

## Nowell, Keith, Env. Health

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**From:** John Lucio <John.Lucio@erm.com>  
**Sent:** Tuesday, September 18, 2018 9:35 AM  
**To:** Nowell, Keith, Env. Health; Roe, Dilan, Env. Health  
**Cc:** Conner, Anne P; Xiaodong Huang; Gina Sperinde; Arun Chemburkar  
**Subject:** RE: DRAFT RE: S-081 Brush street Backfill - Cemex Clayton Quarry Sampling Summary  
**Attachments:** Quarry Map.JPG; 9-12-18 Final Summary Report of Backfill Import Soil Sampling - Cemex Quarry for PGE 205 Brush Street, Oakland (2).pdf

Due to the lack of additional backfill from the conditionally approved Hansen Quarry in Clayton, PG&E collected samples from two potential backfill materials at the adjacent Cemex Clayton Quarry on 12 September 2018. The attached photo shows the location of the Hansen and Cemex quarries. As seen in this photo, the two quarries are mining essentially the same material from different sides of a ridge. Four point composite samples were collected from a 0.75-inch Class II AB pile and a 0.5-inch dust tailings. The sampling activities and results are provided in the attached report.

The preferred material for the remaining backfill is the 0.5-inch dust tailings as the material is looser and will allow for easier re-excavation while installing the pipes for the pressure regulation station. As seen in this report, the only issue with this material was it had slightly elevated cobalt (between 24 and 33 mg/kg) that are above the proposed cobalt import level of 23 mg/kg, which was similar to the conditionally approved material from the adjacent Hansen Quarry. As previously discussed, we believe that the cobalt levels are naturally occurring since these materials are coming directly from a quarry. Similar to the condition for the Hansen quarry material, we believe that the preferred material could be used as backfill since the cobalt levels would be identified in the subsequent soil management plan.

Due to the impending construction schedule, we would like to get your concurrence with PG&E's proposed plan to use the 0.5-inch dust tailings for import to the 205 Brush Street site today. Please let us know if that is possible.

Thank you for your consideration.

Thanks,

John Lucio  
Program Director

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Hanson Aggregates

Quarry Rd

Wichita Pl

Mitchell Canyon Rd

Mitchell Canyon Rd

Mitchell Canyon Rd

Mitchell Canyon

Mitchell Canyon  
Visitor Center







September 17, 2018

Hydrochem PSC  
1802 Shelton Drive  
Hollister, California 95023

Attn: Mr. Edwin Sargenti, Project Manager  
[edwin.sargenti@hydrochempsc.com](mailto:edwin.sargenti@hydrochempsc.com)

RE: Project # PSC-1816 B: 9/12/2018 Report of Sampling of Import Soil at Cemex Quarry in Clayton, California, for Backfilling the Excavation located at the PG&E Facility at 205 Brush Street, Oakland, California.

Dear Mr. Sargenti,

This Report is prepared to address a request from HydrochemPSC (PSC) to collect samples of the import fill to be used as backfill for the soil remediation work performed at the PG&E facility (formerly owned by the Port of Oakland) located at 205 Brush Street, Oakland, California. The purpose of collecting samples was to have the fill analyzed for chemicals of concern (COCs) to ensure that concentrations of the COCs are below site-specific import screening values listed in ERM's "Soil Import Management Plan (SIMP)" dated May 2018. The plan covers the type of sampling, frequency, number of samples to be collected, analytical methods, and site-specific environmental screening levels with which to compare the sample results. The screening levels are listed in Table 2 of the SIMP. Import of fill to the site will not begin until the analytical data is reported and confirmed to meet the screening levels within the SIMP.

On September 12, 2018, Environmental Technical Services (ETS) collected representative soil samples from two (2) separate stockpiles of proposed backfill material, located at the Cemex Quarry located at 515 Mitchell Canyon Road, in Clayton, California. PSC requested sampling for a proposed use of approximately 2,000 cubic yards of  $\frac{3}{4}$  inch Class 2 Base Rock, and 2,000 cubic yards of  $\frac{1}{2}$  inch dust tailings. With the assistance of Cemex Quarry, ETS collected six (6) representative 4-point composite samples from the approximate 13,000 cubic yard stockpile of  $\frac{3}{4}$ -inch Class 2 Aggregate Base (AB) (Pile "AB"), and six (6) representative 4-point composite samples from the approximate the large stockpile of  $\frac{1}{2}$  inch dust Tailings Stockpile (Pile "DT") whose volume could not be estimated due to the large size of the stockpile. Mr. Xiaodong Huang, P.E. and Project Manager for ERM, was on-site during the soil sampling to ensure the sampling was conducted in accordance with the SIMP.

The analytical methods and number of samples to be collected are given in Table 1 of the SIMP. Initial sampling depicts the total number of samples required and the sample analyses: 1 sample from each type of material must be analyzed for CA Title 22 metals; polycyclic aromatic hydrocarbons (PAHs); total volatile petroleum hydrocarbons (TVPH); total extractable petroleum hydrocarbons; volatile organic compounds (VOCs); pesticides and herbicides; polychlorinated biphenyls (PCBs), asbestos and pH. Samples AB1 and DT1 were analyzed as initial samples. Production sampling depicts the number of samples; 1). for the first 1,000 cubic yards (CY) where samples are collected every 250 CY and 2). for

the remaining backfill where a sample is collected every 500 CY. The remaining samples AB2-6 and DT2-6 were analyzed for CA Title 22 metals; PAHs; TVPH; and TEPH, asbestos and pH.

Samples were placed in 9-ounce glass jars, labeled, photographed, and placed on ice in a cooler for transport directly to McCampbell Analytical, Inc., located in Pittsburg, California for all samples except asbestos. Asbestos samples were transported directly to EMSL Analytical Inc., located in San Leandro, California. McCampbell Analytical, Inc. holds a certification with the California State Environmental Laboratory Accreditation Program, (ELAP) Certificate No. 1644, with an expiration date of 10/31/2018. EMSL holds a certification with the American Industrial Hygiene Association Laboratory Accreditation Program (IHLAP) Certificate No. 101748, with an expiration date of 05/01/2020.

The report continues on the next page.

## CAM 17 Metals

The all concentrations of metals in the ¾ inch Class 2 Aggregate Base were below the Clean Import Fill Screening Levels.

Table 1. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 CAM-17 Analytical Test Results Summary for Import Fill (mg/kg)							
Sample ID	205BS-091218-AB1	205BS-091218-AB2	205BS-091218-AB3	205BS-091218-AB4	205BS-091218-AB5	205BS-091218-AB6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	
Sampling Date: 09/12/2018							
Sampling Time	10:35	10:40	10:44	10:48	10:57	10:59	
Antimony	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>31</b>
Arsenic	<b>2.5</b>	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>14</b>
Barium	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	<b>3,000</b>
Beryllium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>42</b>
Cadmium	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	<b>39</b>
Chromium III	<b>20</b>	<b>21</b>	<b>20</b>	<b>23</b>	<b>11</b>	<b>8.9</b>	<b>120,000</b>
Chromium VI	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	<b>0.30</b>
Cobalt	<b>16</b>	<b>20</b>	<b>11</b>	<b>12</b>	<b>10</b>	<b>8.3</b>	<b>23</b>
Copper	<b>72</b>	<b>34</b>	<b>23</b>	<b>19</b>	<b>23</b>	<b>42</b>	<b>3,100</b>
Lead	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>80</b>
Mercury	<b>1.1</b>	<b>0.38</b>	<b>0.22</b>	<b>0.47</b>	<b>0.72</b>	<b>0.20</b>	<b>13</b>
Molybdenum	ND (<0.50)	<b>0.65</b>	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Nickel	<b>17</b>	<b>17</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>6.6</b>	<b>86</b>
Selenium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Silver	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Thallium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>0.78</b>
Vanadium	<b>130</b>	<b>150</b>	<b>75</b>	<b>70</b>	<b>65</b>	<b>53</b>	<b>390</b>
Zinc	<b>10</b>	<b>12</b>	<b>6.1</b>	ND (<5.0)	ND (<5.0)	<b>5.0</b>	<b>23,000</b>

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level

The cobalt concentrations in the 1/2 inch Dust Tailings ranged from 24 mg/kg to 33 mg/kg and were above the Clean Import Fill Screening Level of 23 mg/kg.

Table 1. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 CAM-17 Analytical Test Results Summary for Import Fill (mg/kg)							
Sample ID	205BS-091218-DT1	205BS-091218-DT2	205BS-091218-DT3	205BS-091218-DT4	205BS-091218-DT5	205BS-091218-DT6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018							
Sampling Time	11:32	11:34	11:35	11:36	11:38	11:39	
Antimony	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>31</b>
Arsenic	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>2.7</b>	ND (<0.50)	ND (<0.50)	<b>14</b>
Barium	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	<b>3,000</b>
Beryllium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>42</b>
Cadmium	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	<b>39</b>
Chromium III	<b>50</b>	<b>27</b>	<b>38</b>	<b>36</b>	<b>37</b>	<b>48</b>	<b>120,000</b>
Chromium VI	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	<b>0.30</b>
Cobalt	<b>33</b>	<b>24</b>	<b>27</b>	<b>29</b>	<b>28</b>	<b>25</b>	<b>23</b>
Copper	<b>29</b>	<b>19</b>	<b>27</b>	<b>36</b>	<b>12</b>	<b>32</b>	<b>3,100</b>
Lead	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>80</b>
Mercury	<b>0.39</b>	<b>0.20</b>	<b>0.41</b>	<b>0.21</b>	<b>0.41</b>	<b>0.25</b>	<b>13</b>
Molybdenum	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Nickel	<b>36</b>	<b>23</b>	<b>30</b>	<b>29</b>	<b>34</b>	<b>30</b>	<b>86</b>
Selenium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Silver	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>390</b>
Thallium	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	<b>0.78</b>
Vanadium	<b>140</b>	<b>120</b>	<b>150</b>	<b>140</b>	<b>140</b>	<b>130</b>	<b>390</b>
Zinc	<b>14</b>	<b>9.9</b>	<b>25</b>	<b>71</b>	<b>12</b>	<b>13</b>	<b>23,000</b>

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level

## Total Petroleum Hydrocarbons (TPH) as Gasoline, Diesel and Motor Oil

Motor oil was detected in two samples: AB1 and DT 1, at concentrations of 6.3 mg/kg and 6.6 mg/kg respectively. Those concentrations were below the Clean Import Screening Level of 5,100mg/kg. TPH as gasoline and diesel were not detected in any of the samples.

Table 2. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Total Petroleum Hydrocarbons (TPH) as Gasoline, Diesel and Motor Oil Analytical Test Results Summary for Import Fill (mg/kg)								
Sample ID	205BS-091218-AB1	205BS-091218-AB2	205BS-091218-AB3	205BS-091218-AB4	205BS-091218-AB5	205BS-091218-AB6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted	
Sample Description	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base		
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W		
Sampling Date: 09/12/2018								
Sampling Time	10:35	10:40	10:44	10:48	10:57	10:59		
TPH as Gasoline	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	100	
TPH as Diesel	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	230	
TPH as Motor Oil	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	5,100	

ND = Not Detected

Value in parenthesis is the Reporting Limit

Table 2. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Total Petroleum Hydrocarbons (TPH) as Gasoline, Diesel and Motor Oil Analytical Test Results Summary for Import Fill (mg/kg)								
Sample ID	205BS-091218-DT1	205BS-091218-DT2	205BS-091218-DT3	205BS-091218-DT4	205BS-091218-DT5	205BS-091218-DT6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted	
Sample Description	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings		
Sample Location	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W		
Sampling Date: 09/12/2018								
Sampling Time	11:32	11:34	11:35	11:36	11:38	11:39		
TPH as Gasoline	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	100	
TPH as Diesel	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	230	
TPH as Motor Oil	6.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	5,100	

ND = Not Detected

Value in parenthesis is the Reporting Limit



## Volatile Organic Compounds (VOCs)

No VOCs were detected in either sample of the aggregate bas or the dust tailings.

Table 3. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Volatile Organic Compounds (VOCs) Analytical Test Results Summary for Import Fill (mg/kg)			
Sample ID	205BS-091218-AB1	205BS-091218-DT1	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018			
Sampling Time	10:35	11:32	
Acetone	ND (<0.10)	ND (<0.10)	0.50
Benzene	ND (<0.0050)	ND (<0.0050)	0.04
Bromodichloromethane	ND (<0.0050)	ND (<0.0050)	0.52
Bromoform	ND (<0.0050)	ND (<0.0050)	1.7
Bromomethane	ND (<0.0050)	ND (<0.0050)	0.30
2-Butanone (MEK)	ND (<0.020)	ND (<0.020)	5.1
tert-Butyl alcohol	ND (<0.050)	ND (<0.050)	0.075
Carbon tetrachloride	ND (<0.0050)	ND (<0.0050)	0.048
Chlorobenzene	ND (<0.0050)	ND (<0.0050)	1.5
Chloroethane	ND (<0.0050)	ND (<0.0050)	1.1
Chloroform	ND (<0.0050)	ND (<0.0050)	0.068
Chloromethane	ND (<0.0050)	ND (<0.0050)	29
Dibromochloromethane	ND (<0.0050)	ND (<0.0050)	3.8
1,2-dibromo-3-chloropropane	ND (<0.00025)	ND (<0.00025)	0.0045
1,2-Dibromoethane (EDB)	ND (<0.00010)	ND (<0.00010)	0.00033
1,2-Dichlorobenzene	ND (<0.0050)	ND (<0.0050)	1.6
1,3-Dichlorobenzene	ND (<0.0050)	ND (<0.0050)	7.4
1,4-Dichlorobenzene	ND (<0.0050)	ND (<0.0050)	0.59
1,1-Dichloroethane	ND (<0.0050)	ND (<0.0050)	0.20
1,2-Dichloroethane	ND (<0.00025)	ND (<0.00025)	0.0045
1,1 Dichloroethene	ND (<0.00025)	ND (<0.00025)	0.55
cis-1,2-Dichloroethene	ND (<0.0050)	ND (<0.0050)	0.19
1,2-Dichloropropane	ND (<0.0050)	ND (<0.0050)	0.12
1,3-Dichloropropane	ND (<0.0050)	ND (<0.0050)	0.059
Ethylbenzene	ND (<0.0050)	ND (<0.0050)	1.4
Hexachlorobutadiene	ND (<0.0050)	ND (<0.0050)	0.68

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level, green denotes the reporting limit is greater than the screening level.

Table 3. (cont.)			
Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607			
Volatile Organic Compounds (VOCs) Analytical Test Results Summary for Import Fill (mg/kg)			
Sample ID	205BS-091218-AB1	205BS-091218-DT1	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018			
Sampling Time	10:35	11:32	
Methyl -t-butyl ether (MTBE)	ND (<0.0050)	ND (<0.0050)	0.023
Methylene Chloride	ND (<0.010)	ND (<0.010)	0.077
Methyl isobutyl ketone	ND (<0.0050)	ND (<0.0050)	2.8
Naphthalene	ND (<0.0050)	ND (<0.0050)	0.033
Styrene	ND (<0.0050)	ND (<0.0050)	1.5
1,1,1,2 Tetrachloroethane	ND (<0.0050)	ND (<0.0050)	0.010
1,1,2,2 Tetrachloroethane	ND (<0.00025)	ND (<0.00025)	0.018
Tetrachloroethene	ND (<0.00025)	ND (<0.00025)	0.420
Toluene	ND (<0.0050)	ND (<0.0050)	2.900
1,2,4-Trichlorobenzene	ND (<0.0050)	ND (<0.0050)	1.500
1,1,1-Trichloroethane	ND (<0.0050)	ND (<0.0050)	7.800
1,1,2-Trichloroethane	ND (<0.0050)	ND (<0.0050)	0.070
Trichloroethene	ND (<0.0050)	ND (<0.0050)	0.460
Vinyl chloride	ND (<0.00025)	ND (<0.00025)	0.0082
Xylenes	ND (<0.0050)	ND (<0.0050)	2.300

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level, green denotes the reporting limit is greater than the screening level.

## Semi-Volatile Organic Compounds

No aggregate base sample result for SVOCs was above the Clean Import Screening Level.

Table 4. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Semi-Volatile Organic Compounds (SVOCs) Analytical Test Results Summary for Import Fill (mg/kg)							
Sample ID	205BS-091218-AB1	205BS-091218-AB2	205BS-091218-AB3	205BS-091218-AB4	205BS-091218-AB5	205BS-091218-AB6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	
Sampling Date: 09/12/2018							
Sampling Time	10:35	10:40	10:44	10:48	10:57	10:59	
Acenaphthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	16
Acenaphthylene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	13
Anthracene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	2.8
Benzo (a) anthracene	ND (<0.0050)	0.0043	ND (<0.0050)	0.0044	ND (<0.0050)	ND (<0.0050)	*
Benzo (b) fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	*
Benzo (k) fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	*
Benzo (g,h,i) perylene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	2.5
Benzo (a) pyrene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
Benzo (a) pyrene equivalents	ND	0.0043	ND	0.0044	ND	ND	0.90
1,1-Biphenyl	ND (<0.013)	0.0024	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.65
Bis (2-chloroethyl) ether	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0015
Bis (2-chloroisopropyl) ether	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0039
Bis (2-ethylhexyl) phthalate	0.0038	0.0043	ND (<0.0050)	0.0035	0.0077	ND (<0.0050)	39
p-Chloroaniline	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0039
2-Chlorophenol	ND (<0.0050)	0.0021	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.012
Chrysene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
Dibenzo (a,h) anthracene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
3,3 Dichlorobenzidine	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.012
2,4-Dichlorophenol	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.3
Diethyl phthalate	0.0042	0.0040	0.0040	0.0042	0.0040	0.0044	0.035
Dimethyl phthalate	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.035
2,4-Dimethylphenol	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	0.67
2,4-Dinitrophenol	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	0.11
2,4-Dinitrotoluene	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	0.0018
Fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	60
Fluorene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	8.9
Ideno (1,2,3-cd) pyrene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
2-Methylnaphthalene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.25
Phenanthrene	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.00070	11
Phenol	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.076
Pyrene	0.0017	0.0016	ND (<0.0025)	0.0014	ND (<0.0025)	ND (<0.0025)	85
1,2,4-Trichlorobenzene	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	1.5
2,4,5-Trichlorophenol	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.18
2,4,6-Trichlorophenol	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.21

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level; green highlighted area denotes the reporting limit is above the screening level

\* The calculation for Benzo (a) pyrene equivalents are found in table 2 of the SIMP)

No 1/2 inch dust tailings result for SVOCs was above the Clean Import Fill Screening Level.

Table 4. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Semi-Volatile Organic Compounds (SVOCs) Analytical Test Results Summary for Import Fill (mg/kg)							
Sample ID	205BS-091218-DT1	205BS-091218-DT2	205BS-091218-DT3	205BS-091218-DT4	205BS-091218-DT5	205BS-091218-DT6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018							
Sampling Time	11:32	11:34	11:35	11:36	11:38	11:39	
Acenaphthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	16
Acenaphthylene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	13
Anthracene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	2.8
Benzo (a) anthracene	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	*
Benzo (b) fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	*
Benzo (k) fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	*
Benzo (g,h,i) perylene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	2.5
Benzo (a) pyrene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
Benzo (a) pyrene equivalents	ND	ND	ND	ND	ND	ND	0.90
1,1-Biphenyl	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.65
Bis (2-chloroethyl) ether	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0015
Bis (2-chloroisopropyl) ether	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0039
Bis (2-ethylhexyl) phthalate	ND (<0.0050)	ND (<0.0050)	0.0053	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	39
p-Chloroaniline	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.0039
2-Chlorophenol	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.012
Chrysene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
Dibenzo (a,h) anthracene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
3,3 Dichlorobenzidine	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.012
2,4-Dichlorophenol	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.3
Diethyl phthalate	0.0042	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.0037	0.035
Dimethyl phthalate	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.035
2,4-Dimethylphenol	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	0.67
2,4-Dinitrophenol	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	ND (<0.13)	0.11
2,4-Dinitrotoluene	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	ND (<0.0063)	0.0018
Fluoranthene	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	60
Fluorene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	8.9
Ideno (1,2,3-cd) pyrene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	*
2-Methylnaphthalene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.25
Phenanthrene	ND (<0.0050)	0.00082	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	11
Phenol	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.076
Pyrene	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	85
1,2,4-Trichlorobenzene	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	ND (<0.25)	1.5
2,4,5-Trichlorophenol	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	ND (<0.0025)	0.18
2,4,6-Trichlorophenol	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	ND (<0.013)	0.21

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level; green highlighted area denotes the reporting limit is above the screening level

\* The calculation for Benzo (a) pyrene equivalents are found in table 2 of the SIMP)

### Organochloride Pesticides and Polychlorinated Biphenyls (PCBs)

No Organochloride pesticide or PCB was detected in any of the samples.



