30	23	5.4	13	5.8	0.053	2.9	21	<2.0	<0.13	<1.3	28	41
SB13-3	3.0	<0.66	3.9	81	0.28	1.0	13	5.3	13	39	0.22	3.4	14	<2.0	<0.13	<1.3	26	57
SB13-5	5.0	<0.60	6.8	170	0.21	11	41	7.4	24	12	0.070	14	55	3.1	0.30	<1.2	160	96
SB13-8	8.0	<0.66	4.6	51	0.31	0.24	15	6.1	9	5.5	<0.016	2.9	16	<2.0	<0.13	<1.3	22	29
SB14-3	3.0	<0.33	9.6	77	0.20	0.51	20	3.5	8.1	12	0.064	1.4	12	<0.98	<0.067	<0.64	21	31
SB14-5	5.0	<0.33	3.7	48	0.32	0.25	17	5.8	11	5	0.017	1.8	16	<0.98	<0.067	<0.64	23	30
SB14-8	8.0	<0.33	5.8	52	0.32	0.25	16	4.6	9.7	5.6	0.028	1.8	12	<0.98	<0.067	<0.64	22	26
SB15-3	3.0	<1.6	2.3	380	0.58	2.5	18	3.7	17	56	2.3	4.9	22	<4.9	<0.34	4.1	27	550
SB15-5	5.0	<0.33	4.3	58	0.30	0.23	17	5.5	11	5.3	0.050	1.9	16	<0.98	<0.067	<0.64	23	31
SB15-8	8.0	<0.33	3.5	40	0.28	0.25	16	4.5	10	5	0.024	1.9	15	1.0	<0.067	<0.64	22	27
SB16-3	3.0	<0.66	4.2	110	0.14	5.3	18	2.2	7.4	2.5	0.079	7.2	24	<2.0	<0.13	<1.3	48	43
SB16-5	5.0	0.76	3.9	73	0.29	0.29	20	6.6	13	6.8	0.079	3.7	17	<2.0	<0.13	<1.3	26	40
SB16-8	8.0	<0.66	5.1	150	0.25	0.30	15	4.5	9.3	5.2	0.037	1.8	12	<2.0	<0.13	<1.3	20	24
SB17-3	3.0	<0.66	8.5	230	0.27	17	50	4.0	24	3.2	0.14	17	55	<2.0	0.30	<1.3	210	120
SB17-5	5.0	0.87	10	330	0.32	29	70	3.5	34	3.7	0.12	31	86	<2.0	0.30	1.7	330	180
SB17-8	8.0	<0.66	4.2	74	0.33	0.25	17	7.7	11	5.8	0.068	2.7	18	<2.0	0.16	<1.3	24	30
SB18-3	3.0	<0.66	7.4	170	0.17	18	48	3.3	24	2.9	0.12	28	66	4.6	0.24	<1.3	240	110
SB18-5	5.0	<0.66	5.4	70	0.20	11	27	1.5	16	1.7	0.071	21	68	10	0.22	<1.3	150	68
SB18-8	8.0	<0.66	4.4	41	0.33	0.44	21	6.1	11	6.5	0.12	4.4	19	<2.0	<0.13	<1.3	27	35
SB19-3	3.0	<0.66	7.7	190	0.30	23	32	3.6	24	3.3	0.085	20	58	<2.0	0.5	<1.3	190	120
SB19-5	5.0	0.83	4.4	65	0.29	0.86	18	6.1	12	6.6	0.055	4.9	18	<2.0	<0.13	<1.3	25	39
SB19-8	8.0	<0.66	4.7	37	0.34	0.31	16	4.4	8.8	5.7	0.038	2.5	14	<2.0	<0.13	<1.3	22	28



**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS FOR CCR TITLE 22 METALS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**  
**NOVEMBER 2016**

Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB20-3	3.0	<0.66	8.3	140	<0.094	26	35	4.3	29	2.8	0.14	38	75	8.7	0.36	<1.3	230	140
SB20-5	5.0	0.83	7.8	420	0.17	11	47	4.5	24	17	0.32	12	45	<2.0	0.86	<1.3	140	110
SB20-8	8.0	<0.66	5.0	30	0.28	0.22	16	4.7	7.5	4.9	0.036	2.5	13	<2.0	<0.13	<1.3	20	25
Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
<b>Tier 1 ESL</b>		<b>11</b>	<b>0.067</b>	<b>390</b>	<b>5.0</b>	<b>1.9</b>	<b>160</b>	<b>23</b>	<b>180</b>	<b>32</b>	<b>13</b>	<b>6.9</b>	<b>86</b>	<b>2.4</b>	<b>25</b>	<b>0.78</b>	<b>18</b>	<b>340</b>
<b>Construction Worker ESL</b>		<b>50</b>	<b>0.98</b>	<b>3000</b>	<b>27</b>	<b>110</b>		<b>280</b>	<b>14000</b>	<b>160</b>	<b>44</b>	<b>1800</b>	<b>86</b>	<b>1700</b>	<b>1800</b>	<b>3.5</b>	<b>470</b>	<b>110000</b>
<b>Comm Shallow Soil ESL</b>		<b>160</b>	<b>0.31</b>	<b>220000</b>	<b>230.0</b>	<b>1100</b>		<b>350</b>	<b>47000</b>	<b>320</b>	<b>190</b>	<b>5800</b>	<b>11000</b>	<b>5800</b>	<b>5800</b>	<b>12</b>	<b>5800</b>	<b>350000</b>
CCR Title 22 TTLC		500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5000
CCR Title 22 STLC		15	5	100.00	0.75	1	5 or 560	80	25	5	0.2	350	20	1	5	7	24	250

Notes

mg/kg milligrams per kilogram

mg/L milligrams per liter

CCR Title 22 TTLC - CA Code of Regulations Title 22 Total Threshold Limit Concentration in mg/kg

CCR Title 22 STLC - CA Code of Regulations Title 22 Soluble Threshold Limit Concentration in mg/L

TCLP US EPA Toxicity characteristic leaching procedure

(--\*) STLC concentration in mg/L

(\*\*\*) TCLP concentration in mg/L

(\*\*\*\*) Chromium VI concentration in mg/kg

Detected concentration above RWQCB-SFR Tier 1 ESL

Detected concentration above RWQCB-SFR Construction Worker ESL

**Detected total metal concentration in excess of 10 times CCR Title 22 STLC**

**TABLE 3**  
**SOIL VAPOR SAMPLE ANALYTICAL RESULTS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Date Sampled	Sample Depth (fbg)	PCE (ug/L)	TCE (ug/L)	Acetone (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	2-Butanone (ug/L)	cis-DCE (ug/L)	trans-DCE (ug/L)	Vinyl Chloride (ug/L)	18 Other VOC's
SV-1	4/5/2022	5	No Flow in test area - 3 attempted locations separated by 50 ft. - clay materials with low permeability encountered											
SV-2	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-3	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-4	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-5	4/5/2022	5	<b>0.066</b>	<0.01	<1.00	<b>0.054</b>	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-6	4/5/2022	5	<0.01	<0.01	<1.00	<b>0.013</b>	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-7	4/5/2022	5	<0.01	<0.01	<1.00	<b>0.045</b>	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-8	4/5/2022		<b>0.013</b>	<0.01	<1.00	<b>0.474</b>	<1.00	<b>1.604</b>	<1.00	<1.00	<0.2	<1.00	<0.001	sec-Butylbenzene 2.92; n-Propylbenzene 9.92; 1,3,5-Trimethylbenzene 6.40; TPH-g 2,684.4
SV-8 Dup	4/5/2022	5	<b>0.012</b>	<0.01	<1.00	<b>0.460</b>	<1.00	<b>1.611</b>	<1.00	<1.00	<0.2	<1.00	<0.001	sec-Butylbenzene 2.82; n-Propylbenzene 9.81; 1,3,5-Trimethylbenzene 6.39; TPH-g 2,669.3
SV-9	4/5/2022	5	<b>0.017</b>	<0.01	<1.00	<b>0.019</b>	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-10	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-11	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-12	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-13	4/5/2022	5	<0.01	<0.01	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	ND
SV-14	4/5/2022	5	<b>0.010</b>	<b>0.013</b>	<1.00	<0.003	<1.00	<0.03	<1.00	<1.00	<0.2	<1.00	<0.001	chloroform 0.041
<b>Tier 1 ESL (2019 Rev. 1)</b>			<b>0.015</b>	<b>0.016</b>	<b>100</b>	<b>0.0032</b>	<b>10</b>	<b>0.037</b>	<b>3.5</b>	--	<b>0.28</b>	<b>2.8</b>	<b>0.00032</b>	
<b>Commercial ESL (2019 Rev. 1)</b>			<b>0.067</b>	<b>0.10</b>	<b>4,500</b>	<b>0.014</b>	<b>44</b>	<b>0.160</b>	<b>15</b>	--	<b>1.2</b>	<b>12</b>	<b>0.0052</b>	