Table 5. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Organochloride Pesticides and PCBs Analytical Test Results Summary for Import Fill (mg/kg)			
Sample ID	205BS-091218- AB1	205BS-091218- DT1	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018			
Sampling Time	10:35	11:32	
<b>Aldrin</b>	ND (<0.00010)	ND (<0.00010)	<b>0.036</b>
<b>Chlordane</b>	ND (<0.0025)	ND (<0.0025)	<b>0.48</b>
<b>DDD</b>	ND (<0.00010)	ND (<0.00010)	<b>2.7</b>
<b>DDE</b>	ND (<0.00010)	ND (<0.00010)	<b>1.9</b>
<b>DDT</b>	ND (<0.00010)	ND (<0.00010)	<b>1.9</b>
<b>Dieldrin</b>	ND (<0.00010)	ND (<0.00010)	<b>0.00017</b>
<b>Endosulfan</b>	ND (<0.00010)	ND (<0.00010)	<b>0.0046</b>
<b>Endrin</b>	ND (<0.00010)	ND (<0.00010)	<b>0.00065</b>
<b>Heptachlor</b>	ND (<0.00010)	ND (<0.00010)	<b>0.00077</b>
<b>Heptachlor epoxide</b>	ND (<0.00010)	ND (<0.00010)	<b>0.00042</b>
<b>Hexachlorobenzene</b>	ND (<0.0010)	ND (<0.0010)	<b>0.34</b>
<b>Methoxychlor</b>	ND (<0.00020)	ND (<0.00020)	<b>19</b>
<b>Toxaphene</b>	ND (<0.0050)	ND (<0.0050)	<b>0.005</b>
<b>PCBs, Total</b>	ND (<0.0050)	ND (<0.0050)	<b>0.25</b>

ND = Not Detected

Value in parenthesis is the Reporting Limit

Yellow highlighted area designates that sample result is above the screening level:m green denotes thereporting limit is greater than the screening level

## Chlorinated Herbicides

No pentachlorophenol was detected in either sample.

<b>Table 6. Soil Sampling for Cemex Quarry for PG&amp;E S-081 205 Brush Street, Oakland, California 94607 Chlorinated Herbicides Analytical Test Results Summary for Import Fill (mg/kg)</b>			
<b>Sample ID</b>	<b>205BS-091218- AB1</b>	<b>205BS-091218- DT1</b>	<b>SIMP Final Clean Import Fill Screening Level mg/kg, except as noted</b>
<b>Sample Description</b>	<b>3/4-inch Class 2 Aggregate Base</b>	<b>1/2 inch Dust Tailings</b>	
<b>Sample Location</b>	<b>GPS: 37°55'46"N, 121°56'33"W</b>	<b>GPS: 37°55'43"N, 121°56'35"W</b>	
<b>Sampling Date: 09/12/2018</b>			
<b>Sampling Time</b>	<b>10:35</b>	<b>11:32</b>	
<b>Pentachlorophenol</b>	<b>ND (&lt;0.050)</b>	<b>ND (&lt;0.050)</b>	

ND = Not Detected

Value in parenthesis is the Reporting Limit

## Asbestos

No asbestos was detected in any sample.

Table 7. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Asbestos Analytical Test Results Summary for Import Fill (%)							
Sample ID	205BS-091218-AB1	205BS-091218-AB2	205BS-091218-AB3	205BS-091218-AB4	205BS-091218-AB5	205BS-091218-AB6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	
Sampling Date: 09/12/2018							
Sampling Time	10:35	10:40	10:44	10:48	10:57	10:59	
Asbestos	ND - 100% Non-fibrous	ND - 100% Non-fibrous	ND - 100% Non-fibrous	ND - 100% Non-fibrous	ND - 100% Non-fibrous	ND - 100% Non-fibrous	<0.25%

Table 7. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 Asbestos Analytical Test Results Summary for Import Fill (%)							
Sample ID	205BS-091218-DT1	205BS-091218-DT2	205BS-091218-DT3	205BS-091218-DT4	205BS-091218-DT5	205BS-091218-DT6	SIMP Final Clean Import Fill Screening Level mg/kg, except as noted
Sample Description	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018							
Sampling Time	11:32	11:34	11:35	11:36	11:38	11:39	
Asbestos	ND - 99% Non-fibrous / 1% Cellulose	ND - 99% Non-fibrous / 1% Cellulose	ND - 99% Non-fibrous / 1% Cellulose	ND - 99% Non-fibrous / 1% Cellulose	ND - 99% Non-fibrous / 1% Cellulose	ND - 99% Non-fibrous / 1% Cellulose	<0.25%

pH

pH levels were slightly basic and ranged from 8.06 to 8.78.

Table 8. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 pH Analytical Test Results Summary for Import Fill (%)							
Sample ID	205BS-091218-AB1	205BS-091218-AB2	205BS-091218-AB3	205BS-091218-AB4	205BS-091218-AB5	205BS-091218-AB6	8.48
Sample Description	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	3/4-inch Class 2 Aggregate Base	
Sample Location	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	GPS: 37.5546°N, 121.5633°W	
Sampling Date: 09/12/2018							
Sampling Time	10:35	10:40	10:44	10:48	10:57	10:59	
pH	8.48	8.65	8.67	8.55	8.54	8.78	

Table 8. Soil Sampling at Cemex Quarry for PG&E S-081 205 Brush Street, Oakland, California 94607 pH Analytical Test Results Summary for Import Fill (%)							
Sample ID	205BS-091218-DT1	205BS-091218-DT2	205BS-091218-DT3	205BS-091218-DT4	205BS-091218-DT5	205BS-091218-DT6	For Information Purposes Only
Sample Description	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	1/2 inch Dust Tailings	
Sample Location	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	GPS: 37.5543°N, 121.5635°W	
Sampling Date: 09/12/2018							
Sampling Time	11:32	11:34	11:35	11:36	11:38	11:39	
pH	8.13	8.07	8.06	8.25	8.12	8.17	

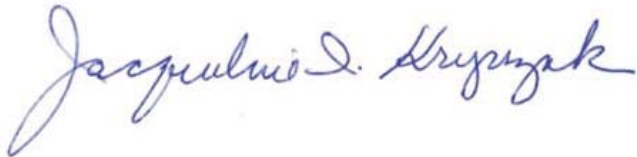


**Conclusion**

Cobalt concentrations in all six ½ inch dust tailings ranged from 24 -33 mg/kg and were above the screening level of 23 mg/kg. This material may not be acceptable to the county health department.

ETS recommends that ERM review the sample results to determine if the aggregate rock and dust tailings are approved for use at the PG&E Facility located at 205 Brush Street, Oakland, CA.

Sincerely,



Jacqueline I. Kryszak, MS, CIH, CSP  
Industrial Hygiene Program Manager

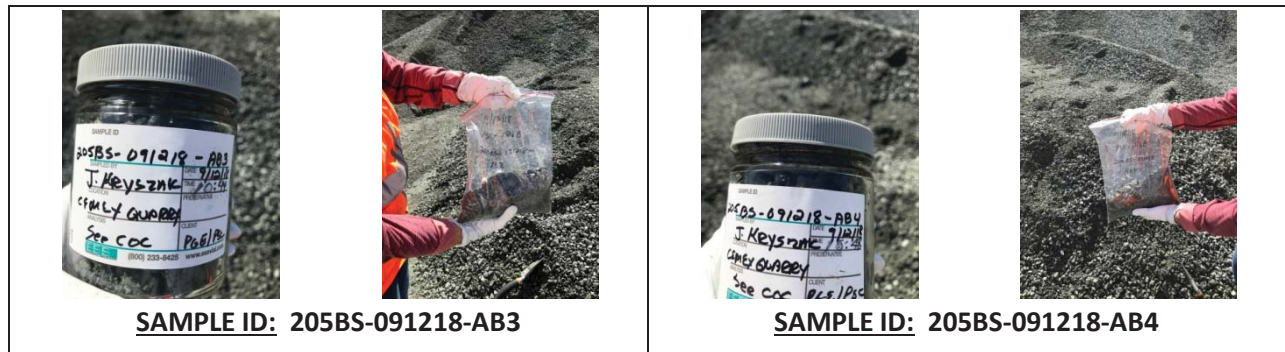
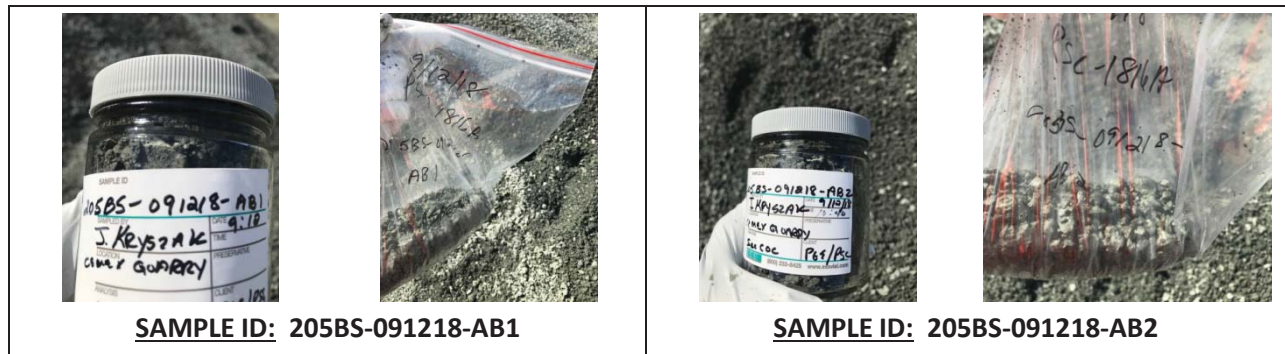
Enclosures: pages



PG&E at 205 Brush Street, Oakland, California  
- Backfill Material Sampling at Cemex Clayton Quarry -



3/4-inch Class 2 Aggregate Base (AB) Stockpile at the Cemex Clayton Quarry. Twelve (12) 4-point composite samples were collected from a representative stockpile of the 3/4-inch AB; six samples submitted for asbestos analysis and six samples submitted for the remaining analyses.



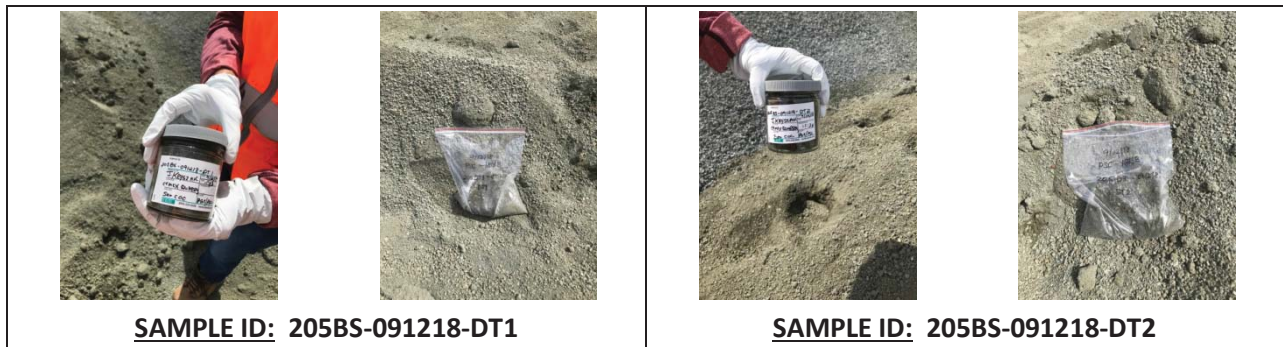


PG&E at 205 Brush Street, Oakland, California  
- Backfill Material Sampling at Cemex Clayton Quarry -

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1/2-inch Dust Tailings (DT) Stockpile at the Cemex Clayton Quarry. Twelve (12) 4-point composite samples were collected from a representative stockpile of the 1/2-inch Dust Tailings; six samples submitted for asbestos analysis and six samples submitted for the remaining analyses.



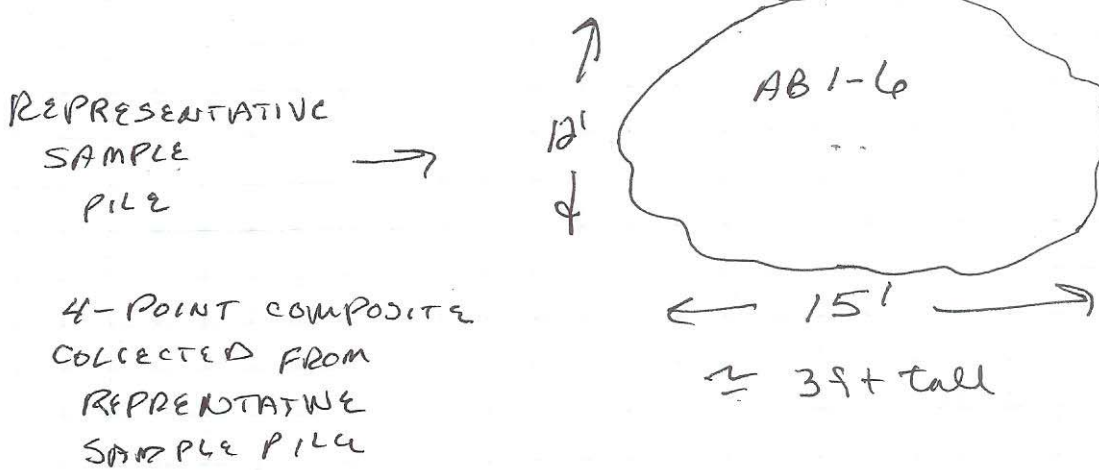
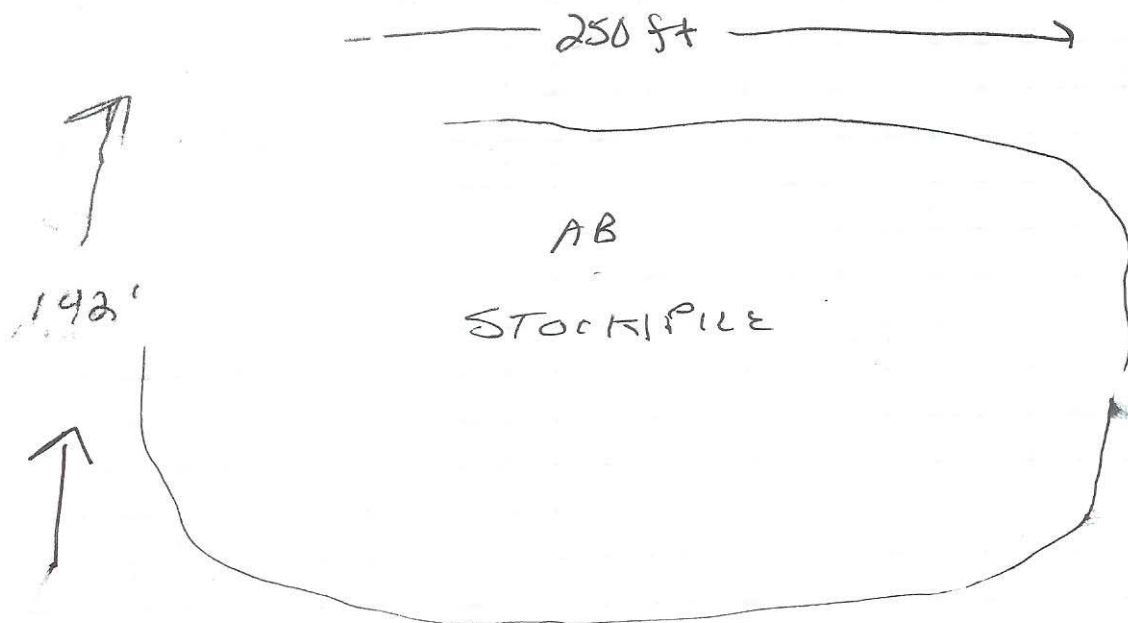


Project: 205 BRUSH ST OAKLAND  
On-site I.H.: KRYSZAK  
Hrs./Mileage: \_\_\_\_\_  
Temperature: AM \_\_\_\_\_ PM \_\_\_\_\_

Date: 9/12/18  
Day No: \_\_\_\_\_ Shift No: \_\_\_\_\_  
Project No: PSC-1816B  
Condition: AM \_\_\_\_\_ PM \_\_\_\_\_

3/4" CLASS II BASE (AGGREGATE)

30 feet tall  
≈ 13,000 CY







Environmental Technical Services, Inc.

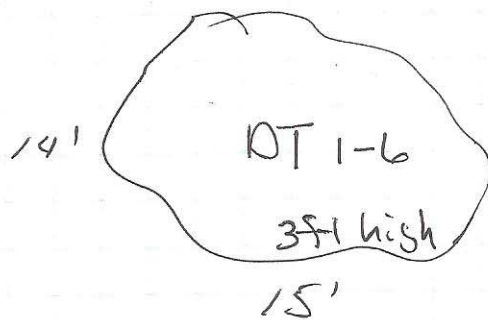
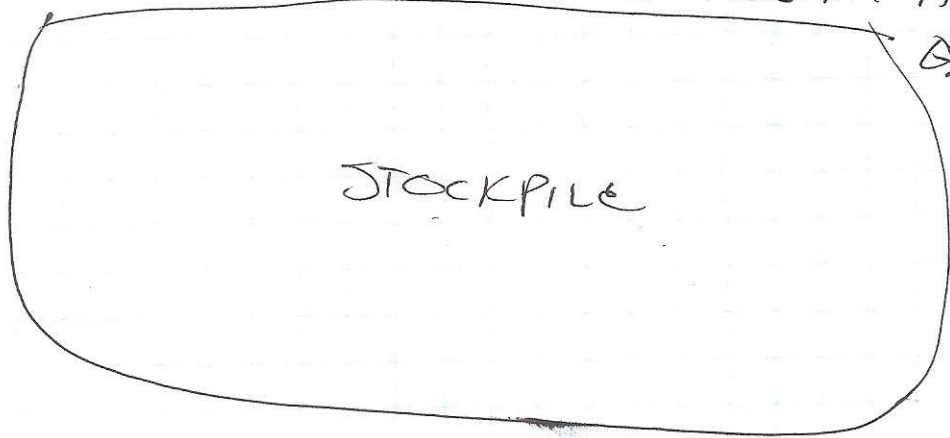
Project: 205 BRUSH ST, OAKLAND, CA  
On-site I.H.: KRYSZAK  
Hrs./Mileage: \_\_\_\_\_  
Temperature: AM \_\_\_\_\_ PM \_\_\_\_\_

Date: 9/12/18  
Day No: \_\_\_\_\_ Shift No: \_\_\_\_\_  
Project No.: \_\_\_\_\_  
Condition: AM \_\_\_\_\_ PM \_\_\_\_\_

1/2" dust tailings

37.5543°N  
121.5635°W

TOO LARGE TO MEASURE - ASSUME ADEQUATE QUANTITY





## Glossary of Terms & Qualifier Definitions

**Client:** Environmental Technical Services, Inc.  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**WorkOrder:** 1809403

### Glossary Abbreviation

95% Interval	95% Confident Interval
c	Serial Dilution Percent Difference
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



## Glossary of Terms & Qualifier Definitions

**Client:** Environmental Technical Services, Inc.  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**WorkOrder:** 1809403

### Analytical Qualifiers

J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.  
S Surrogate spike recovery outside accepted recovery limits  
c2 Surrogate recovery outside of the control limits due to matrix interference.  
c11 The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.  
e7 Oil range compounds are significant  
h3 Elemental sulfur (EPA 3660) cleanup

### Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.  
F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.  
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.  
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg

### Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	IC2 18091328.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 17:53

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	IC2 18091329.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 18:10

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	IC2 18091330.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 18:27

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	IC2 18091337.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 20:24

Analyst(s): AO

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg

### Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	IC2 18091338.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 20:41

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	IC2 18091341.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 21:31

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	IC2 18091342.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 21:48

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	IC2 18091343.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 22:05

Analyst(s): AO

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg

### Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	IC2 18091344.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 22:22

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	IC2 18091348.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 23:29

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	IC2 18091349.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/13/2018 23:46

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	IC2 18091401.CHW	164814

Analytes	Result	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.10	0.20	1	09/14/2018 00:02

Analyst(s): AO



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640Am/3630Cm  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC40 09141818.d	164715

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	09/14/2018 14:21
a-BHC	ND	0.00010	1	09/14/2018 14:21
b-BHC	ND	0.00030	1	09/14/2018 14:21
d-BHC	ND	0.00020	1	09/14/2018 14:21
g-BHC	ND	0.00010	1	09/14/2018 14:21
Chlordane (Technical)	ND	0.0025	1	09/14/2018 14:21
a-Chlordane	ND	0.00010	1	09/14/2018 14:21
g-Chlordane	ND	0.00010	1	09/14/2018 14:21
p,p-DDD	ND	0.00010	1	09/14/2018 14:21
p,p-DDE	ND	0.00010	1	09/14/2018 14:21
p,p-DDT	ND	0.00010	1	09/14/2018 14:21
Dieldrin	ND	0.00010	1	09/14/2018 14:21
Endosulfan I	ND	0.00010	1	09/14/2018 14:21
Endosulfan II	ND	0.00010	1	09/14/2018 14:21
Endosulfan sulfate	ND	0.00010	1	09/14/2018 14:21
Endrin	ND	0.00010	1	09/14/2018 14:21
Endrin aldehyde	ND	0.00010	1	09/14/2018 14:21
Endrin ketone	ND	0.00010	1	09/14/2018 14:21
Heptachlor	ND	0.00010	1	09/14/2018 14:21
Heptachlor epoxide	ND	0.00010	1	09/14/2018 14:21
Hexachlorobenzene	ND	0.0010	1	09/14/2018 14:21
Hexachlorocyclopentadiene	ND	0.0020	1	09/14/2018 14:21
Methoxychlor	ND	0.00020	1	09/14/2018 14:21
Toxaphene	ND	0.0050	1	09/14/2018 14:21
Aroclor1016	ND	0.0050	1	09/14/2018 14:21
Aroclor1221	ND	0.0050	1	09/14/2018 14:21
Aroclor1232	ND	0.0050	1	09/14/2018 14:21
Aroclor1242	ND	0.0050	1	09/14/2018 14:21
Aroclor1248	ND	0.0050	1	09/14/2018 14:21
Aroclor1254	ND	0.0050	1	09/14/2018 14:21
Aroclor1260	ND	0.0050	1	09/14/2018 14:21
PCBs, total	ND	0.0050	1	09/14/2018 14:21

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	109	20-145	09/14/2018 14:21

Analyst(s): CK

Analytical Comments: h3

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640Am/3630Cm  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC40 09141828.d	164715

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	09/14/2018 16:47
a-BHC	ND	0.00010	1	09/14/2018 16:47
b-BHC	ND	0.00030	1	09/14/2018 16:47
d-BHC	ND	0.00020	1	09/14/2018 16:47
g-BHC	ND	0.00010	1	09/14/2018 16:47
Chlordane (Technical)	ND	0.0025	1	09/14/2018 16:47
a-Chlordane	ND	0.00010	1	09/14/2018 16:47
g-Chlordane	ND	0.00010	1	09/14/2018 16:47
p,p-DDD	ND	0.00010	1	09/14/2018 16:47
p,p-DDE	ND	0.00010	1	09/14/2018 16:47
p,p-DDT	ND	0.00010	1	09/14/2018 16:47
Dieldrin	ND	0.00010	1	09/14/2018 16:47
Endosulfan I	ND	0.00010	1	09/14/2018 16:47
Endosulfan II	ND	0.00010	1	09/14/2018 16:47
Endosulfan sulfate	ND	0.00010	1	09/14/2018 16:47
Endrin	ND	0.00010	1	09/14/2018 16:47
Endrin aldehyde	ND	0.00010	1	09/14/2018 16:47
Endrin ketone	ND	0.00010	1	09/14/2018 16:47
Heptachlor	ND	0.00010	1	09/14/2018 16:47
Heptachlor epoxide	ND	0.00010	1	09/14/2018 16:47
Hexachlorobenzene	ND	0.0010	1	09/14/2018 16:47
Hexachlorocyclopentadiene	ND	0.0020	1	09/14/2018 16:47
Methoxychlor	ND	0.00020	1	09/14/2018 16:47
Toxaphene	ND	0.0050	1	09/14/2018 16:47
Aroclor1016	ND	0.0050	1	09/14/2018 16:47
Aroclor1221	ND	0.0050	1	09/14/2018 16:47
Aroclor1232	ND	0.0050	1	09/14/2018 16:47
Aroclor1242	ND	0.0050	1	09/14/2018 16:47
Aroclor1248	ND	0.0050	1	09/14/2018 16:47
Aroclor1254	ND	0.0050	1	09/14/2018 16:47
Aroclor1260	ND	0.0050	1	09/14/2018 16:47
PCBs, total	ND	0.0050	1	09/14/2018 16:47

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	111	20-145	09/14/2018 16:47

Analyst(s): LT



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC38 09141809.D	164794

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/14/2018 16:42
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/14/2018 16:42
Benzene	ND	0.0050	1	09/14/2018 16:42
Bromobenzene	ND	0.0050	1	09/14/2018 16:42
Bromochloromethane	ND	0.0050	1	09/14/2018 16:42
Bromodichloromethane	ND	0.0010	1	09/14/2018 16:42
Bromoform	ND	0.0050	1	09/14/2018 16:42
Bromomethane	ND	0.0050	1	09/14/2018 16:42
2-Butanone (MEK)	ND	0.020	1	09/14/2018 16:42
t-Butyl alcohol (TBA)	ND	0.050	1	09/14/2018 16:42
n-Butyl benzene	ND	0.0050	1	09/14/2018 16:42
sec-Butyl benzene	ND	0.0050	1	09/14/2018 16:42
tert-Butyl benzene	ND	0.0050	1	09/14/2018 16:42
Carbon Disulfide	ND	0.0050	1	09/14/2018 16:42
Carbon Tetrachloride	ND	0.0050	1	09/14/2018 16:42
Chlorobenzene	ND	0.0050	1	09/14/2018 16:42
Chloroethane	ND	0.0050	1	09/14/2018 16:42
Chloroform	ND	0.0050	1	09/14/2018 16:42
Chloromethane	ND	0.0050	1	09/14/2018 16:42
2-Chlorotoluene	ND	0.0050	1	09/14/2018 16:42
4-Chlorotoluene	ND	0.0050	1	09/14/2018 16:42
Dibromochloromethane	ND	0.0050	1	09/14/2018 16:42
1,2-Dibromo-3-chloropropane	ND	0.00025	1	09/14/2018 16:42
1,2-Dibromoethane (EDB)	ND	0.00010	1	09/14/2018 16:42
Dibromomethane	ND	0.0050	1	09/14/2018 16:42
1,2-Dichlorobenzene	ND	0.0050	1	09/14/2018 16:42
1,3-Dichlorobenzene	ND	0.0050	1	09/14/2018 16:42
1,4-Dichlorobenzene	ND	0.0050	1	09/14/2018 16:42
Dichlorodifluoromethane	ND	0.0050	1	09/14/2018 16:42
1,1-Dichloroethane	ND	0.0050	1	09/14/2018 16:42
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	09/14/2018 16:42
1,1-Dichloroethene	ND	0.00025	1	09/14/2018 16:42
cis-1,2-Dichloroethene	ND	0.0050	1	09/14/2018 16:42
trans-1,2-Dichloroethene	ND	0.0050	1	09/14/2018 16:42
1,2-Dichloropropane	ND	0.0050	1	09/14/2018 16:42
1,3-Dichloropropane	ND	0.0050	1	09/14/2018 16:42
2,2-Dichloropropane	ND	0.0050	1	09/14/2018 16:42

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8260B  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/kg

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC38 09141809.D	164794

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	09/14/2018 16:42
cis-1,3-Dichloropropene	ND	0.0050	1	09/14/2018 16:42
trans-1,3-Dichloropropene	ND	0.0050	1	09/14/2018 16:42
Diisopropyl ether (DIPE)	ND	0.0050	1	09/14/2018 16:42
Ethylbenzene	ND	0.0050	1	09/14/2018 16:42
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/14/2018 16:42
Freon 113	ND	0.0050	1	09/14/2018 16:42
Hexachlorobutadiene	ND	0.0050	1	09/14/2018 16:42
Hexachloroethane	ND	0.0050	1	09/14/2018 16:42
2-Hexanone	ND	0.0050	1	09/14/2018 16:42
Isopropylbenzene	ND	0.0050	1	09/14/2018 16:42
4-Isopropyl toluene	ND	0.0050	1	09/14/2018 16:42
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/14/2018 16:42
Methylene chloride	ND	0.010	1	09/14/2018 16:42
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/14/2018 16:42
Naphthalene	ND	0.0050	1	09/14/2018 16:42
n-Propyl benzene	ND	0.0050	1	09/14/2018 16:42
Styrene	ND	0.0050	1	09/14/2018 16:42
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/14/2018 16:42
1,1,2,2-Tetrachloroethane	ND	0.00025	1	09/14/2018 16:42
Tetrachloroethene	ND	0.00025	1	09/14/2018 16:42
Toluene	ND	0.0050	1	09/14/2018 16:42
1,2,3-Trichlorobenzene	ND	0.0050	1	09/14/2018 16:42
1,2,4-Trichlorobenzene	ND	0.0050	1	09/14/2018 16:42
1,1,1-Trichloroethane	ND	0.0050	1	09/14/2018 16:42
1,1,2-Trichloroethane	ND	0.0050	1	09/14/2018 16:42
Trichloroethene	ND	0.0050	1	09/14/2018 16:42
Trichlorofluoromethane	ND	0.0050	1	09/14/2018 16:42
1,2,3-Trichloropropane	ND	0.00025	1	09/14/2018 16:42
1,2,4-Trimethylbenzene	ND	0.0050	1	09/14/2018 16:42
1,3,5-Trimethylbenzene	ND	0.0050	1	09/14/2018 16:42
Vinyl Chloride	ND	0.00025	1	09/14/2018 16:42
Xylenes, Total	ND	0.0050	1	09/14/2018 16:42

(Cont.)





**McC Campbell Analytical, Inc.**

*"When Quality Counts"*

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC38 09141809.D	164794

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
Dibromofluoromethane	113		82-136	09/14/2018 16:42
Toluene-d8	142	S	92-139	09/14/2018 16:42
4-BFB	127		82-135	09/14/2018 16:42
Benzene-d6	77		55-122	09/14/2018 16:42
Ethylbenzene-d10	90		58-141	09/14/2018 16:42
1,2-DCB-d4	70		51-107	09/14/2018 16:42

Analyst(s): JEM

Analytical Comments: c11

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8260B  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/kg

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC38 09141810.D	164794

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/14/2018 17:20
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/14/2018 17:20
Benzene	ND	0.0050	1	09/14/2018 17:20
Bromobenzene	ND	0.0050	1	09/14/2018 17:20
Bromochloromethane	ND	0.0050	1	09/14/2018 17:20
Bromodichloromethane	ND	0.0010	1	09/14/2018 17:20
Bromoform	ND	0.0050	1	09/14/2018 17:20
Bromomethane	ND	0.0050	1	09/14/2018 17:20
2-Butanone (MEK)	ND	0.020	1	09/14/2018 17:20
t-Butyl alcohol (TBA)	ND	0.050	1	09/14/2018 17:20
n-Butyl benzene	ND	0.0050	1	09/14/2018 17:20
sec-Butyl benzene	ND	0.0050	1	09/14/2018 17:20
tert-Butyl benzene	ND	0.0050	1	09/14/2018 17:20
Carbon Disulfide	ND	0.0050	1	09/14/2018 17:20
Carbon Tetrachloride	ND	0.0050	1	09/14/2018 17:20
Chlorobenzene	ND	0.0050	1	09/14/2018 17:20
Chloroethane	ND	0.0050	1	09/14/2018 17:20
Chloroform	ND	0.0050	1	09/14/2018 17:20
Chloromethane	ND	0.0050	1	09/14/2018 17:20
2-Chlorotoluene	ND	0.0050	1	09/14/2018 17:20
4-Chlorotoluene	ND	0.0050	1	09/14/2018 17:20
Dibromochloromethane	ND	0.0050	1	09/14/2018 17:20
1,2-Dibromo-3-chloropropane	ND	0.00025	1	09/14/2018 17:20
1,2-Dibromoethane (EDB)	ND	0.00010	1	09/14/2018 17:20
Dibromomethane	ND	0.0050	1	09/14/2018 17:20
1,2-Dichlorobenzene	ND	0.0050	1	09/14/2018 17:20
1,3-Dichlorobenzene	ND	0.0050	1	09/14/2018 17:20
1,4-Dichlorobenzene	ND	0.0050	1	09/14/2018 17:20
Dichlorodifluoromethane	ND	0.0050	1	09/14/2018 17:20
1,1-Dichloroethane	ND	0.0050	1	09/14/2018 17:20
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	09/14/2018 17:20
1,1-Dichloroethene	ND	0.00025	1	09/14/2018 17:20
cis-1,2-Dichloroethene	ND	0.0050	1	09/14/2018 17:20
trans-1,2-Dichloroethene	ND	0.0050	1	09/14/2018 17:20
1,2-Dichloropropane	ND	0.0050	1	09/14/2018 17:20
1,3-Dichloropropane	ND	0.0050	1	09/14/2018 17:20
2,2-Dichloropropane	ND	0.0050	1	09/14/2018 17:20

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC38 09141810.D	164794

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	09/14/2018 17:20
cis-1,3-Dichloropropene	ND	0.0050	1	09/14/2018 17:20
trans-1,3-Dichloropropene	ND	0.0050	1	09/14/2018 17:20
Diisopropyl ether (DIPE)	ND	0.0050	1	09/14/2018 17:20
Ethylbenzene	ND	0.0050	1	09/14/2018 17:20
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/14/2018 17:20
Freon 113	ND	0.0050	1	09/14/2018 17:20
Hexachlorobutadiene	ND	0.0050	1	09/14/2018 17:20
Hexachloroethane	ND	0.0050	1	09/14/2018 17:20
2-Hexanone	ND	0.0050	1	09/14/2018 17:20
Isopropylbenzene	ND	0.0050	1	09/14/2018 17:20
4-Isopropyl toluene	ND	0.0050	1	09/14/2018 17:20
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/14/2018 17:20
Methylene chloride	ND	0.010	1	09/14/2018 17:20
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/14/2018 17:20
Naphthalene	ND	0.0050	1	09/14/2018 17:20
n-Propyl benzene	ND	0.0050	1	09/14/2018 17:20
Styrene	ND	0.0050	1	09/14/2018 17:20
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/14/2018 17:20
1,1,2,2-Tetrachloroethane	ND	0.00025	1	09/14/2018 17:20
Tetrachloroethene	ND	0.00025	1	09/14/2018 17:20
Toluene	ND	0.0050	1	09/14/2018 17:20
1,2,3-Trichlorobenzene	ND	0.0050	1	09/14/2018 17:20
1,2,4-Trichlorobenzene	ND	0.0050	1	09/14/2018 17:20
1,1,1-Trichloroethane	ND	0.0050	1	09/14/2018 17:20
1,1,2-Trichloroethane	ND	0.0050	1	09/14/2018 17:20
Trichloroethene	ND	0.0050	1	09/14/2018 17:20
Trichlorofluoromethane	ND	0.0050	1	09/14/2018 17:20
1,2,3-Trichloropropane	ND	0.00025	1	09/14/2018 17:20
1,2,4-Trimethylbenzene	ND	0.0050	1	09/14/2018 17:20
1,3,5-Trimethylbenzene	ND	0.0050	1	09/14/2018 17:20
Vinyl Chloride	ND	0.00025	1	09/14/2018 17:20
Xylenes, Total	ND	0.0050	1	09/14/2018 17:20

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC38 09141810.D	164794

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
Dibromofluoromethane	113		82-136	09/14/2018 17:20
Toluene-d8	144	S	92-139	09/14/2018 17:20
4-BFB	130		82-135	09/14/2018 17:20
Benzene-d6	86		55-122	09/14/2018 17:20
Ethylbenzene-d10	99		58-141	09/14/2018 17:20
1,2-DCB-d4	75		51-107	09/14/2018 17:20

Analyst(s): JEM

Analytical Comments: c11



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC17 09131805.D	164743	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 11:13
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 11:13
Acetochlor	ND		0.25	0.25	1	09/13/2018 11:13
Anthracene	ND		0.00082	0.0013	1	09/13/2018 11:13
Benzidine	ND		0.67	1.2	1	09/13/2018 11:13
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 11:13
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 11:13
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 11:13
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 11:13
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 11:13
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 11:13
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 11:13
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 11:13
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 11:13
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 11:13
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 11:13
Bis (2-ethylhexyl) Phthalate	<b>0.0038</b>	J	0.0034	0.0050	1	09/13/2018 11:13
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 11:13
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 11:13
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 11:13
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 11:13
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 11:13
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 11:13
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 11:13
Chrysene	ND		0.00080	0.0025	1	09/13/2018 11:13
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 11:13
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 11:13
Di-n-butyl Phthalate	<b>0.0045</b>		0.0020	0.0025	1	09/13/2018 11:13
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 11:13
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 11:13
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 11:13
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 11:13
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 11:13
Diethyl Phthalate	<b>0.0042</b>	J	0.0036	0.0050	1	09/13/2018 11:13
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 11:13
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 11:13
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 11:13

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC17 09131805.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 11:13
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 11:13
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 11:13
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 11:13
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 11:13
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 11:13
Fluorene	ND		0.00086	0.0025	1	09/13/2018 11:13
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 11:13
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 11:13
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 11:13
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 11:13
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 11:13
Isophorone	ND		0.15	0.25	1	09/13/2018 11:13
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 11:13
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 11:13
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 11:13
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 11:13
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 11:13
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 11:13
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 11:13
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 11:13
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 11:13
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 11:13
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 11:13
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 11:13
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 11:13
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 11:13
Phenol	ND		0.00094	0.0050	1	09/13/2018 11:13
Pyrene	<b>0.0017</b>	J	0.0014	0.0025	1	09/13/2018 11:13
Pyridine	ND		0.18	0.25	1	09/13/2018 11:13
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 11:13
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 11:13
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 11:13

(Cont.)





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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC17 09131805.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	120			30-130		09/13/2018 11:13
Phenol-d5	128			30-130		09/13/2018 11:13
Nitrobenzene-d5	107			30-130		09/13/2018 11:13
2-Fluorobiphenyl	87			30-130		09/13/2018 11:13
2,4,6-Tribromophenol	100			16-130		09/13/2018 11:13
4-Terphenyl-d14	90			30-130		09/13/2018 11:13

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	GC17 09131806.D	164831	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 11:40
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 11:40
Acetochlor	ND		0.25	0.25	1	09/13/2018 11:40
Anthracene	ND		0.00082	0.0013	1	09/13/2018 11:40
Benzidine	ND		0.67	1.2	1	09/13/2018 11:40
Benzo (a) anthracene	<b>0.0043</b>	J	0.0043	0.0050	1	09/13/2018 11:40
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 11:40
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 11:40
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 11:40
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 11:40
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 11:40
1,1-Biphenyl	<b>0.0024</b>	J	0.0023	0.013	1	09/13/2018 11:40
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 11:40
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 11:40
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 11:40
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 11:40
Bis (2-ethylhexyl) Phthalate	<b>0.0043</b>	J	0.0034	0.0050	1	09/13/2018 11:40
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 11:40
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 11:40
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 11:40
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 11:40
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 11:40
2-Chlorophenol	<b>0.0021</b>	J	0.0020	0.0050	1	09/13/2018 11:40
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 11:40
Chrysene	ND		0.00080	0.0025	1	09/13/2018 11:40
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 11:40
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 11:40
Di-n-butyl Phthalate	<b>0.0055</b>		0.0020	0.0025	1	09/13/2018 11:40
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 11:40
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 11:40
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 11:40
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 11:40
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 11:40
Diethyl Phthalate	<b>0.0040</b>	J	0.0036	0.0050	1	09/13/2018 11:40
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 11:40
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 11:40
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 11:40

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	GC17 09131806.D	164831	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 11:40
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 11:40
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 11:40
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 11:40
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 11:40
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 11:40
Fluorene	ND		0.00086	0.0025	1	09/13/2018 11:40
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 11:40
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 11:40
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 11:40
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 11:40
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 11:40
Isophorone	ND		0.15	0.25	1	09/13/2018 11:40
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 11:40
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 11:40
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 11:40
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 11:40
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 11:40
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 11:40
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 11:40
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 11:40
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 11:40
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 11:40
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 11:40
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 11:40
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 11:40
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 11:40
Phenol	ND		0.00094	0.0050	1	09/13/2018 11:40
Pyrene	<b>0.0016</b>	J	0.0014	0.0025	1	09/13/2018 11:40
Pyridine	ND		0.18	0.25	1	09/13/2018 11:40
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 11:40
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 11:40
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 11:40

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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	GC17 09131806.D	164831

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>		<u>Limits</u>		
2-Fluorophenol	126			30-130		09/13/2018 11:40
Phenol-d5	134	S		30-130		09/13/2018 11:40
Nitrobenzene-d5	125			30-130		09/13/2018 11:40
2-Fluorobiphenyl	105			30-130		09/13/2018 11:40
2,4,6-Tribromophenol	114			16-130		09/13/2018 11:40
4-Terphenyl-d14	113			30-130		09/13/2018 11:40

Analyst(s): REB

Analytical Comments: c2

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	GC17 09131807.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 12:07
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 12:07
Acetochlor	ND		0.25	0.25	1	09/13/2018 12:07
Anthracene	ND		0.00082	0.0013	1	09/13/2018 12:07
Benzidine	ND		0.67	1.2	1	09/13/2018 12:07
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 12:07
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 12:07
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 12:07
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 12:07
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 12:07
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 12:07
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 12:07
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 12:07
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 12:07
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 12:07
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 12:07
Bis (2-ethylhexyl) Phthalate	ND		0.0034	0.0050	1	09/13/2018 12:07
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 12:07
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 12:07
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 12:07
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 12:07
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 12:07
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 12:07
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 12:07
Chrysene	ND		0.00080	0.0025	1	09/13/2018 12:07
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 12:07
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 12:07
Di-n-butyl Phthalate	<b>0.0030</b>		0.0020	0.0025	1	09/13/2018 12:07
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 12:07
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 12:07
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 12:07
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 12:07
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 12:07
Diethyl Phthalate	<b>0.0040</b>	J	0.0036	0.0050	1	09/13/2018 12:07
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 12:07
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 12:07
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 12:07