**Notes:**

- fbg = feet below grade
- PCE = Tetrachloroethylene, tetrachloroethene, Perc -- = not analyzed, measured, or collected
- TCE = Trichloroethylene, trichloroethene ND = not detected above the minimum laboratory detection limit
- cis-DCE = cis 1,2 dichloroethene ug/L = micrograms per liter (1 ug/L = 1,000 ug/m<sup>3</sup>)
- trans-DCE = trans 1,2 dichloroethene **BOLD** = Concentrations detected above minimum laboratory detection limit
- VOCs = Volatile Organic Compounds by US EPA Method 8260B - for full list, refer to lab reports included in Appendix E
- Tier 1 ESL (2019 rev.) = RWQCB San Francisco Region Tier 1 Environmental Screening Levels, Revised 2019. (Converted from ug/m<sup>3</sup> to ug/L)
- = Concentration exceeds RWQCB-SFR Tier 1 ESL.
- = Concentration exceeds RWQCB-SFR Commercial ESL.

**TABLE 4**  
**SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR TPH-G,**  
**VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Date Sampled	TPH-G (ug/L)	VOCs (ug/L)	SVOCs-BNAs (ug/L)
<b>MARCH 2022</b>				
SB2-W	3/31/2022	<7.2	cis-1,2-Dichloroethene 0.21 MTBE 3.0 Diisopropyl ether 0.70	ND
SB3-W	3/31/2022	<7.2	MTBE 0.52	ND
SB4-W	3/30/2022	<7.2	ND	ND
SB6-W	3/31/2022	<7.2	MTBE 12	ND
SB7-W	3/31/2022	<7.2	cis-1,2-Dichloroethene 0.91 MTBE 2.1 Vinyl Chloride 0.12	ND
SB8-W	3/31/2022	<7.2	MTBE 1.3 Diisopropyl ether 0.72	ND
SB9-W	3/30/2022	20	1,1-Dichloroethane 0.28 cis-1,2-Dichloroethene 8.2 trans-1,2-Dichloroethene 0.47 MTBE 0.52 Trichloroethene 9.5	ND
SB10-W	3/31/2022	<7.2	MTBE 8.0 Diisopropyl ether 0.97	ND
SB13-W	3/30/2022	7.4	cis-1,2-Dichloroethene 1.7 Trichloroethene 4.8	ND
SB15-W	3/31/2022	33	1,1-Dichloroethane 0.19 cis-1,2-Dichloroethene 2.9 Tetrachloroethene 1.4 Trichloroethene 14	ND
SB16-W	3/30/2022	18	cis-1,2-Dichloroethene 13 trans 1,2-Dichloroethene 0.88 Trichloroethene 6.2	ND
SB17-W	3/30/2022	<7.2	cis-1,2-Dichloroethene 0.83 Tetrachloroethene 0.77 Trichloroethene 2.8	ND
SB18-W	3/30/2022	<7.2	Trichloroethene 0.51	ND
SB19-W	3/30/2022	<7.2	cis-1,2-Dichloroethene 0.52 Trichloroethene 0.46	ND
SB20-W	3/30/2022	8.1	cis-1,2-Dichloroethene 0.90 Tetrachloroethene 3.7 Trichloroethene 2.8	ND
<b>Tier 1 ESL - RWQCB Reg 9</b>		<b>100</b>	1,1-Dichloroethane 5.0 cis-1,2-Dichloroethene 6.0 trans-1,2-Dichloroethene 1.0 MTBE 5.0 Tetrachloroethene 5.0 Trichloroethene 5.0	

**TABLE 4**  
**SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR TPH-G,**  
**VOCs, AND SVOCs**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**

Sample ID	Date Sampled	TPH-G (ug/L)	VOCs (ug/L)	SVOCs-BNAs (ug/L)
-----------	--------------	--------------	-------------	-------------------