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	GC17 09131807.D	164743	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 12:07
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 12:07
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 12:07
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 12:07
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 12:07
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 12:07
Fluorene	ND		0.00086	0.0025	1	09/13/2018 12:07
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 12:07
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 12:07
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 12:07
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 12:07
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 12:07
Isophorone	ND		0.15	0.25	1	09/13/2018 12:07
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 12:07
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 12:07
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 12:07
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 12:07
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 12:07
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 12:07
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 12:07
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 12:07
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 12:07
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 12:07
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 12:07
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 12:07
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 12:07
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 12:07
Phenol	ND		0.00094	0.0050	1	09/13/2018 12:07
Pyrene	ND		0.0014	0.0025	1	09/13/2018 12:07
Pyridine	ND		0.18	0.25	1	09/13/2018 12:07
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 12:07
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 12:07
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 12:07

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	GC17 09131807.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	98			30-130		09/13/2018 12:07
Phenol-d5	104			30-130		09/13/2018 12:07
Nitrobenzene-d5	88			30-130		09/13/2018 12:07
2-Fluorobiphenyl	76			30-130		09/13/2018 12:07
2,4,6-Tribromophenol	76			16-130		09/13/2018 12:07
4-Terphenyl-d14	86			30-130		09/13/2018 12:07

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	GC17 09131808.D	164743	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 12:34
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 12:34
Acetochlor	ND		0.25	0.25	1	09/13/2018 12:34
Anthracene	ND		0.00082	0.0013	1	09/13/2018 12:34
Benzidine	ND		0.67	1.2	1	09/13/2018 12:34
Benzo (a) anthracene	<b>0.0044</b>	J	0.0043	0.0050	1	09/13/2018 12:34
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 12:34
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 12:34
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 12:34
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 12:34
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 12:34
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 12:34
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 12:34
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 12:34
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 12:34
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 12:34
Bis (2-ethylhexyl) Phthalate	<b>0.0035</b>	J	0.0034	0.0050	1	09/13/2018 12:34
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 12:34
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 12:34
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 12:34
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 12:34
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 12:34
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 12:34
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 12:34
Chrysene	ND		0.00080	0.0025	1	09/13/2018 12:34
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 12:34
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 12:34
Di-n-butyl Phthalate	<b>0.0058</b>		0.0020	0.0025	1	09/13/2018 12:34
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 12:34
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 12:34
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 12:34
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 12:34
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 12:34
Diethyl Phthalate	<b>0.0042</b>	J	0.0036	0.0050	1	09/13/2018 12:34
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 12:34
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 12:34
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 12:34

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	GC17 09131808.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 12:34
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 12:34
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 12:34
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 12:34
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 12:34
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 12:34
Fluorene	ND		0.00086	0.0025	1	09/13/2018 12:34
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 12:34
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 12:34
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 12:34
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 12:34
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 12:34
Isophorone	ND		0.15	0.25	1	09/13/2018 12:34
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 12:34
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 12:34
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 12:34
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 12:34
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 12:34
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 12:34
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 12:34
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 12:34
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 12:34
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 12:34
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 12:34
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 12:34
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 12:34
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 12:34
Phenol	ND		0.00094	0.0050	1	09/13/2018 12:34
Pyrene	<b>0.0014</b>	J	0.0014	0.0025	1	09/13/2018 12:34
Pyridine	ND		0.18	0.25	1	09/13/2018 12:34
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 12:34
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 12:34
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 12:34

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	GC17 09131808.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	106			30-130		09/13/2018 12:34
Phenol-d5	114			30-130		09/13/2018 12:34
Nitrobenzene-d5	98			30-130		09/13/2018 12:34
2-Fluorobiphenyl	84			30-130		09/13/2018 12:34
2,4,6-Tribromophenol	77			16-130		09/13/2018 12:34
4-Terphenyl-d14	95			30-130		09/13/2018 12:34

Analyst(s): REB

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	GC17 09131809.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 13:02
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 13:02
Acetochlor	ND		0.25	0.25	1	09/13/2018 13:02
Anthracene	ND		0.00082	0.0013	1	09/13/2018 13:02
Benzidine	ND		0.67	1.2	1	09/13/2018 13:02
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 13:02
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 13:02
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 13:02
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 13:02
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 13:02
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 13:02
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 13:02
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 13:02
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 13:02
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 13:02
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 13:02
Bis (2-ethylhexyl) Phthalate	<b>0.0077</b>		0.0034	0.0050	1	09/13/2018 13:02
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 13:02
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 13:02
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 13:02
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 13:02
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 13:02
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 13:02
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 13:02
Chrysene	ND		0.00080	0.0025	1	09/13/2018 13:02
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 13:02
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 13:02
Di-n-butyl Phthalate	<b>0.0083</b>		0.0020	0.0025	1	09/13/2018 13:02
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:02
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 13:02
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 13:02
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 13:02
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 13:02
Diethyl Phthalate	<b>0.0040</b>	J	0.0036	0.0050	1	09/13/2018 13:02
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 13:02
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 13:02
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 13:02

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	GC17 09131809.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 13:02
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 13:02
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 13:02
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 13:02
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 13:02
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 13:02
Fluorene	ND		0.00086	0.0025	1	09/13/2018 13:02
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 13:02
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 13:02
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 13:02
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 13:02
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 13:02
Isophorone	ND		0.15	0.25	1	09/13/2018 13:02
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 13:02
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 13:02
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 13:02
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 13:02
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 13:02
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 13:02
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 13:02
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 13:02
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 13:02
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 13:02
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 13:02
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 13:02
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 13:02
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 13:02
Phenol	ND		0.00094	0.0050	1	09/13/2018 13:02
Pyrene	ND		0.0014	0.0025	1	09/13/2018 13:02
Pyridine	ND		0.18	0.25	1	09/13/2018 13:02
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:02
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 13:02
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 13:02

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	GC17 09131809.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	113			30-130		09/13/2018 13:02
Phenol-d5	119			30-130		09/13/2018 13:02
Nitrobenzene-d5	99			30-130		09/13/2018 13:02
2-Fluorobiphenyl	88			30-130		09/13/2018 13:02
2,4,6-Tribromophenol	81			16-130		09/13/2018 13:02
4-Terphenyl-d14	90			30-130		09/13/2018 13:02

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	GC17 09131810.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 13:29
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 13:29
Acetochlor	ND		0.25	0.25	1	09/13/2018 13:29
Anthracene	ND		0.00082	0.0013	1	09/13/2018 13:29
Benzidine	ND		0.67	1.2	1	09/13/2018 13:29
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 13:29
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 13:29
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 13:29
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 13:29
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 13:29
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 13:29
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 13:29
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 13:29
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 13:29
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 13:29
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 13:29
Bis (2-ethylhexyl) Phthalate	ND		0.0034	0.0050	1	09/13/2018 13:29
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 13:29
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 13:29
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 13:29
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 13:29
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 13:29
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 13:29
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 13:29
Chrysene	ND		0.00080	0.0025	1	09/13/2018 13:29
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 13:29
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 13:29
Di-n-butyl Phthalate	<b>0.0045</b>		0.0020	0.0025	1	09/13/2018 13:29
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:29
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 13:29
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 13:29
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 13:29
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 13:29
Diethyl Phthalate	<b>0.0044</b>	J	0.0036	0.0050	1	09/13/2018 13:29
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 13:29
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 13:29
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 13:29

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	GC17 09131810.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 13:29
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 13:29
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 13:29
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 13:29
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 13:29
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 13:29
Fluorene	ND		0.00086	0.0025	1	09/13/2018 13:29
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 13:29
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 13:29
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 13:29
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 13:29
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 13:29
Isophorone	ND		0.15	0.25	1	09/13/2018 13:29
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 13:29
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 13:29
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 13:29
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 13:29
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 13:29
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 13:29
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 13:29
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 13:29
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 13:29
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 13:29
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 13:29
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 13:29
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 13:29
Phenanthrene	<b>0.00070</b>	J	0.00067	0.0050	1	09/13/2018 13:29
Phenol	ND		0.00094	0.0050	1	09/13/2018 13:29
Pyrene	ND		0.0014	0.0025	1	09/13/2018 13:29
Pyridine	ND		0.18	0.25	1	09/13/2018 13:29
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:29
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 13:29
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 13:29

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	GC17 09131810.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	116			30-130		09/13/2018 13:29
Phenol-d5	123			30-130		09/13/2018 13:29
Nitrobenzene-d5	106			30-130		09/13/2018 13:29
2-Fluorobiphenyl	91			30-130		09/13/2018 13:29
2,4,6-Tribromophenol	86			16-130		09/13/2018 13:29
4-Terphenyl-d14	104			30-130		09/13/2018 13:29

Analyst(s): REB



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC17 09131811.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 13:56
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 13:56
Acetochlor	ND		0.25	0.25	1	09/13/2018 13:56
Anthracene	ND		0.00082	0.0013	1	09/13/2018 13:56
Benzidine	ND		0.67	1.2	1	09/13/2018 13:56
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 13:56
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 13:56
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 13:56
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 13:56
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 13:56
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 13:56
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 13:56
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 13:56
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 13:56
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 13:56
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 13:56
Bis (2-ethylhexyl) Phthalate	ND		0.0034	0.0050	1	09/13/2018 13:56
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 13:56
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 13:56
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 13:56
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 13:56
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 13:56
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 13:56
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 13:56
Chrysene	ND		0.00080	0.0025	1	09/13/2018 13:56
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 13:56
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 13:56
Di-n-butyl Phthalate	<b>0.0035</b>		0.0020	0.0025	1	09/13/2018 13:56
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:56
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 13:56
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 13:56
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 13:56
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 13:56
Diethyl Phthalate	<b>0.0042</b>	J	0.0036	0.0050	1	09/13/2018 13:56
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 13:56
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 13:56
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 13:56

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC17 09131811.D	164743	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 13:56
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 13:56
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 13:56
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 13:56
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 13:56
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 13:56
Fluorene	ND		0.00086	0.0025	1	09/13/2018 13:56
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 13:56
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 13:56
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 13:56
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 13:56
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 13:56
Isophorone	ND		0.15	0.25	1	09/13/2018 13:56
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 13:56
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 13:56
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 13:56
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 13:56
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 13:56
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 13:56
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 13:56
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 13:56
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 13:56
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 13:56
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 13:56
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 13:56
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 13:56
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 13:56
Phenol	ND		0.00094	0.0050	1	09/13/2018 13:56
Pyrene	ND		0.0014	0.0025	1	09/13/2018 13:56
Pyridine	ND		0.18	0.25	1	09/13/2018 13:56
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:56
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 13:56
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 13:56

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC17 09131811.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	114			30-130		09/13/2018 13:56
Phenol-d5	120			30-130		09/13/2018 13:56
Nitrobenzene-d5	103			30-130		09/13/2018 13:56
2-Fluorobiphenyl	87			30-130		09/13/2018 13:56
2,4,6-Tribromophenol	76			16-130		09/13/2018 13:56
4-Terphenyl-d14	86			30-130		09/13/2018 13:56

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	GC17 09131812.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 14:23
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 14:23
Acetochlor	ND		0.25	0.25	1	09/13/2018 14:23
Anthracene	ND		0.00082	0.0013	1	09/13/2018 14:23
Benzidine	ND		0.67	1.2	1	09/13/2018 14:23
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 14:23
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 14:23
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 14:23
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 14:23
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 14:23
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 14:23
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 14:23
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 14:23
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 14:23
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 14:23
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 14:23
Bis (2-ethylhexyl) Phthalate	ND		0.0034	0.0050	1	09/13/2018 14:23
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 14:23
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 14:23
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 14:23
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 14:23
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 14:23
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 14:23
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 14:23
Chrysene	ND		0.00080	0.0025	1	09/13/2018 14:23
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 14:23
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 14:23
Di-n-butyl Phthalate	<b>0.0035</b>		0.0020	0.0025	1	09/13/2018 14:23
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 14:23
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 14:23
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 14:23
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 14:23
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 14:23
Diethyl Phthalate	ND		0.0036	0.0050	1	09/13/2018 14:23
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 14:23
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 14:23
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 14:23

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## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	GC17 09131812.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 14:23
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 14:23
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 14:23
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 14:23
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 14:23
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 14:23
Fluorene	ND		0.00086	0.0025	1	09/13/2018 14:23
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 14:23
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 14:23
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 14:23
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 14:23
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 14:23
Isophorone	ND		0.15	0.25	1	09/13/2018 14:23
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 14:23
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 14:23
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 14:23
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 14:23
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 14:23
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 14:23
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 14:23
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 14:23
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 14:23
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 14:23
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 14:23
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 14:23
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 14:23
Phenanthrene	<b>0.00082</b>	J	0.00067	0.0050	1	09/13/2018 14:23
Phenol	ND		0.00094	0.0050	1	09/13/2018 14:23
Pyrene	ND		0.0014	0.0025	1	09/13/2018 14:23
Pyridine	ND		0.18	0.25	1	09/13/2018 14:23
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 14:23
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 14:23
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 14:23

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	GC17 09131812.D	164743

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	120			30-130		09/13/2018 14:23
Phenol-d5	120			30-130		09/13/2018 14:23
Nitrobenzene-d5	105			30-130		09/13/2018 14:23
2-Fluorobiphenyl	88			30-130		09/13/2018 14:23
2,4,6-Tribromophenol	77			16-130		09/13/2018 14:23
4-Terphenyl-d14	85			30-130		09/13/2018 14:23

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	GC21 09131807.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.00077	0.0013	1	09/13/2018 12:20
Acenaphthylene	ND	0.00041	0.0013	1	09/13/2018 12:20
Acetochlor	ND	0.25	0.25	1	09/13/2018 12:20
Anthracene	ND	0.00082	0.0013	1	09/13/2018 12:20
Benzidine	ND	0.67	1.2	1	09/13/2018 12:20
Benzo (a) anthracene	ND	0.0043	0.0050	1	09/13/2018 12:20
Benzo (a) pyrene	ND	0.0012	0.0025	1	09/13/2018 12:20
Benzo (b) fluoranthene	ND	0.00074	0.0013	1	09/13/2018 12:20
Benzo (g,h,i) perylene	ND	0.0011	0.0025	1	09/13/2018 12:20
Benzo (k) fluoranthene	ND	0.00079	0.0013	1	09/13/2018 12:20
Benzyl Alcohol	ND	0.76	1.2	1	09/13/2018 12:20
1,1-Biphenyl	ND	0.0023	0.013	1	09/13/2018 12:20
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	1	09/13/2018 12:20
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	1	09/13/2018 12:20
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	1	09/13/2018 12:20
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	1	09/13/2018 12:20
Bis (2-ethylhexyl) Phthalate	<b>0.0053</b>	0.0034	0.0050	1	09/13/2018 12:20
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	1	09/13/2018 12:20
Butylbenzyl Phthalate	ND	0.021	0.025	1	09/13/2018 12:20
4-Chloroaniline	ND	0.0016	0.0025	1	09/13/2018 12:20
4-Chloro-3-methylphenol	ND	0.20	0.25	1	09/13/2018 12:20
2-Chloronaphthalene	ND	0.14	0.25	1	09/13/2018 12:20
2-Chlorophenol	ND	0.0020	0.0050	1	09/13/2018 12:20
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	1	09/13/2018 12:20
Chrysene	ND	0.00080	0.0025	1	09/13/2018 12:20
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	1	09/13/2018 12:20
Dibenzofuran	ND	0.16	0.25	1	09/13/2018 12:20
Di-n-butyl Phthalate	<b>0.0052</b>	0.0020	0.0025	1	09/13/2018 12:20
1,2-Dichlorobenzene	ND	0.15	0.25	1	09/13/2018 12:20
1,3-Dichlorobenzene	ND	0.13	0.25	1	09/13/2018 12:20
1,4-Dichlorobenzene	ND	0.18	0.25	1	09/13/2018 12:20
3,3-Dichlorobenzidine	ND	0.0016	0.0025	1	09/13/2018 12:20
2,4-Dichlorophenol	ND	0.0017	0.013	1	09/13/2018 12:20
Diethyl Phthalate	ND	0.0036	0.0050	1	09/13/2018 12:20
2,4-Dimethylphenol	ND	0.16	0.25	1	09/13/2018 12:20
Dimethyl Phthalate	ND	0.0025	0.0025	1	09/13/2018 12:20
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	1	09/13/2018 12:20

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	GC21 09131807.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.051	0.13	1	09/13/2018 12:20
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	09/13/2018 12:20
2,6-Dinitrotoluene	ND	0.0013	0.0025	1	09/13/2018 12:20
Di-n-octyl Phthalate	ND	0.0043	0.0050	1	09/13/2018 12:20
1,2-Diphenylhydrazine	ND	0.15	0.25	1	09/13/2018 12:20
Fluoranthene	ND	0.0011	0.0013	1	09/13/2018 12:20
Fluorene	ND	0.00086	0.0025	1	09/13/2018 12:20
Hexachlorobenzene	ND	0.00057	0.0013	1	09/13/2018 12:20
Hexachlorobutadiene	ND	0.00042	0.0025	1	09/13/2018 12:20
Hexachlorocyclopentadiene	ND	0.11	2.0	1	09/13/2018 12:20
Hexachloroethane	ND	0.0011	0.0025	1	09/13/2018 12:20
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	09/13/2018 12:20
Isophorone	ND	0.15	0.25	1	09/13/2018 12:20
2-Methylnaphthalene	ND	0.0017	0.0025	1	09/13/2018 12:20
2-Methylphenol (o-Cresol)	ND	0.27	0.50	1	09/13/2018 12:20
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	1	09/13/2018 12:20
Naphthalene	ND	0.00069	0.0013	1	09/13/2018 12:20
2-Nitroaniline	ND	0.69	1.2	1	09/13/2018 12:20
3-Nitroaniline	ND	0.84	1.2	1	09/13/2018 12:20
4-Nitroaniline	ND	1.1	1.2	1	09/13/2018 12:20
Nitrobenzene	ND	0.16	0.25	1	09/13/2018 12:20
2-Nitrophenol	ND	0.66	1.2	1	09/13/2018 12:20
4-Nitrophenol	ND	0.77	1.2	1	09/13/2018 12:20
N-Nitrosodiphenylamine	ND	0.15	0.25	1	09/13/2018 12:20
N-Nitrosodi-n-propylamine	ND	0.14	0.25	1	09/13/2018 12:20
Pentachlorophenol	ND	0.014	0.031	1	09/13/2018 12:20
Phenanthrene	ND	0.00067	0.0050	1	09/13/2018 12:20
Phenol	ND	0.00094	0.0050	1	09/13/2018 12:20
Pyrene	ND	0.0014	0.0025	1	09/13/2018 12:20
Pyridine	ND	0.18	0.25	1	09/13/2018 12:20
1,2,4-Trichlorobenzene	ND	0.15	0.25	1	09/13/2018 12:20
2,4,5-Trichlorophenol	ND	0.0013	0.0025	1	09/13/2018 12:20
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	09/13/2018 12:20

(Cont.)



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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	GC21 09131807.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	100		30-130		09/13/2018 12:20
Phenol-d5	97		30-130		09/13/2018 12:20
Nitrobenzene-d5	95		30-130		09/13/2018 12:20
2-Fluorobiphenyl	87		30-130		09/13/2018 12:20
2,4,6-Tribromophenol	91		16-130		09/13/2018 12:20
4-Terphenyl-d14	81		30-130		09/13/2018 12:20

Analyst(s): REB

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	GC21 09131808.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.00077	0.0013	1	09/13/2018 12:47
Acenaphthylene	ND	0.00041	0.0013	1	09/13/2018 12:47
Acetochlor	ND	0.25	0.25	1	09/13/2018 12:47
Anthracene	ND	0.00082	0.0013	1	09/13/2018 12:47
Benzidine	ND	0.67	1.2	1	09/13/2018 12:47
Benzo (a) anthracene	ND	0.0043	0.0050	1	09/13/2018 12:47
Benzo (a) pyrene	ND	0.0012	0.0025	1	09/13/2018 12:47
Benzo (b) fluoranthene	ND	0.00074	0.0013	1	09/13/2018 12:47
Benzo (g,h,i) perylene	ND	0.0011	0.0025	1	09/13/2018 12:47
Benzo (k) fluoranthene	ND	0.00079	0.0013	1	09/13/2018 12:47
Benzyl Alcohol	ND	0.76	1.2	1	09/13/2018 12:47
1,1-Biphenyl	ND	0.0023	0.013	1	09/13/2018 12:47
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	1	09/13/2018 12:47
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	1	09/13/2018 12:47
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	1	09/13/2018 12:47
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	1	09/13/2018 12:47
Bis (2-ethylhexyl) Phthalate	ND	0.0034	0.0050	1	09/13/2018 12:47
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	1	09/13/2018 12:47
Butylbenzyl Phthalate	ND	0.021	0.025	1	09/13/2018 12:47
4-Chloroaniline	ND	0.0016	0.0025	1	09/13/2018 12:47
4-Chloro-3-methylphenol	ND	0.20	0.25	1	09/13/2018 12:47
2-Chloronaphthalene	ND	0.14	0.25	1	09/13/2018 12:47
2-Chlorophenol	ND	0.0020	0.0050	1	09/13/2018 12:47
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	1	09/13/2018 12:47
Chrysene	ND	0.00080	0.0025	1	09/13/2018 12:47
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	1	09/13/2018 12:47
Dibenzofuran	ND	0.16	0.25	1	09/13/2018 12:47
Di-n-butyl Phthalate	<b>0.0045</b>	0.0020	0.0025	1	09/13/2018 12:47
1,2-Dichlorobenzene	ND	0.15	0.25	1	09/13/2018 12:47
1,3-Dichlorobenzene	ND	0.13	0.25	1	09/13/2018 12:47
1,4-Dichlorobenzene	ND	0.18	0.25	1	09/13/2018 12:47
3,3-Dichlorobenzidine	ND	0.0016	0.0025	1	09/13/2018 12:47
2,4-Dichlorophenol	ND	0.0017	0.013	1	09/13/2018 12:47
Diethyl Phthalate	ND	0.0036	0.0050	1	09/13/2018 12:47
2,4-Dimethylphenol	ND	0.16	0.25	1	09/13/2018 12:47
Dimethyl Phthalate	ND	0.0025	0.0025	1	09/13/2018 12:47
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	1	09/13/2018 12:47

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	GC21 09131808.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.051	0.13	1	09/13/2018 12:47
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	09/13/2018 12:47
2,6-Dinitrotoluene	ND	0.0013	0.0025	1	09/13/2018 12:47
Di-n-octyl Phthalate	ND	0.0043	0.0050	1	09/13/2018 12:47
1,2-Diphenylhydrazine	ND	0.15	0.25	1	09/13/2018 12:47
Fluoranthene	ND	0.0011	0.0013	1	09/13/2018 12:47
Fluorene	ND	0.00086	0.0025	1	09/13/2018 12:47
Hexachlorobenzene	ND	0.00057	0.0013	1	09/13/2018 12:47
Hexachlorobutadiene	ND	0.00042	0.0025	1	09/13/2018 12:47
Hexachlorocyclopentadiene	ND	0.11	2.0	1	09/13/2018 12:47
Hexachloroethane	ND	0.0011	0.0025	1	09/13/2018 12:47
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	09/13/2018 12:47
Isophorone	ND	0.15	0.25	1	09/13/2018 12:47
2-Methylnaphthalene	ND	0.0017	0.0025	1	09/13/2018 12:47
2-Methylphenol (o-Cresol)	ND	0.27	0.50	1	09/13/2018 12:47
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	1	09/13/2018 12:47
Naphthalene	ND	0.00069	0.0013	1	09/13/2018 12:47
2-Nitroaniline	ND	0.69	1.2	1	09/13/2018 12:47
3-Nitroaniline	ND	0.84	1.2	1	09/13/2018 12:47
4-Nitroaniline	ND	1.1	1.2	1	09/13/2018 12:47
Nitrobenzene	ND	0.16	0.25	1	09/13/2018 12:47
2-Nitrophenol	ND	0.66	1.2	1	09/13/2018 12:47
4-Nitrophenol	ND	0.77	1.2	1	09/13/2018 12:47
N-Nitrosodiphenylamine	ND	0.15	0.25	1	09/13/2018 12:47
N-Nitrosodi-n-propylamine	ND	0.14	0.25	1	09/13/2018 12:47
Pentachlorophenol	ND	0.014	0.031	1	09/13/2018 12:47
Phenanthrene	ND	0.00067	0.0050	1	09/13/2018 12:47
Phenol	ND	0.00094	0.0050	1	09/13/2018 12:47
Pyrene	ND	0.0014	0.0025	1	09/13/2018 12:47
Pyridine	ND	0.18	0.25	1	09/13/2018 12:47
1,2,4-Trichlorobenzene	ND	0.15	0.25	1	09/13/2018 12:47
2,4,5-Trichlorophenol	ND	0.0013	0.0025	1	09/13/2018 12:47
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	09/13/2018 12:47

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	GC21 09131808.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	115		30-130		09/13/2018 12:47
Phenol-d5	118		30-130		09/13/2018 12:47
Nitrobenzene-d5	103		30-130		09/13/2018 12:47
2-Fluorobiphenyl	89		30-130		09/13/2018 12:47
2,4,6-Tribromophenol	95		16-130		09/13/2018 12:47
4-Terphenyl-d14	84		30-130		09/13/2018 12:47

Analyst(s): REB

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CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	GC21 09131817.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.00077	0.0013	1	09/13/2018 16:51
Acenaphthylene	ND	0.00041	0.0013	1	09/13/2018 16:51
Acetochlor	ND	0.25	0.25	1	09/13/2018 16:51
Anthracene	ND	0.00082	0.0013	1	09/13/2018 16:51
Benzidine	ND	0.67	1.2	1	09/13/2018 16:51
Benzo (a) anthracene	ND	0.0043	0.0050	1	09/13/2018 16:51
Benzo (a) pyrene	ND	0.0012	0.0025	1	09/13/2018 16:51
Benzo (b) fluoranthene	ND	0.00074	0.0013	1	09/13/2018 16:51
Benzo (g,h,i) perylene	ND	0.0011	0.0025	1	09/13/2018 16:51
Benzo (k) fluoranthene	ND	0.00079	0.0013	1	09/13/2018 16:51
Benzyl Alcohol	ND	0.76	1.2	1	09/13/2018 16:51
1,1-Biphenyl	ND	0.0023	0.013	1	09/13/2018 16:51
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	1	09/13/2018 16:51
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	1	09/13/2018 16:51
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	1	09/13/2018 16:51
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	1	09/13/2018 16:51
Bis (2-ethylhexyl) Phthalate	ND	0.0034	0.0050	1	09/13/2018 16:51
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	1	09/13/2018 16:51
Butylbenzyl Phthalate	ND	0.021	0.025	1	09/13/2018 16:51
4-Chloroaniline	ND	0.0016	0.0025	1	09/13/2018 16:51
4-Chloro-3-methylphenol	ND	0.20	0.25	1	09/13/2018 16:51
2-Chloronaphthalene	ND	0.14	0.25	1	09/13/2018 16:51
2-Chlorophenol	ND	0.0020	0.0050	1	09/13/2018 16:51
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	1	09/13/2018 16:51
Chrysene	ND	0.00080	0.0025	1	09/13/2018 16:51
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	1	09/13/2018 16:51
Dibenzofuran	ND	0.16	0.25	1	09/13/2018 16:51
Di-n-butyl Phthalate	<b>0.0044</b>	0.0020	0.0025	1	09/13/2018 16:51
1,2-Dichlorobenzene	ND	0.15	0.25	1	09/13/2018 16:51
1,3-Dichlorobenzene	ND	0.13	0.25	1	09/13/2018 16:51
1,4-Dichlorobenzene	ND	0.18	0.25	1	09/13/2018 16:51
3,3-Dichlorobenzidine	ND	0.0016	0.0025	1	09/13/2018 16:51
2,4-Dichlorophenol	ND	0.0017	0.013	1	09/13/2018 16:51
Diethyl Phthalate	ND	0.0036	0.0050	1	09/13/2018 16:51
2,4-Dimethylphenol	ND	0.16	0.25	1	09/13/2018 16:51
Dimethyl Phthalate	ND	0.0025	0.0025	1	09/13/2018 16:51
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	1	09/13/2018 16:51

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	GC21 09131817.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.051	0.13	1	09/13/2018 16:51
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	09/13/2018 16:51
2,6-Dinitrotoluene	ND	0.0013	0.0025	1	09/13/2018 16:51
Di-n-octyl Phthalate	ND	0.0043	0.0050	1	09/13/2018 16:51
1,2-Diphenylhydrazine	ND	0.15	0.25	1	09/13/2018 16:51
Fluoranthene	ND	0.0011	0.0013	1	09/13/2018 16:51
Fluorene	ND	0.00086	0.0025	1	09/13/2018 16:51
Hexachlorobenzene	ND	0.00057	0.0013	1	09/13/2018 16:51
Hexachlorobutadiene	ND	0.00042	0.0025	1	09/13/2018 16:51
Hexachlorocyclopentadiene	ND	0.11	2.0	1	09/13/2018 16:51
Hexachloroethane	ND	0.0011	0.0025	1	09/13/2018 16:51
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	09/13/2018 16:51
Isophorone	ND	0.15	0.25	1	09/13/2018 16:51
2-Methylnaphthalene	ND	0.0017	0.0025	1	09/13/2018 16:51
2-Methylphenol (o-Cresol)	ND	0.27	0.50	1	09/13/2018 16:51
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	1	09/13/2018 16:51
Naphthalene	ND	0.00069	0.0013	1	09/13/2018 16:51
2-Nitroaniline	ND	0.69	1.2	1	09/13/2018 16:51
3-Nitroaniline	ND	0.84	1.2	1	09/13/2018 16:51
4-Nitroaniline	ND	1.1	1.2	1	09/13/2018 16:51
Nitrobenzene	ND	0.16	0.25	1	09/13/2018 16:51
2-Nitrophenol	ND	0.66	1.2	1	09/13/2018 16:51
4-Nitrophenol	ND	0.77	1.2	1	09/13/2018 16:51
N-Nitrosodiphenylamine	ND	0.15	0.25	1	09/13/2018 16:51
N-Nitrosodi-n-propylamine	ND	0.14	0.25	1	09/13/2018 16:51
Pentachlorophenol	ND	0.014	0.031	1	09/13/2018 16:51
Phenanthrene	ND	0.00067	0.0050	1	09/13/2018 16:51
Phenol	ND	0.00094	0.0050	1	09/13/2018 16:51
Pyrene	ND	0.0014	0.0025	1	09/13/2018 16:51
Pyridine	ND	0.18	0.25	1	09/13/2018 16:51
1,2,4-Trichlorobenzene	ND	0.15	0.25	1	09/13/2018 16:51
2,4,5-Trichlorophenol	ND	0.0013	0.0025	1	09/13/2018 16:51
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	09/13/2018 16:51

(Cont.)



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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	GC21 09131817.D	164743

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	101		30-130		09/13/2018 16:51
Phenol-d5	99		30-130		09/13/2018 16:51
Nitrobenzene-d5	91		30-130		09/13/2018 16:51
2-Fluorobiphenyl	81		30-130		09/13/2018 16:51
2,4,6-Tribromophenol	69		16-130		09/13/2018 16:51
4-Terphenyl-d14	74		30-130		09/13/2018 16:51

Analyst(s): REB

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	GC21 09131810.D	164831

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acenaphthene	ND		0.00077	0.0013	1	09/13/2018 13:41
Acenaphthylene	ND		0.00041	0.0013	1	09/13/2018 13:41
Acetochlor	ND		0.25	0.25	1	09/13/2018 13:41
Anthracene	ND		0.00082	0.0013	1	09/13/2018 13:41
Benzidine	ND		0.67	1.2	1	09/13/2018 13:41
Benzo (a) anthracene	ND		0.0043	0.0050	1	09/13/2018 13:41
Benzo (a) pyrene	ND		0.0012	0.0025	1	09/13/2018 13:41
Benzo (b) fluoranthene	ND		0.00074	0.0013	1	09/13/2018 13:41
Benzo (g,h,i) perylene	ND		0.0011	0.0025	1	09/13/2018 13:41
Benzo (k) fluoranthene	ND		0.00079	0.0013	1	09/13/2018 13:41
Benzyl Alcohol	ND		0.76	1.2	1	09/13/2018 13:41
1,1-Biphenyl	ND		0.0023	0.013	1	09/13/2018 13:41
Bis (2-chloroethoxy) Methane	ND		0.15	0.25	1	09/13/2018 13:41
Bis (2-chloroethyl) Ether	ND		0.0016	0.0025	1	09/13/2018 13:41
Bis (2-chloroisopropyl) Ether	ND		0.0014	0.0025	1	09/13/2018 13:41
Bis (2-ethylhexyl) Adipate	ND		0.15	0.50	1	09/13/2018 13:41
Bis (2-ethylhexyl) Phthalate	ND		0.0034	0.0050	1	09/13/2018 13:41
4-Bromophenyl Phenyl Ether	ND		0.15	0.25	1	09/13/2018 13:41
Butylbenzyl Phthalate	ND		0.021	0.025	1	09/13/2018 13:41
4-Chloroaniline	ND		0.0016	0.0025	1	09/13/2018 13:41
4-Chloro-3-methylphenol	ND		0.20	0.25	1	09/13/2018 13:41
2-Chloronaphthalene	ND		0.14	0.25	1	09/13/2018 13:41
2-Chlorophenol	ND		0.0020	0.0050	1	09/13/2018 13:41
4-Chlorophenyl Phenyl Ether	ND		0.16	0.25	1	09/13/2018 13:41
Chrysene	ND		0.00080	0.0025	1	09/13/2018 13:41
Dibenzo (a,h) anthracene	ND		0.0015	0.0025	1	09/13/2018 13:41
Dibenzofuran	ND		0.16	0.25	1	09/13/2018 13:41
Di-n-butyl Phthalate	<b>0.0043</b>		0.0020	0.0025	1	09/13/2018 13:41
1,2-Dichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:41
1,3-Dichlorobenzene	ND		0.13	0.25	1	09/13/2018 13:41
1,4-Dichlorobenzene	ND		0.18	0.25	1	09/13/2018 13:41
3,3-Dichlorobenzidine	ND		0.0016	0.0025	1	09/13/2018 13:41
2,4-Dichlorophenol	ND		0.0017	0.013	1	09/13/2018 13:41
Diethyl Phthalate	<b>0.0037</b>	J	0.0036	0.0050	1	09/13/2018 13:41
2,4-Dimethylphenol	ND		0.16	0.25	1	09/13/2018 13:41
Dimethyl Phthalate	ND		0.0025	0.0025	1	09/13/2018 13:41
4,6-Dinitro-2-methylphenol	ND		0.81	1.2	1	09/13/2018 13:41

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## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW3550B/3640A  
**Date Prepared:** 9/13/18      **Analytical Method:** SW8270C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	GC21 09131810.D	164831	
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND		0.051	0.13	1	09/13/2018 13:41
2,4-Dinitrotoluene	ND		0.0011	0.0063	1	09/13/2018 13:41
2,6-Dinitrotoluene	ND		0.0013	0.0025	1	09/13/2018 13:41
Di-n-octyl Phthalate	ND		0.0043	0.0050	1	09/13/2018 13:41
1,2-Diphenylhydrazine	ND		0.15	0.25	1	09/13/2018 13:41
Fluoranthene	ND		0.0011	0.0013	1	09/13/2018 13:41
Fluorene	ND		0.00086	0.0025	1	09/13/2018 13:41
Hexachlorobenzene	ND		0.00057	0.0013	1	09/13/2018 13:41
Hexachlorobutadiene	ND		0.00042	0.0025	1	09/13/2018 13:41
Hexachlorocyclopentadiene	ND		0.11	2.0	1	09/13/2018 13:41
Hexachloroethane	ND		0.0011	0.0025	1	09/13/2018 13:41
Indeno (1,2,3-cd) pyrene	ND		0.0010	0.0025	1	09/13/2018 13:41
Isophorone	ND		0.15	0.25	1	09/13/2018 13:41
2-Methylnaphthalene	ND		0.0017	0.0025	1	09/13/2018 13:41
2-Methylphenol (o-Cresol)	ND		0.27	0.50	1	09/13/2018 13:41
3 & 4-Methylphenol (m,p-Cresol)	ND		0.24	0.25	1	09/13/2018 13:41
Naphthalene	ND		0.00069	0.0013	1	09/13/2018 13:41
2-Nitroaniline	ND		0.69	1.2	1	09/13/2018 13:41
3-Nitroaniline	ND		0.84	1.2	1	09/13/2018 13:41
4-Nitroaniline	ND		1.1	1.2	1	09/13/2018 13:41
Nitrobenzene	ND		0.16	0.25	1	09/13/2018 13:41
2-Nitrophenol	ND		0.66	1.2	1	09/13/2018 13:41
4-Nitrophenol	ND		0.77	1.2	1	09/13/2018 13:41
N-Nitrosodiphenylamine	ND		0.15	0.25	1	09/13/2018 13:41
N-Nitrosodi-n-propylamine	ND		0.14	0.25	1	09/13/2018 13:41
Pentachlorophenol	ND		0.014	0.031	1	09/13/2018 13:41
Phenanthrene	ND		0.00067	0.0050	1	09/13/2018 13:41
Phenol	ND		0.00094	0.0050	1	09/13/2018 13:41
Pyrene	ND		0.0014	0.0025	1	09/13/2018 13:41
Pyridine	ND		0.18	0.25	1	09/13/2018 13:41
1,2,4-Trichlorobenzene	ND		0.15	0.25	1	09/13/2018 13:41
2,4,5-Trichlorophenol	ND		0.0013	0.0025	1	09/13/2018 13:41
2,4,6-Trichlorophenol	ND		0.0012	0.013	1	09/13/2018 13:41

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# Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/13/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B/3640A  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	GC21 09131810.D	164831

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
2-Fluorophenol	104			30-130		09/13/2018 13:41
Phenol-d5	97			30-130		09/13/2018 13:41
Nitrobenzene-d5	88			30-130		09/13/2018 13:41
2-Fluorobiphenyl	79			30-130		09/13/2018 13:41
2,4,6-Tribromophenol	74			16-130		09/13/2018 13:41
4-Terphenyl-d14	74			30-130		09/13/2018 13:41

Analyst(s): REB



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	ICP-MS3 020SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:03
Arsenic	<b>2.5</b>	0.50	1	09/13/2018 10:03
Barium	ND	5.0	1	09/13/2018 10:03
Beryllium	ND	0.50	1	09/13/2018 10:03
Cadmium	ND	0.25	1	09/13/2018 10:03
Chromium	<b>20</b>	0.50	1	09/13/2018 10:03
Cobalt	<b>16</b>	0.50	1	09/13/2018 10:03
Copper	<b>72</b>	0.50	1	09/13/2018 10:03
Lead	ND	0.50	1	09/13/2018 10:03
Mercury	<b>1.1</b>	0.050	1	09/13/2018 10:03
Molybdenum	ND	0.50	1	09/13/2018 10:03
Nickel	<b>17</b>	0.50	1	09/13/2018 10:03
Selenium	ND	0.50	1	09/13/2018 10:03
Silver	ND	0.50	1	09/13/2018 10:03
Thallium	ND	0.50	1	09/13/2018 10:03
Vanadium	<b>130</b>	0.50	1	09/13/2018 10:03
Zinc	<b>10</b>	5.0	1	09/13/2018 10:03

Surrogates	REC (%)	Limits	
Terbium	103	70-130	09/13/2018 10:03

Analyst(s): ND

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	ICP-MS3 024SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:27
Arsenic	ND	0.50	1	09/13/2018 10:27
Barium	ND	5.0	1	09/13/2018 10:27
Beryllium	ND	0.50	1	09/13/2018 10:27
Cadmium	ND	0.25	1	09/13/2018 10:27
Chromium	21	0.50	1	09/13/2018 10:27
Cobalt	20	0.50	1	09/13/2018 10:27
Copper	34	0.50	1	09/13/2018 10:27
Lead	ND	0.50	1	09/13/2018 10:27
Mercury	0.38	0.050	1	09/13/2018 10:27
Molybdenum	0.65	0.50	1	09/13/2018 10:27
Nickel	17	0.50	1	09/13/2018 10:27
Selenium	ND	0.50	1	09/13/2018 10:27
Silver	ND	0.50	1	09/13/2018 10:27
Thallium	ND	0.50	1	09/13/2018 10:27
Vanadium	150	0.50	1	09/13/2018 10:27
Zinc	12	5.0	1	09/13/2018 10:27

Surrogates	REC (%)	Limits	
Terbium	103	70-130	09/13/2018 10:27

Analyst(s): ND

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	ICP-MS3 028SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:52
Arsenic	ND	0.50	1	09/13/2018 10:52
Barium	ND	5.0	1	09/13/2018 10:52
Beryllium	ND	0.50	1	09/13/2018 10:52
Cadmium	ND	0.25	1	09/13/2018 10:52
Chromium	<b>20</b>	0.50	1	09/13/2018 10:52
Cobalt	<b>11</b>	0.50	1	09/13/2018 10:52
Copper	<b>23</b>	0.50	1	09/13/2018 10:52
Lead	ND	0.50	1	09/13/2018 10:52
Mercury	<b>0.22</b>	0.050	1	09/13/2018 10:52
Molybdenum	ND	0.50	1	09/13/2018 10:52
Nickel	<b>13</b>	0.50	1	09/13/2018 10:52
Selenium	ND	0.50	1	09/13/2018 10:52
Silver	ND	0.50	1	09/13/2018 10:52
Thallium	ND	0.50	1	09/13/2018 10:52
Vanadium	<b>75</b>	0.50	1	09/13/2018 10:52
Zinc	<b>6.1</b>	5.0	1	09/13/2018 10:52