**Notes**

TPH-G	Total Petroleum Hydrocarbons - Gasoline Range Hydrocarbons C6-C10 by US EPA Method 8260B
VOCs	Volatile Organic Compounds by US EPA Method 8260B - for full list, refer to lab reports included in Appendix D
SVOCs	Semi-Volatile Organic Compounds by US EPA Method 8270C - for full list, refer to lab reports included in Appendix D
ug/L	micrograms per liter
ND	None of the compounds were detected present above the laboratory detection limit.
Tier 1 ESL	Environmental Screening Level - CA Regional Water Quality Control Board, San Francisco Region (Reg 9), January 2019

**TABLE 5**  
**GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR DISSOLVED CCR TITLE 22 METALS**  
**101 GARDEN STREET, SANTA BARBARA, CA**  
**SOUTH OF INTERSECTION OF GARDEN AND YANONALI STREETS**  
**NOVEMBER 2016**

Sample ID	Antimony ug/L	Arsenic ug/L	Barium ug/L	Beryllium ug/L	Cadmium ug/L	Chromium ug/L	Cobalt ug/L	Copper ug/L	Lead ug/L	Mercury ug/L	Molybdenum ug/L	Nickel ug/L	Selenium ug/L	Silver ug/L	Thallium ug/L	Vanadium ug/L	Zinc ug/L
<b>MARCH 2022</b>																	
SB2-W	<9.8	40	340	2.3	2.5	<2.0	<2.2	2.5	21	<0.022	43	<4.8	<30	<2.4	<20	<4.4	<10
SB3-W	<9.8	47	220	1.8	<2.2	<2.0	<2.2	3.5	23	<0.022	54	11	<30	<2.4	<20	<4.4	<10
SB4-W	<9.8	20	160	2.5	<2.2	<2.0	<2.2	3.7	34	<0.022	39	<4.8	<30	<2.4	<20	<4.4	<10
SB6-W	<9.8	51	420	2.1	<2.2	<2.0	<2.2	4.0	20	0.038	25	<4.8	<30	<2.4	<20	<4.4	<10
SB7-W	<9.8	42	260	2.1	<2.2	2.6	<2.2	3.6	22	<0.022	22	15	<30	<2.4	<20	<4.4	13
SB8-W	<9.8	52	250	2.3	2.4	<2.0	<2.2	5.0	15	<0.022	33	<4.8	<30	<2.4	<20	<4.4	<10
SB9-W	<9.8	46	170	2.3	<2.2	<2.0	<2.2	5.1	24	<0.022	33	<4.8	38	<2.4	<20	<4.4	<10
SB10-W	<9.8	70	340	2.0	<2.2	<2.0	<2.2	3.1	20	<0.022	16	<4.8	<30	<2.4	<20	<4.4	<10
SB13-W	<24	85	110	5.0	<5.5	<5.0	<5.5	7.7	48	<0.022	54	<12	<75	<6.0	<50	<11	<25
SB15-W	<9.8	39	90	1.9	<2.2	<2.0	<2.2	2.9	21	<0.022	41	7.1	<30	<2.4	<20	<4.4	<10
SB16-W	<9.8	37	72	1.9	<2.2	<2.0	<2.2	4.0	25	<0.022	90	8.4	68	<2.4	<20	<4.4	<10
SB17-W	<24	75	110	5.3	<5.5	<5.0	<5.5	8.7	59	<0.022	43	<12	<75	<6.0	<50	<11	<25
SB18-W	<24	86	76	6.0	<5.5	<5.0	<5.5	8.8	76	<0.022	73	<12	<75	<6.0	<50	<11	<25
SB19-W	<9.8	36	75	1.8	<2.2	<2.0	<2.2	3.6	21	<0.022	69	<4.8	<30	<2.4	<20	<4.4	<10
SB20-W	<9.8	54	88	3.0	2.9	<2.0	<2.2	4.3	27	<0.022	23	5	<30	<2.4	<20	<4.4	15
Sample ID	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
Tier 1 ESL	6	10	100	4.0	5	50	6	1000	15	2	100	100	50	100	2	19	5000

**Notes**

ug/L

micrograms per liter

Tier 1 ESL

Environmental Screening Level - CA Regional Water Quality Control Board, San Francisco Region (Reg 9), January 2019