Surrogates	REC (%)	Limits	
Terbium	104	70-130	09/13/2018 10:52

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	ICP-MS3 029SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:58
Arsenic	ND	0.50	1	09/13/2018 10:58
Barium	ND	5.0	1	09/13/2018 10:58
Beryllium	ND	0.50	1	09/13/2018 10:58
Cadmium	ND	0.25	1	09/13/2018 10:58
Chromium	<b>23</b>	0.50	1	09/13/2018 10:58
Cobalt	<b>12</b>	0.50	1	09/13/2018 10:58
Copper	<b>19</b>	0.50	1	09/13/2018 10:58
Lead	ND	0.50	1	09/13/2018 10:58
Mercury	<b>0.47</b>	0.050	1	09/13/2018 10:58
Molybdenum	ND	0.50	1	09/13/2018 10:58
Nickel	<b>10</b>	0.50	1	09/13/2018 10:58
Selenium	ND	0.50	1	09/13/2018 10:58
Silver	ND	0.50	1	09/13/2018 10:58
Thallium	ND	0.50	1	09/13/2018 10:58
Vanadium	<b>70</b>	0.50	1	09/13/2018 10:58
Zinc	ND	5.0	1	09/13/2018 10:58

Surrogates	REC (%)	Limits	
Terbium	103	70-130	09/13/2018 10:58

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	ICP-MS1 024SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:21
Arsenic	ND	0.50	1	09/13/2018 10:21
Barium	ND	5.0	1	09/13/2018 10:21
Beryllium	ND	0.50	1	09/13/2018 10:21
Cadmium	ND	0.25	1	09/13/2018 10:21
Chromium	11	0.50	1	09/13/2018 10:21
Cobalt	10	0.50	1	09/13/2018 10:21
Copper	23	0.50	1	09/13/2018 10:21
Lead	ND	0.50	1	09/13/2018 10:21
Mercury	0.72	0.050	1	09/13/2018 10:21
Molybdenum	ND	0.50	1	09/13/2018 10:21
Nickel	10	0.50	1	09/13/2018 10:21
Selenium	ND	0.50	1	09/13/2018 10:21
Silver	ND	0.50	1	09/13/2018 10:21
Thallium	ND	0.50	1	09/13/2018 10:21
Vanadium	65	0.50	1	09/13/2018 10:21
Zinc	ND	5.0	1	09/13/2018 10:21

Surrogates	REC (%)	Limits	
Terbium	98	70-130	09/13/2018 10:21

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	ICP-MS1 025SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:28
Arsenic	ND	0.50	1	09/13/2018 10:28
Barium	ND	5.0	1	09/13/2018 10:28
Beryllium	ND	0.50	1	09/13/2018 10:28
Cadmium	ND	0.25	1	09/13/2018 10:28
Chromium	8.9	0.50	1	09/13/2018 10:28
Cobalt	8.3	0.50	1	09/13/2018 10:28
Copper	42	0.50	1	09/13/2018 10:28
Lead	ND	0.50	1	09/13/2018 10:28
Mercury	0.20	0.050	1	09/13/2018 10:28
Molybdenum	ND	0.50	1	09/13/2018 10:28
Nickel	6.6	0.50	1	09/13/2018 10:28
Selenium	ND	0.50	1	09/13/2018 10:28
Silver	ND	0.50	1	09/13/2018 10:28
Thallium	ND	0.50	1	09/13/2018 10:28
Vanadium	53	0.50	1	09/13/2018 10:28
Zinc	5.0	5.0	1	09/13/2018 10:28

Surrogates	REC (%)	Limits	
Terbium	104	70-130	09/13/2018 10:28

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	ICP-MS1 026SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:34
Arsenic	ND	0.50	1	09/13/2018 10:34
Barium	ND	5.0	1	09/13/2018 10:34
Beryllium	ND	0.50	1	09/13/2018 10:34
Cadmium	ND	0.25	1	09/13/2018 10:34
Chromium	<b>50</b>	0.50	1	09/13/2018 10:34
Cobalt	<b>33</b>	0.50	1	09/13/2018 10:34
Copper	<b>29</b>	0.50	1	09/13/2018 10:34
Lead	ND	0.50	1	09/13/2018 10:34
Mercury	<b>0.39</b>	0.050	1	09/13/2018 10:34
Molybdenum	ND	0.50	1	09/13/2018 10:34
Nickel	<b>36</b>	0.50	1	09/13/2018 10:34
Selenium	ND	0.50	1	09/13/2018 10:34
Silver	ND	0.50	1	09/13/2018 10:34
Thallium	ND	0.50	1	09/13/2018 10:34
Vanadium	<b>140</b>	0.50	1	09/13/2018 10:34
Zinc	<b>14</b>	5.0	1	09/13/2018 10:34

Surrogates	REC (%)	Limits	
Terbium	100	70-130	09/13/2018 10:34

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	ICP-MS3 031SMPL.D	164796

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Antimony	ND	0.50	1	09/13/2018 11:10
Arsenic	ND	0.50	1	09/13/2018 11:10
Barium	ND	5.0	1	09/13/2018 11:10
Beryllium	ND	0.50	1	09/13/2018 11:10
Cadmium	ND	0.25	1	09/13/2018 11:10
Chromium	<b>27</b>	0.50	1	09/13/2018 11:10
Cobalt	<b>24</b>	0.50	1	09/13/2018 11:10
Copper	<b>19</b>	0.50	1	09/13/2018 11:10
Lead	ND	0.50	1	09/13/2018 11:10
Mercury	<b>0.20</b>	0.050	1	09/13/2018 11:10
Molybdenum	ND	0.50	1	09/13/2018 11:10
Nickel	<b>23</b>	0.50	1	09/13/2018 11:10
Selenium	ND	0.50	1	09/13/2018 11:10
Silver	ND	0.50	1	09/13/2018 11:10
Thallium	ND	0.50	1	09/13/2018 11:10
Vanadium	<b>120</b>	0.50	1	09/13/2018 11:10
Zinc	<b>9.9</b>	5.0	1	09/13/2018 11:10

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
Terbium	105	70-130	09/13/2018 11:10

**Analyst(s):** JC

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	ICP-MS1 027SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 10:40
Arsenic	ND	0.50	1	09/13/2018 10:40
Barium	ND	5.0	1	09/13/2018 10:40
Beryllium	ND	0.50	1	09/13/2018 10:40
Cadmium	ND	0.25	1	09/13/2018 10:40
Chromium	<b>38</b>	0.50	1	09/13/2018 10:40
Cobalt	<b>27</b>	0.50	1	09/13/2018 10:40
Copper	<b>27</b>	0.50	1	09/13/2018 10:40
Lead	ND	0.50	1	09/13/2018 10:40
Mercury	<b>0.41</b>	0.050	1	09/13/2018 10:40
Molybdenum	ND	0.50	1	09/13/2018 10:40
Nickel	<b>30</b>	0.50	1	09/13/2018 10:40
Selenium	ND	0.50	1	09/13/2018 10:40
Silver	ND	0.50	1	09/13/2018 10:40
Thallium	ND	0.50	1	09/13/2018 10:40
Vanadium	<b>150</b>	0.50	1	09/13/2018 10:40
Zinc	<b>25</b>	5.0	1	09/13/2018 10:40

Surrogates	REC (%)	Limits	
Terbium	104	70-130	09/13/2018 10:40

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	ICP-MS1 031SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 11:04
Arsenic	<b>2.7</b>	0.50	1	09/13/2018 11:04
Barium	ND	5.0	1	09/13/2018 11:04
Beryllium	ND	0.50	1	09/13/2018 11:04
Cadmium	ND	0.25	1	09/13/2018 11:04
Chromium	<b>36</b>	0.50	1	09/13/2018 11:04
Cobalt	<b>29</b>	0.50	1	09/13/2018 11:04
Copper	<b>36</b>	0.50	1	09/13/2018 11:04
Lead	ND	0.50	1	09/13/2018 11:04
Mercury	<b>0.21</b>	0.050	1	09/13/2018 11:04
Molybdenum	ND	0.50	1	09/13/2018 11:04
Nickel	<b>29</b>	0.50	1	09/13/2018 11:04
Selenium	ND	0.50	1	09/13/2018 11:04
Silver	ND	0.50	1	09/13/2018 11:04
Thallium	ND	0.50	1	09/13/2018 11:04
Vanadium	<b>140</b>	0.50	1	09/13/2018 11:04
Zinc	<b>71</b>	5.0	1	09/13/2018 11:04

Surrogates	REC (%)	Limits	
Terbium	104	70-130	09/13/2018 11:04

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	ICP-MS3 030SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 11:04
Arsenic	ND	0.50	1	09/13/2018 11:04
Barium	ND	5.0	1	09/13/2018 11:04
Beryllium	ND	0.50	1	09/13/2018 11:04
Cadmium	ND	0.25	1	09/13/2018 11:04
Chromium	37	0.50	1	09/13/2018 11:04
Cobalt	28	0.50	1	09/13/2018 11:04
Copper	12	0.50	1	09/13/2018 11:04
Lead	ND	0.50	1	09/13/2018 11:04
Mercury	0.41	0.050	1	09/13/2018 11:04
Molybdenum	ND	0.50	1	09/13/2018 11:04
Nickel	34	0.50	1	09/13/2018 11:04
Selenium	ND	0.50	1	09/13/2018 11:04
Silver	ND	0.50	1	09/13/2018 11:04
Thallium	ND	0.50	1	09/13/2018 11:04
Vanadium	140	0.50	1	09/13/2018 11:04
Zinc	12	5.0	1	09/13/2018 11:04

Surrogates	REC (%)	Limits	
Terbium	107	70-130	09/13/2018 11:04

Analyst(s): JC

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	ICP-MS1 032SMPL.D	164796

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/13/2018 11:11
Arsenic	ND	0.50	1	09/13/2018 11:11
Barium	ND	5.0	1	09/13/2018 11:11
Beryllium	ND	0.50	1	09/13/2018 11:11
Cadmium	ND	0.25	1	09/13/2018 11:11
Chromium	<b>48</b>	0.50	1	09/13/2018 11:11
Cobalt	<b>25</b>	0.50	1	09/13/2018 11:11
Copper	<b>32</b>	0.50	1	09/13/2018 11:11
Lead	ND	0.50	1	09/13/2018 11:11
Mercury	<b>0.25</b>	0.050	1	09/13/2018 11:11
Molybdenum	ND	0.50	1	09/13/2018 11:11
Nickel	<b>30</b>	0.50	1	09/13/2018 11:11
Selenium	ND	0.50	1	09/13/2018 11:11
Silver	ND	0.50	1	09/13/2018 11:11
Thallium	ND	0.50	1	09/13/2018 11:11
Vanadium	<b>130</b>	0.50	1	09/13/2018 11:11
Zinc	<b>13</b>	5.0	1	09/13/2018 11:11

Surrogates	REC (%)	Limits	
Terbium	103	70-130	09/13/2018 11:11

Analyst(s): JC



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC19 09121823.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/12/2018 22:32
MTBE	ND	0.050	1	09/12/2018 22:32
Benzene	ND	0.0050	1	09/12/2018 22:32
Toluene	ND	0.0050	1	09/12/2018 22:32
Ethylbenzene	ND	0.0050	1	09/12/2018 22:32
m,p-Xylene	ND	0.010	1	09/12/2018 22:32
o-Xylene	ND	0.0050	1	09/12/2018 22:32
Xylenes	ND	0.0050	1	09/12/2018 22:32

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	09/12/2018 22:32

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	GC3 09131808.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 14:20
MTBE	ND	0.050	1	09/13/2018 14:20
Benzene	ND	0.0050	1	09/13/2018 14:20
Toluene	ND	0.0050	1	09/13/2018 14:20
Ethylbenzene	ND	0.0050	1	09/13/2018 14:20
m,p-Xylene	ND	0.010	1	09/13/2018 14:20
o-Xylene	ND	0.0050	1	09/13/2018 14:20
Xylenes	ND	0.0050	1	09/13/2018 14:20

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	89	62-126	09/13/2018 14:20

Analyst(s): IA

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	GC7 09131810.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 15:12
MTBE	ND	0.050	1	09/13/2018 15:12
Benzene	ND	0.0050	1	09/13/2018 15:12
Toluene	ND	0.0050	1	09/13/2018 15:12
Ethylbenzene	ND	0.0050	1	09/13/2018 15:12
m,p-Xylene	ND	0.010	1	09/13/2018 15:12
o-Xylene	ND	0.0050	1	09/13/2018 15:12
Xylenes	ND	0.0050	1	09/13/2018 15:12

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	80	62-126	09/13/2018 15:12

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	GC7 09131811.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 15:42
MTBE	ND	0.050	1	09/13/2018 15:42
Benzene	ND	0.0050	1	09/13/2018 15:42
Toluene	ND	0.0050	1	09/13/2018 15:42
Ethylbenzene	ND	0.0050	1	09/13/2018 15:42
m,p-Xylene	ND	0.010	1	09/13/2018 15:42
o-Xylene	ND	0.0050	1	09/13/2018 15:42
Xylenes	ND	0.0050	1	09/13/2018 15:42

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	09/13/2018 15:42

Analyst(s): IA

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	GC7 09131813.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 16:42
MTBE	ND	0.050	1	09/13/2018 16:42
Benzene	ND	0.0050	1	09/13/2018 16:42
Toluene	ND	0.0050	1	09/13/2018 16:42
Ethylbenzene	ND	0.0050	1	09/13/2018 16:42
m,p-Xylene	ND	0.010	1	09/13/2018 16:42
o-Xylene	ND	0.0050	1	09/13/2018 16:42
Xylenes	ND	0.0050	1	09/13/2018 16:42

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	09/13/2018 16:42

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	GC7 09131814.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 17:12
MTBE	ND	0.050	1	09/13/2018 17:12
Benzene	ND	0.0050	1	09/13/2018 17:12
Toluene	ND	0.0050	1	09/13/2018 17:12
Ethylbenzene	ND	0.0050	1	09/13/2018 17:12
m,p-Xylene	ND	0.010	1	09/13/2018 17:12
o-Xylene	ND	0.0050	1	09/13/2018 17:12
Xylenes	ND	0.0050	1	09/13/2018 17:12

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	09/13/2018 17:12

Analyst(s): IA

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC7 09131815.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 17:42
MTBE	ND	0.050	1	09/13/2018 17:42
Benzene	ND	0.0050	1	09/13/2018 17:42
Toluene	ND	0.0050	1	09/13/2018 17:42
Ethylbenzene	ND	0.0050	1	09/13/2018 17:42
m,p-Xylene	ND	0.010	1	09/13/2018 17:42
o-Xylene	ND	0.0050	1	09/13/2018 17:42
Xylenes	ND	0.0050	1	09/13/2018 17:42

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	84	62-126	09/13/2018 17:42

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	GC3 09131809.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 14:52
MTBE	ND	0.050	1	09/13/2018 14:52
Benzene	ND	0.0050	1	09/13/2018 14:52
Toluene	ND	0.0050	1	09/13/2018 14:52
Ethylbenzene	ND	0.0050	1	09/13/2018 14:52
m,p-Xylene	ND	0.010	1	09/13/2018 14:52
o-Xylene	ND	0.0050	1	09/13/2018 14:52
Xylenes	ND	0.0050	1	09/13/2018 14:52

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	86	62-126	09/13/2018 14:52

Analyst(s): IA

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	GC3 09131811.D	164797
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	ND		1.0	1	09/13/2018 15:56
MTBE	ND		0.050	1	09/13/2018 15:56
Benzene	ND		0.0050	1	09/13/2018 15:56
Toluene	ND		0.0050	1	09/13/2018 15:56
Ethylbenzene	ND		0.0050	1	09/13/2018 15:56
m,p-Xylene	ND		0.010	1	09/13/2018 15:56
o-Xylene	ND		0.0050	1	09/13/2018 15:56
Xylenes	ND		0.0050	1	09/13/2018 15:56
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	94		62-126		09/13/2018 15:56
<u>Analyst(s):</u> IA					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	GC3 09131812.D	164797
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	ND		1.0	1	09/13/2018 16:28
MTBE	ND		0.050	1	09/13/2018 16:28
Benzene	ND		0.0050	1	09/13/2018 16:28
Toluene	ND		0.0050	1	09/13/2018 16:28
Ethylbenzene	ND		0.0050	1	09/13/2018 16:28
m,p-Xylene	ND		0.010	1	09/13/2018 16:28
o-Xylene	ND		0.0050	1	09/13/2018 16:28
Xylenes	ND		0.0050	1	09/13/2018 16:28
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	93		62-126		09/13/2018 16:28
<u>Analyst(s):</u> IA					

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW5030B  
**Date Prepared:** 9/12/18      **Analytical Method:** SW8021B/8015Bm  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	GC3 09131813.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 17:00
MTBE	ND	0.050	1	09/13/2018 17:00
Benzene	ND	0.0050	1	09/13/2018 17:00
Toluene	ND	0.0050	1	09/13/2018 17:00
Ethylbenzene	ND	0.0050	1	09/13/2018 17:00
m,p-Xylene	ND	0.010	1	09/13/2018 17:00
o-Xylene	ND	0.0050	1	09/13/2018 17:00
Xylenes	ND	0.0050	1	09/13/2018 17:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	94	62-126	09/13/2018 17:00

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	GC3 09131814.D	164797

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	09/13/2018 17:32
MTBE	ND	0.050	1	09/13/2018 17:32
Benzene	ND	0.0050	1	09/13/2018 17:32
Toluene	ND	0.0050	1	09/13/2018 17:32
Ethylbenzene	ND	0.0050	1	09/13/2018 17:32
m,p-Xylene	ND	0.010	1	09/13/2018 17:32
o-Xylene	ND	0.0050	1	09/13/2018 17:32
Xylenes	ND	0.0050	1	09/13/2018 17:32

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	92	62-126	09/13/2018 17:32

Analyst(s): IA



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW9045C  
**Date Prepared:** 9/12/18      **Analytical Method:** SW9045C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** pH units @ 25°C

### pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.48	±0.1	1	09/12/2018 21:42

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.65	±0.1	1	09/12/2018 21:44

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.67	±0.1	1	09/12/2018 21:45

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.55	±0.1	1	09/12/2018 21:46

Analyst(s): PHU

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW9045C  
**Date Prepared:** 9/12/18      **Analytical Method:** SW9045C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** pH units @ 25°C

### pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.54	±0.1	1	09/12/2018 21:47

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.78	±0.1	1	09/12/2018 21:48

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.13	±0.1	1	09/12/2018 21:49

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.07	±0.1	1	09/12/2018 21:50

Analyst(s): PHU

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Received:** 9/12/18 13:30      **Extraction Method:** SW9045C  
**Date Prepared:** 9/12/18      **Analytical Method:** SW9045C  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Unit:** pH units @ 25°C

### pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.06	±0.1	1	09/12/2018 21:51

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	WetChem	164817

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.25	±0.1	1	09/12/2018 21:52

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	WetChem	164818

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.12	±0.1	1	09/12/2018 21:54

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	WetChem	164818

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.17	±0.1	1	09/12/2018 21:56

Analyst(s): PHU



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB1 3/4" AB	1809403-001A	Soil	09/12/2018 10:35	GC6B 09121849.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 08:06
TPH-Motor Oil (C18-C36)		6.3	5.0	1	09/13/2018 08:06
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		86	74-123		09/13/2018 08:06
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB2 3/4" AB	1809403-002A	Soil	09/12/2018 10:40	GC6A 09121858.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 10:42
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 10:42
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		106	74-123		09/13/2018 10:42
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB3 3/4" AB	1809403-003A	Soil	09/12/2018 10:44	GC6A 09121850.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 08:06
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 08:06
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		105	74-123		09/13/2018 08:06
<u>Analyst(s):</u> JIS					

(Cont.)





## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB4 3/4" AB	1809403-004A	Soil	09/12/2018 10:48	GC6A 09121846.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 06:48
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 06:48
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		105	74-123		09/13/2018 06:48
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB5 3/4" AB	1809403-005A	Soil	09/12/2018 10:57	GC6A 09121852.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 08:45
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 08:45
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		106	74-123		09/13/2018 08:45
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-AB6 3/4" AB	1809403-006A	Soil	09/12/2018 10:59	GC9a 09121852.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 09:40
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 09:40
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		95	74-123		09/13/2018 09:40
<u>Analyst(s):</u> JIS					

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT1 1/2" DUST TAILINGS	1809403-007A	Soil	09/12/2018 11:32	GC6A 09121862.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 12:00
TPH-Motor Oil (C18-C36)		6.6	5.0	1	09/13/2018 12:00
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		105	74-123		09/13/2018 12:00
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT2 1/2" DUST TAILINGS	1809403-008A	Soil	09/12/2018 11:34	GC6B 09121859.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 11:21
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 11:21
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		86	74-123		09/13/2018 11:21
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT3 1/2" DUST TAILINGS	1809403-009A	Soil	09/12/2018 11:35	GC6B 09121855.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 10:03
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 10:03
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		85	74-123		09/13/2018 10:03
<u>Analyst(s):</u> JIS					

(Cont.)



## Analytical Report

**Client:** Environmental Technical Services, Inc.  
**Date Received:** 9/12/18 13:30  
**Date Prepared:** 9/12/18  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA

**WorkOrder:** 1809403  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT4 1/2" DUST TAILINGS	1809403-010A	Soil	09/12/2018 11:36	GC6A 09121860.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 11:21
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 11:21
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		105	74-123		09/13/2018 11:21
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT5 1/2" DUST TAILINGS	1809403-011A	Soil	09/12/2018 11:38	GC6B 09121857.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 10:42
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 10:42
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		86	74-123		09/13/2018 10:42
<u>Analyst(s):</u> JIS					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
205 BS-091218-DT6 1/2" DUST TAILINGS	1809403-012A	Soil	09/12/2018 11:39	GC6A 09121856.D	164790
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	09/13/2018 10:03
TPH-Motor Oil (C18-C36)		ND	5.0	1	09/13/2018 10:03
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		104	74-123		09/13/2018 10:03
<u>Analyst(s):</u> JIS					



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164814
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3060A
<b>Instrument:</b>	IC2	<b>Analytical Method:</b>	SW7199
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164814 1809403-005AMS/MSD

### QC Summary Report for SW7199 (Hexavalent chromium)

Analyte	MB Result	MDL	RL			
Hexavalent chromium	ND	0.10	0.20	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Hexavalent chromium	19.4	19.4	20	97	97	70-130	0	10

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexavalent chromium	1	20.0	19.8	20	ND	100	99	70-130	1.12	20



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164794
<b>Date Analyzed:</b>	9/14/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC38	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0050	-	-	-
Benzene	ND	0.0050	-	-	-
Bromobenzene	ND	0.0050	-	-	-
Bromochloromethane	ND	0.0050	-	-	-
Bromodichloromethane	ND	0.0010	-	-	-
Bromoform	ND	0.0050	-	-	-
Bromomethane	ND	0.0050	-	-	-
2-Butanone (MEK)	ND	0.020	-	-	-
t-Butyl alcohol (TBA)	ND	0.050	-	-	-
n-Butyl benzene	ND	0.0050	-	-	-
sec-Butyl benzene	ND	0.0050	-	-	-
tert-Butyl benzene	ND	0.0050	-	-	-
Carbon Disulfide	ND	0.0050	-	-	-
Carbon Tetrachloride	ND	0.0050	-	-	-
Chlorobenzene	ND	0.0050	-	-	-
Chloroethane	ND	0.0050	-	-	-
Chloroform	ND	0.0050	-	-	-
Chloromethane	ND	0.0050	-	-	-
2-Chlorotoluene	ND	0.0050	-	-	-
4-Chlorotoluene	ND	0.0050	-	-	-
Dibromochloromethane	ND	0.0050	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.00025	-	-	-
1,2-Dibromoethane (EDB)	ND	0.00010	-	-	-
Dibromomethane	ND	0.0050	-	-	-
1,2-Dichlorobenzene	ND	0.0050	-	-	-
1,3-Dichlorobenzene	ND	0.0050	-	-	-
1,4-Dichlorobenzene	ND	0.0050	-	-	-
Dichlorodifluoromethane	ND	0.0050	-	-	-
1,1-Dichloroethane	ND	0.0050	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	-	-	-
1,1-Dichloroethene	ND	0.00025	-	-	-
cis-1,2-Dichloroethene	ND	0.0050	-	-	-
trans-1,2-Dichloroethene	ND	0.0050	-	-	-
1,2-Dichloropropane	ND	0.0050	-	-	-
1,3-Dichloropropane	ND	0.0050	-	-	-
2,2-Dichloropropane	ND	0.0050	-	-	-
1,1-Dichloropropene	ND	0.0050	-	-	-

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164794
<b>Date Analyzed:</b>	9/14/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC38	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.0050	-	-	-
trans-1,3-Dichloropropene	ND	0.0050	-	-	-
Diisopropyl ether (DIPE)	ND	0.0050	-	-	-
Ethylbenzene	ND	0.0050	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0050	-	-	-
Freon 113	ND	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0050	-	-	-
Hexachloroethane	ND	0.0050	-	-	-
2-Hexanone	ND	0.0050	-	-	-
Isopropylbenzene	ND	0.0050	-	-	-
4-Isopropyl toluene	ND	0.0050	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0050	-	-	-
Methylene chloride	ND	0.010	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.0050	-	-	-
Naphthalene	ND	0.0050	-	-	-
n-Propyl benzene	ND	0.0050	-	-	-
Styrene	ND	0.0050	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.0050	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.00025	-	-	-
Tetrachloroethene	ND	0.00025	-	-	-
Toluene	ND	0.0050	-	-	-
1,2,3-Trichlorobenzene	ND	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.0050	-	-	-
1,1,1-Trichloroethane	ND	0.0050	-	-	-
1,1,2-Trichloroethane	ND	0.0050	-	-	-
Trichloroethene	ND	0.0050	-	-	-
Trichlorofluoromethane	ND	0.0050	-	-	-
1,2,3-Trichloropropane	ND	0.00025	-	-	-
1,2,4-Trimethylbenzene	ND	0.0050	-	-	-
1,3,5-Trimethylbenzene	ND	0.0050	-	-	-
Vinyl Chloride	ND	0.00025	-	-	-
Xylenes, Total	ND	0.0050	-	-	-

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## Quality Control Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Prepared:** 9/12/18      **BatchID:** 164794  
**Date Analyzed:** 9/14/18      **Extraction Method:** SW5030B  
**Instrument:** GC38      **Analytical Method:** SW8260B  
**Matrix:** Soil      **Unit:** mg/kg  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Sample ID:** MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
<b>Surrogate Recovery</b>					
Dibromofluoromethane	0.143		0.12	114	87-127
Toluene-d8	0.181		0.12	145,F3	93-141
4-BFB	0.0162		0.012	130	84-137
Benzene-d6	0.0914		0.10	91	67-131
Ethylbenzene-d10	0.106		0.10	106	78-153
1,2-DCB-d4	0.0774		0.10	77	63-109

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CA ELAP 1644 • NELAP 4033ORELAP





## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164794
<b>Date Analyzed:</b>	9/14/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC38	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.202	0.170	0.20	101	85	48-156	17.2	30
tert-Amyl methyl ether (TAME)	0.00608	0.00612	0.010	61	61	56-115	0	30
Benzene	0.00804	0.00813	0.010	80	81	63-131	1.13	30
Bromobenzene	0.0101	0.00967	0.010	101	97	66-127	4.73	30
Bromochloromethane	0.00887	0.00896	0.010	89	90	64-124	1.11	30
Bromodichloromethane	0.00744	0.00751	0.010	74	75	64-120	0.856	30
Bromoform	0.00605	0.00623	0.010	61	62	48-92	2.98	30
Bromomethane	0.00774	0.00718	0.010	77	72	25-163	7.52	30
2-Butanone (MEK)	0.0348	0.0338	0.040	87	85	51-133	2.94	30
t-Butyl alcohol (TBA)	0.0385	0.0367	0.040	96	92	52-129	4.70	30
n-Butyl benzene	0.0135	0.0137	0.010	135	137	83-200	1.23	30
sec-Butyl benzene	0.0125	0.0129	0.010	125	129	81-199	2.80	30
tert-Butyl benzene	0.0114	0.0119	0.010	114	119	79-178	3.97	30
Carbon Disulfide	0.00888	0.00886	0.010	89	89	64-136	0	30
Carbon Tetrachloride	0.00959	0.00972	0.010	96	97	66-140	1.29	30
Chlorobenzene	0.00932	0.00930	0.010	93	93	73-116	0	30
Chloroethane	0.00774	0.00754	0.010	77	75	35-147	2.64	30
Chloroform	0.00926	0.00931	0.010	93	93	65-130	0	30
Chloromethane	0.00578	0.00545	0.010	58	54	30-137	5.88	30
2-Chlorotoluene	0.0110	0.0108	0.010	110	108	75-152	2.12	30
4-Chlorotoluene	0.0102	0.0101	0.010	102	101	71-148	1.41	30
Dibromochloromethane	0.00731	0.00745	0.010	73	75	61-106	1.95	30
1,2-Dibromo-3-chloropropane	0.00321	0.00301	0.0040	80	75	36-120	6.26	30
1,2-Dibromoethane (EDB)	0.00860	0.00877	0.010	86	88	67-118	1.95	30
Dibromomethane	0.00764	0.00779	0.010	76	78	61-116	1.98	30
1,2-Dichlorobenzene	0.00870	0.00829	0.010	87	83	59-106	4.79	30
1,3-Dichlorobenzene	0.0104	0.0101	0.010	104	101	75-129	2.50	30
1,4-Dichlorobenzene	0.00952	0.00916	0.010	95	92	66-127	3.89	30
Dichlorodifluoromethane	0.00326	0.00312	0.010	33	31	13-74	4.55	30
1,1-Dichloroethane	0.00901	0.00906	0.010	90	91	65-134	0.557	30
1,2-Dichloroethane (1,2-DCA)	0.00830	0.00834	0.010	83	83	57-131	0	30
1,1-Dichloroethene	0.0104	0.0103	0.010	103	103	62-127	0	30
cis-1,2-Dichloroethene	0.00881	0.00890	0.010	88	89	66-130	0.980	30
trans-1,2-Dichloroethene	0.00909	0.00910	0.010	91	91	60-131	0	30
1,2-Dichloropropane	0.00795	0.00807	0.010	79	81	63-127	1.48	30
1,3-Dichloropropane	0.00898	0.00907	0.010	90	91	68-124	1.06	30
2,2-Dichloropropane	0.00869	0.00864	0.010	87	86	63-150	0.629	30
1,1-Dichloropropene	0.00900	0.00917	0.010	90	92	67-134	1.87	30

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164794
<b>Date Analyzed:</b>	9/14/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC38	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.00841	0.00862	0.010	84	86	65-138	2.47	30
trans-1,3-Dichloropropene	0.00826	0.00815	0.010	83	81	66-124	1.34	30
Diisopropyl ether (DIPE)	0.00710	0.00713	0.010	71	71	58-129	0	30
Ethylbenzene	0.00967	0.00977	0.010	97	98	73-145	1.02	30
Ethyl tert-butyl ether (ETBE)	0.00691	0.00692	0.010	69	69	62-125	0	30
Freon 113	0.00824	0.00820	0.010	82	82	55-116	0	30
Hexachlorobutadiene	0.0131	0.0132	0.010	131	132	75-178	0.442	30
Hexachloroethane	0.0103	0.0104	0.010	103	104	75-152	1.42	30
2-Hexanone	0.00383	0.00397	0.010	38, F2	40, F2	41-113	3.45	30
Isopropylbenzene	0.0132	0.0137	0.010	131	137	67-172	4.16	30
4-Isopropyl toluene	0.0125	0.0128	0.010	125	128	88-171	2.29	30
Methyl-t-butyl ether (MTBE)	0.00754	0.00743	0.010	75	74	58-122	1.43	30
Methylene chloride	0.0110	0.0108	0.010	110	108	57-140	1.58	30
4-Methyl-2-pentanone (MIBK)	0.00505	0.00531	0.010	50	53	42-117	5.14	30
Naphthalene	0.0103	0.00654	0.010	103, F2	65	29-65	45.0,F2	30
n-Propyl benzene	0.0123	0.0126	0.010	123	126	85-174	2.60	30
Styrene	0.00815	0.00766	0.010	81	77	63-126	6.12	30
1,1,1,2-Tetrachloroethane	0.00905	0.00923	0.010	91	92	68-131	1.94	30
1,1,2,2-Tetrachloroethane	0.00791	0.00800	0.010	79	80	45-121	1.17	30
Tetrachloroethene	0.0111	0.0114	0.010	111	114	65-150	2.77	30
Toluene	0.0122	0.0124	0.010	122	124	72-135	1.84	30
1,2,3-Trichlorobenzene	0.00753	0.00652	0.010	75	65	35-80	14.3	30
1,2,4-Trichlorobenzene	0.00864	0.00771	0.010	86	77	45-103	11.3	30
1,1,1-Trichloroethane	0.00906	0.00910	0.010	91	91	67-137	0	30
1,1,2-Trichloroethane	0.00863	0.00888	0.010	86	89	67-117	2.88	30
Trichloroethene	0.00905	0.00923	0.010	90	92	62-135	1.98	30
Trichlorofluoromethane	0.00691	0.00801	0.010	69	80	56-124	14.7	30
1,2,3-Trichloropropane	0.00947	0.00965	0.010	95	97	58-133	1.94	30
1,2,4-Trimethylbenzene	0.0113	0.0110	0.010	113	110	78-161	2.89	30
1,3,5-Trimethylbenzene	0.0116	0.0114	0.010	116	114	85-170	1.84	30
Vinyl Chloride	0.00743	0.00709	0.010	74	71	32-142	4.80	30
Xylenes, Total	0.0261	0.0261	0.030	87	87	70-137	0	30

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164794
<b>Date Analyzed:</b>	9/14/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC38	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164794

### QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
<b>Surrogate Recovery</b>								
Dibromofluoromethane	0.146	0.144	0.12	117	115	87-127	1.74	30
Toluene-d8	0.179	0.179	0.12	143, F3	143, F3	93-141	0	30
4-BFB	0.0165	0.0167	0.012	132	133	84-137	1.05	30
Benzene-d6	0.0878	0.0879	0.10	88	88	67-131	0	30
Ethylbenzene-d10	0.102	0.105	0.10	102	105	78-153	2.76	30
1,2-DCB-d4	0.0777	0.0783	0.10	78	78	63-109	0	30



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164743
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.00077	0.0013	-	-	-
Acenaphthylene	ND	0.00041	0.0013	-	-	-
Acetochlor	ND	0.25	0.25	-	-	-
Anthracene	ND	0.00082	0.0013	-	-	-
Benzidine	ND	0.67	1.2	-	-	-
Benzo (a) anthracene	ND	0.0043	0.0050	-	-	-
Benzo (a) pyrene	ND	0.0012	0.0025	-	-	-
Benzo (b) fluoranthene	ND	0.00074	0.0013	-	-	-
Benzo (g,h,i) perylene	ND	0.0011	0.0025	-	-	-
Benzo (k) fluoranthene	ND	0.00079	0.0013	-	-	-
Benzyl Alcohol	ND	0.76	1.2	-	-	-
1,1-Biphenyl	ND	0.0023	0.013	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0034	0.0050	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	-	-	-
Butylbenzyl Phthalate	ND	0.021	0.025	-	-	-
4-Chloroaniline	ND	0.0016	0.0025	-	-	-
4-Chloro-3-methylphenol	ND	0.20	0.25	-	-	-
2-Chloronaphthalene	ND	0.14	0.25	-	-	-
2-Chlorophenol	ND	0.0020	0.0050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	-	-	-
Chrysene	ND	0.00080	0.0025	-	-	-
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	-	-	-
Dibenzofuran	ND	0.16	0.25	-	-	-
Di-n-butyl Phthalate	ND	0.0020	0.0025	-	-	-
1,2-Dichlorobenzene	ND	0.15	0.25	-	-	-
1,3-Dichlorobenzene	ND	0.13	0.25	-	-	-
1,4-Dichlorobenzene	ND	0.18	0.25	-	-	-
3,3-Dichlorobenzidine	ND	0.0016	0.0025	-	-	-
2,4-Dichlorophenol	ND	0.0017	0.013	-	-	-
Diethyl Phthalate	ND	0.0036	0.0050	-	-	-
2,4-Dimethylphenol	ND	0.16	0.25	-	-	-
Dimethyl Phthalate	ND	0.0025	0.0025	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	-	-	-
2,4-Dinitrophenol	ND	0.051	0.13	-	-	-

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164743
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrotoluene	ND	0.0011	0.0063	-	-	-
2,6-Dinitrotoluene	ND	0.0013	0.0025	-	-	-
Di-n-octyl Phthalate	ND	0.0043	0.0050	-	-	-
1,2-Diphenylhydrazine	ND	0.15	0.25	-	-	-
Fluoranthene	ND	0.0011	0.0013	-	-	-
Fluorene	ND	0.00086	0.0025	-	-	-
Hexachlorobenzene	ND	0.00057	0.0013	-	-	-
Hexachlorobutadiene	ND	0.00042	0.0025	-	-	-
Hexachlorocyclopentadiene	ND	0.11	2.0	-	-	-
Hexachloroethane	ND	0.0011	0.0025	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	-	-	-
Isophorone	ND	0.15	0.25	-	-	-
2-Methylnaphthalene	ND	0.0017	0.0025	-	-	-
2-Methylphenol (o-Cresol)	ND	0.27	0.50	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	-	-	-
Naphthalene	ND	0.00069	0.0013	-	-	-
2-Nitroaniline	ND	0.69	1.2	-	-	-
3-Nitroaniline	ND	0.84	1.2	-	-	-
4-Nitroaniline	ND	1.1	1.2	-	-	-
Nitrobenzene	ND	0.16	0.25	-	-	-
2-Nitrophenol	ND	0.66	1.2	-	-	-
4-Nitrophenol	ND	0.77	1.2	-	-	-
N-Nitrosodiphenylamine	ND	0.15	0.25	-	-	-
N-Nitrosodi-n-propylamine	ND	0.14	0.25	-	-	-
Pentachlorophenol	ND	0.014	0.031	-	-	-
Phenanthrene	ND	0.00067	0.0050	-	-	-
Phenol	ND	0.00094	0.0050	-	-	-
Pyrene	ND	0.0014	0.0025	-	-	-
Pyridine	ND	0.18	0.25	-	-	-
1,2,4-Trichlorobenzene	ND	0.15	0.25	-	-	-
2,4,5-Trichlorophenol	ND	0.0013	0.0025	-	-	-
2,4,6-Trichlorophenol	ND	0.0012	0.013	-	-	-

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## Quality Control Report

**Client:** Environmental Technical Services, Inc.      **WorkOrder:** 1809403  
**Date Prepared:** 9/12/18      **BatchID:** 164743  
**Date Analyzed:** 9/12/18      **Extraction Method:** SW3550B/3640A  
**Instrument:** GC21      **Analytical Method:** SW8270C  
**Matrix:** Soil      **Unit:** mg/Kg  
**Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA      **Sample ID:** MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
<b>Surrogate Recovery</b>						
2-Fluorophenol	1.08			1.25	86	30-130
Phenol-d5	1.09			1.25	87	30-130
Nitrobenzene-d5	0.942			1.25	75	30-130
2-Fluorobiphenyl	0.835			1.25	67	30-130
2,4,6-Tribromophenol	0.825			1.25	66	16-130
4-Terphenyl-d14	0.783			1.25	63	30-130

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164743
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.0509	0.0447	0.062	81	72	46-118	13.0	30
Acenaphthylene	0.0494	0.0434	0.062	79	69	43-122	13.2	30
Anthracene	0.0512	0.0442	0.062	82	71	47-125	14.6	30
Benzidine	1.45	1.46	6.25	23	23	13-83	0	30
Benzo (a) anthracene	0.0438	0.0413	0.062	70	66	53-117	5.92	30
Benzo (a) pyrene	0.0482	0.0455	0.062	77	73	53-138	5.67	30
Benzo (b) fluoranthene	0.0474	0.0445	0.062	76	71	48-125	6.34	30
Benzo (g,h,i) perylene	0.0421	0.0401	0.062	67	64	51-146	4.85	30
Benzo (k) fluoranthene	0.0452	0.0421	0.062	72	67	53-124	7.15	30
Benzyl Alcohol	4.79	3.86	6.25	77	62	51-105	21.5	30
Bis (2-chloroethoxy) Methane	1.10	1.01	1.25	88	81	48-115	7.89	30
Bis (2-chloroethyl) Ether	0.0587	0.0538	0.062	94	86	51-105	8.80	30
Bis (2-chloroisopropyl) Ether	0.0553	0.0492	0.062	88	79, F2	85-119	11.7	30
Bis (2-ethylhexyl) Adipate	1.03	0.939	1.25	82	75	46-117	9.06	30
Bis (2-ethylhexyl) Phthalate	0.0492	0.0460	0.062	79	74	50-124	6.93	30
4-Bromophenyl Phenyl Ether	0.959	0.866	1.25	77	69, F2	70-112	10.1	30
Butylbenzyl Phthalate	0.994	0.930	1.25	80	74	55-127	6.66	30
4-Chloroaniline	0.0384	0.0364	0.062	61	58	18-77	5.43	30
4-Chloro-3-methylphenol	1.04	0.964	1.25	83	77	49-123	7.79	30
2-Chloronaphthalene	0.996	0.876	1.25	80	70	44-109	12.8	30
2-Chlorophenol	0.0574	0.0530	0.062	92	85	55-116	8.06	30
4-Chlorophenyl Phenyl Ether	1.04	0.875	1.25	84	70	45-122	17.7	30
Chrysene	0.0428	0.0401	0.062	69	64	54-116	6.58	30
Dibenzo (a,h) anthracene	0.0456	0.0427	0.062	73	68	52-141	6.56	30
Dibenzofuran	0.975	0.862	1.25	78	69	46-117	12.4	30
Di-n-butyl Phthalate	0.0520	0.0453	0.062	83	72	45-126	13.9	30
1,2-Dichlorobenzene	1.08	0.983	1.25	86	79	55-105	9.50	30
1,3-Dichlorobenzene	1.05	0.967	1.25	84	77	51-104	8.47	30
1,4-Dichlorobenzene	1.03	0.946	1.25	82	76	50-102	8.66	30
3,3-Dichlorobenzidine	0.0286	0.0281	0.062	46	45	20-84	1.98	30
2,4-Dichlorophenol	0.0572	0.0523	0.062	92	84	54-124	9.02	30
Diethyl Phthalate	0.0518	0.0447	0.062	83	71	42-118	14.9	30
2,4-Dimethylphenol	1.04	0.989	1.25	83	79	53-120	4.96	30
Dimethyl Phthalate	0.0533	0.0462	0.062	85	74	45-118	14.4	30
4,6-Dinitro-2-methylphenol	4.07	3.71	6.25	65	59	32-126	9.31	30
2,4-Dinitrophenol	0.176	0.152	0.31	56	49	20-130	14.3	30
2,4-Dinitrotoluene	0.0493	0.0444	0.062	79	71	47-117	10.4	30
2,6-Dinitrotoluene	0.0520	0.0460	0.062	83	74	48-121	12.3	30

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164743
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.0571	0.0493	0.062	91	79	40-150	14.6	30
1,2-Diphenylhydrazine	1.03	0.890	1.25	82, F2	71, F2	88-117	14.6	30
Fluoranthene	0.0496	0.0428	0.062	79	69	45-126	14.6	30
Fluorene	0.0524	0.0453	0.062	84	72	43-118	14.6	30
Hexachlorobenzene	0.0488	0.0420	0.062	78	67	47-130	14.9	30
Hexachlorobutadiene	0.0518	0.0463	0.062	83	74	50-121	11.3	30
Hexachlorocyclopentadiene	4.19	3.63	6.25	67	58	30-89	14.4	30
Hexachloroethane	0.0531	0.0482	0.062	85	77	50-106	9.66	30
Indeno (1,2,3-cd) pyrene	0.0433	0.0404	0.062	69	65	51-138	7.04	30
Isophorone	1.07	0.987	1.25	85	79	38-92	7.83	30
2-Methylnaphthalene	0.0645	0.0579	0.062	103	93	51-121	10.9	30
2-Methylphenol (o-Cresol)	1.19	0.969	1.25	95	78	48-114	20.4	30
3 & 4-Methylphenol (m,p-Cresol)	1.14	1.04	1.25	92	83	30-130	9.22	30
Naphthalene	0.0526	0.0467	0.062	84	75	50-113	11.8	30
2-Nitroaniline	5.40	4.67	6.25	86	75	45-115	14.6	30
3-Nitroaniline	3.91	3.66	6.25	63	58	31-93	6.82	30
4-Nitroaniline	4.79	4.38	6.25	77	70	41-108	9.04	30
Nitrobenzene	1.09	0.964	1.25	87	77	49-122	11.9	30
2-Nitrophenol	5.69	5.12	6.25	91	82	54-121	10.4	30
4-Nitrophenol	5.07	4.16	6.25	81	66	40-102	19.8	30
N-Nitrosodiphenylamine	1.03	0.880	1.25	82	70	30-130	15.7	30
N-Nitrosodi-n-propylamine	1.09	0.971	1.25	87	78	47-108	11.4	30
Pentachlorophenol	0.227	0.198	0.31	73	63	39-134	13.6	30
Phenanthrene	0.0492	0.0425	0.062	79	68	49-123	14.5	30
Phenol	0.0360	0.0343	0.062	58	55	49-107	5.01	30
Pyrene	0.0447	0.0416	0.062	72	67	55-124	7.18	30
Pyridine	0.777	0.620	1.25	62, F2	50, F2	70-130	22.4	30
1,2,4-Trichlorobenzene	1.14	0.999	1.25	91	80	51-121	13.2	30
2,4,5-Trichlorophenol	0.0548	0.0498	0.062	88	80	45-126	9.58	30
2,4,6-Trichlorophenol	0.0548	0.0477	0.062	88	76	46-128	13.9	30

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164743
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164743

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
<b>Surrogate Recovery</b>								
2-Fluorophenol	1.17	1.10	1.25	94	88	47-125	6.62	30
Phenol-d5	1.13	1.18	1.25	90	94	45-117	4.66	30
Nitrobenzene-d5	1.11	1.10	1.25	89	88	39-121	1.16	30
2-Fluorobiphenyl	0.983	0.961	1.25	79	77	35-120	2.27	30
2,4,6-Tribromophenol	0.935	0.866	1.25	75	69	32-111	7.64	30
4-Terphenyl-d14	0.920	0.954	1.25	74	76	32-128	3.59	30

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.00077	0.0013	-	-	-
Acenaphthylene	ND	0.00041	0.0013	-	-	-
Acetochlor	ND	0.25	0.25	-	-	-
Anthracene	ND	0.00082	0.0013	-	-	-
Benzidine	ND	0.67	1.2	-	-	-
Benzo (a) anthracene	ND	0.0043	0.0050	-	-	-
Benzo (a) pyrene	ND	0.0012	0.0025	-	-	-
Benzo (b) fluoranthene	ND	0.00074	0.0013	-	-	-
Benzo (g,h,i) perylene	ND	0.0011	0.0025	-	-	-
Benzo (k) fluoranthene	ND	0.00079	0.0013	-	-	-
Benzyl Alcohol	ND	0.76	1.2	-	-	-
1,1-Biphenyl	ND	0.0023	0.013	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0034	0.0050	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	-	-	-
Butylbenzyl Phthalate	ND	0.021	0.025	-	-	-
4-Chloroaniline	ND	0.0016	0.0025	-	-	-
4-Chloro-3-methylphenol	ND	0.20	0.25	-	-	-
2-Chloronaphthalene	ND	0.14	0.25	-	-	-
2-Chlorophenol	ND	0.0020	0.0050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	-	-	-
Chrysene	ND	0.00080	0.0025	-	-	-
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	-	-	-
Dibenzofuran	ND	0.16	0.25	-	-	-
Di-n-butyl Phthalate	ND	0.0020	0.0025	-	-	-
1,2-Dichlorobenzene	ND	0.15	0.25	-	-	-
1,3-Dichlorobenzene	ND	0.13	0.25	-	-	-
1,4-Dichlorobenzene	ND	0.18	0.25	-	-	-
3,3-Dichlorobenzidine	ND	0.0016	0.0025	-	-	-
2,4-Dichlorophenol	ND	0.0017	0.013	-	-	-
Diethyl Phthalate	ND	0.0036	0.0050	-	-	-
2,4-Dimethylphenol	ND	0.16	0.25	-	-	-
Dimethyl Phthalate	ND	0.0025	0.0025	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	-	-	-
2,4-Dinitrophenol	ND	0.051	0.13	-	-	-

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrotoluene	ND	0.0011	0.0063	-	-	-
2,6-Dinitrotoluene	ND	0.0013	0.0025	-	-	-
Di-n-octyl Phthalate	ND	0.0043	0.0050	-	-	-
1,2-Diphenylhydrazine	ND	0.15	0.25	-	-	-
Fluoranthene	ND	0.0011	0.0013	-	-	-
Fluorene	ND	0.00086	0.0025	-	-	-
Hexachlorobenzene	ND	0.00057	0.0013	-	-	-
Hexachlorobutadiene	ND	0.00042	0.0025	-	-	-
Hexachlorocyclopentadiene	ND	0.11	2.0	-	-	-
Hexachloroethane	ND	0.0011	0.0025	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	-	-	-
Isophorone	ND	0.15	0.25	-	-	-
2-Methylnaphthalene	ND	0.0017	0.0025	-	-	-
2-Methylphenol (o-Cresol)	ND	0.27	0.50	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	-	-	-
Naphthalene	ND	0.00069	0.0013	-	-	-
2-Nitroaniline	ND	0.69	1.2	-	-	-
3-Nitroaniline	ND	0.84	1.2	-	-	-
4-Nitroaniline	ND	1.1	1.2	-	-	-
Nitrobenzene	ND	0.16	0.25	-	-	-
2-Nitrophenol	ND	0.66	1.2	-	-	-
4-Nitrophenol	ND	0.77	1.2	-	-	-
N-Nitrosodimethylamine	ND	0.65	1.2	-	-	-
N-Nitrosodiphenylamine	ND	0.15	0.25	-	-	-
N-Nitrosodi-n-propylamine	ND	0.14	0.25	-	-	-
Pentachlorophenol	ND	0.014	0.031	-	-	-
Phenanthrene	ND	0.00067	0.0050	-	-	-
Phenol	ND	0.00094	0.0050	-	-	-
Pyrene	ND	0.0014	0.0025	-	-	-
Pyridine	ND	0.18	0.25	-	-	-
1,2,4-Trichlorobenzene	ND	0.15	0.25	-	-	-
2,4,5-Trichlorophenol	ND	0.0013	0.0025	-	-	-
2,4,6-Trichlorophenol	ND	0.0012	0.013	-	-	-

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
<b>Surrogate Recovery</b>						
2-Fluorophenol	1.33			1.25	106	30-130
Phenol-d5	1.33			1.25	106	30-130
Nitrobenzene-d5	1.14			1.25	91	30-130
2-Fluorobiphenyl	1.11			1.25	89	30-130
2,4,6-Tribromophenol	1.25			1.25	100	16-130
4-Terphenyl-d14	0.987			1.25	79	30-130

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.0500	0.0473	0.062	80	76	46-118	5.64	30
Acenaphthylene	0.0499	0.0464	0.062	80	74	43-122	7.19	30
Anthracene	0.0489	0.0470	0.062	78	75	47-125	3.80	30
Benzidine	2.08	1.95	6.25	33	31	13-83	6.27	30
Benzo (a) anthracene	0.0449	0.0449	0.062	72	72	53-117	0	30
Benzo (a) pyrene	0.0510	0.0513	0.062	82	82	53-138	0	30
Benzo (b) fluoranthene	0.0486	0.0489	0.062	78	78	48-125	0	30
Benzo (g,h,i) perylene	0.0444	0.0460	0.062	71	74	51-146	3.62	30
Benzo (k) fluoranthene	0.0482	0.0470	0.062	77	75	53-124	2.54	30
Benzyl Alcohol	3.92	3.65	6.25	63	58	51-105	7.29	30
Bis (2-chloroethoxy) Methane	1.13	1.10	1.25	90	88	48-115	2.17	30
Bis (2-chloroethyl) Ether	0.0540	0.0533	0.062	86	85	51-105	1.37	30
Bis (2-chloroisopropyl) Ether	0.0493	0.0494	0.062	79, F2	79, F2	85-119	0	30
Bis (2-ethylhexyl) Adipate	1.04	1.09	1.25	83	87	46-117	4.47	30
Bis (2-ethylhexyl) Phthalate	0.0585	0.0568	0.062	94	91	50-124	2.89	30
4-Bromophenyl Phenyl Ether	0.923	0.949	1.25	74	76	70-112	2.73	30
Butylbenzyl Phthalate	1.07	1.06	1.25	86	85	55-127	0.698	30
4-Chloroaniline	0.0368	0.0373	0.062	59	60	18-77	1.40	30
4-Chloro-3-methylphenol	1.13	1.08	1.25	91	86	49-123	4.89	30
2-Chloronaphthalene	1.00	0.919	1.25	80	74	44-109	8.82	30
2-Chlorophenol	0.0551	0.0540	0.062	88	86	55-116	1.90	30
4-Chlorophenyl Phenyl Ether	1.06	0.923	1.25	84	74	45-122	13.5	30
Chrysene	0.0450	0.0444	0.062	72	71	54-116	1.54	30
Dibenzo (a,h) anthracene	0.0495	0.0502	0.062	79	80	52-141	1.50	30
Dibenzofuran	0.974	0.900	1.25	78	72	46-117	7.98	30
Di-n-butyl Phthalate	0.0575	0.0556	0.062	92	89	45-126	3.30	30
1,2-Dichlorobenzene	0.982	1.01	1.25	79	81	55-105	3.22	30
1,3-Dichlorobenzene	0.958	0.972	1.25	77	78	51-104	1.42	30
1,4-Dichlorobenzene	0.947	0.938	1.25	76	75	50-102	0.928	30
3,3-Dichlorobenzidine	0.0164	0.0202	0.062	26	32	20-84	20.3	30
2,4-Dichlorophenol	0.0591	0.0571	0.062	95	91	54-124	3.45	30
Diethyl Phthalate	0.0568	0.0523	0.062	91	84	42-118	8.20	30
2,4-Dimethylphenol	1.24	1.21	1.25	99	97	53-120	2.80	30
Dimethyl Phthalate	0.0557	0.0503	0.062	89	81	45-118	10.1	30
4,6-Dinitro-2-methylphenol	2.96	2.91	6.25	47	47	32-126	0	30
2,4-Dinitrophenol	0.0770	0.0774	0.31	25	25	20-130	0	30
2,4-Dinitrotoluene	0.0500	0.0483	0.062	80	77	47-117	3.62	30
2,6-Dinitrotoluene	0.0541	0.0497	0.062	87	80	48-121	8.37	30

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.0636	0.0624	0.062	102	100	40-150	1.92	30
1,2-Diphenylhydrazine	0.976	0.938	1.25	78, F2	75, F2	88-117	3.99	30
Fluoranthene	0.0483	0.0468	0.062	77	75	45-126	3.07	30
Fluorene	0.0552	0.0516	0.062	88	82	43-118	6.75	30
Hexachlorobenzene	0.0456	0.0436	0.062	73	70	47-130	4.50	30
Hexachlorobutadiene	0.0511	0.0490	0.062	82	78	50-121	4.32	30
Hexachlorocyclopentadiene	4.90	4.52	6.25	78	72	30-89	8.07	30
Hexachloroethane	0.0486	0.0480	0.062	78	77	50-106	1.42	30
Indeno (1,2,3-cd) pyrene	0.0463	0.0483	0.062	74	77	51-138	4.37	30
Isophorone	1.03	1.01	1.25	82	81	38-92	1.91	30
2-Methylnaphthalene	0.0586	0.0575	0.062	94	92	51-121	1.95	30
2-Methylphenol (o-Cresol)	1.04	1.18	1.25	84	95	48-114	12.4	30
3 & 4-Methylphenol (m,p-Cresol)	1.15	1.18	1.25	92	94	30-130	2.55	30
Naphthalene	0.0496	0.0488	0.062	79	78	50-113	1.80	30
2-Nitroaniline	5.34	5.05	6.25	85	81	45-115	5.69	30
3-Nitroaniline	3.90	3.74	6.25	62	60	31-93	4.03	30
4-Nitroaniline	4.83	4.43	6.25	77	71	41-108	8.69	30
Nitrobenzene	1.07	1.05	1.25	85	84	49-122	1.69	30
2-Nitrophenol	5.49	5.61	6.25	88	90	54-121	2.25	30
4-Nitrophenol	5.55	5.19	6.25	89	83	40-102	6.60	30
N-Nitrosodiphenylamine	0.946	0.946	1.25	76	76	30-130	0	30
N-Nitrosodi-n-propylamine	0.990	1.00	1.25	79	80	47-108	1.03	30
Pentachlorophenol	0.200	0.197	0.31	64	63	39-134	1.56	30
Phenanthrene	0.0466	0.0450	0.062	75	72	49-123	3.32	30
Phenol	0.0359	0.0356	0.062	57	57	49-107	0	30
Pyrene	0.0466	0.0454	0.062	75	73	55-124	2.54	30
Pyridine	0.597	0.616	1.25	48, F2	49, F2	70-130	3.19	30
1,2,4-Trichlorobenzene	1.08	1.02	1.25	86	82	51-121	5.10	30
2,4,5-Trichlorophenol	0.0588	0.0536	0.062	94	86	45-126	9.17	30
2,4,6-Trichlorophenol	0.0593	0.0558	0.062	95	89	46-128	6.13	30

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
<b>Surrogate Recovery</b>								
2-Fluorophenol	1.12	1.16	1.25	90	93	47-125	3.47	30
Phenol-d5	1.11	1.14	1.25	89	91	45-117	2.96	30
Nitrobenzene-d5	1.12	1.18	1.25	90	95	39-121	5.60	30
2-Fluorobiphenyl	0.980	1.02	1.25	78	81	35-120	3.50	30
2,4,6-Tribromophenol	0.997	1.04	1.25	80	83	32-111	4.27	30
4-Terphenyl-d14	0.956	0.985	1.25	76	79	32-128	2.96	30

Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	1	0.0622	0.0700	0.062	ND	100	112	66-115	11.7	30
Acenaphthylene	1	0.0639	0.0699	0.062	ND	102	112	66-115	8.99	30
Anthracene	1	0.0642	0.0686	0.062	ND	103	110	67-116	6.66	30
Benzidine	1	4.84	5.24	6.25	ND	77	84	23-149	8.04	30
Benzo (a) anthracene	1	0.0590	0.0623	0.062	ND	87	93	73-126	5.46	30
Benzo (a) pyrene	1	0.0664	0.0697	0.062	ND	106	111	41-163	4.76	30
Benzo (b) fluoranthene	1	0.0656	0.0702	0.062	ND	105	112	39-146	6.68	30
Benzo (g,h,i) perylene	1	0.0587	0.0634	0.062	ND	94	101	42-159	7.66	30
Benzo (k) fluoranthene	1	0.0612	0.0667	0.062	ND	98	107	41-147	8.66	30
Benzyl Alcohol	1	6.07	6.69	6.25	ND	97	107,F1	65-105	9.76	30
Bis (2-chloroethoxy) Methane	1	1.41	1.46	1.25	ND	113	117,F1	63-115	3.78	30
Bis (2-chloroethyl) Ether	1	0.0622	0.0640	0.062	ND	99	102	58-111	2.89	30
Bis (2-chloroisopropyl) Ether	1	0.0604	0.0622	0.062	ND	97	99	60-137	2.93	30
Bis (2-ethylhexyl) Adipate	1	1.41	1.48	1.25	ND	113	118	52-130	4.50	30
Bis (2-ethylhexyl) Phthalate	1	0.0733	0.0778	0.062	ND	110	118	58-133	5.92	30
4-Bromophenyl Phenyl Ether	1	1.27	1.28	1.25	ND	102	102	66-119	0	30
Butylbenzyl Phthalate	1	1.38	1.47	1.25	ND	110	118	63-136	6.50	30
4-Chloroaniline	1	0.0690	0.0704	0.062	ND	110	113,F1	65-112	2.05	30
4-Chloro-3-methylphenol	1	1.44	1.25	1.25	ND	115	100	74-127	13.6	30
2-Chloronaphthalene	1	1.23	1.36	1.25	ND	99	109,F1	60-102	9.80	30
2-Chlorophenol	1	0.0651	0.0683	0.062	ND	101	106	69-125	4.87	30
4-Chlorophenyl Phenyl Ether	1	1.27	1.40	1.25	ND	101	112	64-118	9.82	30
Chrysene	1	0.0588	0.0619	0.062	ND	94	99	68-112	5.07	30
Dibenzo (a,h) anthracene	1	0.0635	0.0660	0.062	ND	102	106	39-163	3.83	30
Dibenzofuran	1	1.24	1.33	1.25	ND	99	107	66-115	7.28	30
Di-n-butyl Phthalate	1	0.0713	0.0782	0.062	0.005451	105	116	65-119	9.28	30

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,2-Dichlorobenzene	1	1.18	1.23	1.25	ND	94	99	61-109	4.91	30
1,3-Dichlorobenzene	1	1.20	1.22	1.25	ND	96	97	58-104	0.928	30
1,4-Dichlorobenzene	1	1.11	1.21	1.25	ND	89	97	58-103	8.60	30
3,3-Dichlorobenzidine	1	0.0561	0.0606	0.062	ND	90	97	56-120	7.84	30
2,4-Dichlorophenol	1	0.0683	0.0736	0.062	ND	109	118	74-129	7.54	30
Diethyl Phthalate	1	0.0699	0.0747	0.062	ND	105	113	63-118	6.67	30
2,4-Dimethylphenol	1	1.38	1.70	1.25	ND	110	136,F1	73-125	21.5	30
Dimethyl Phthalate	1	0.0669	0.0724	0.062	ND	107	116	64-118	7.92	30
4,6-Dinitro-2-methylphenol	1	1.44	1.29	6.25	ND	23	21	1-126	11.2	30
2,4-Dinitrophenol	1	0.0390	0.0342	0.31	ND	12	11	10-80	13.4	30
2,4-Dinitrotoluene	1	0.0618	0.0665	0.062	ND	99	106	56-129	7.38	30
2,6-Dinitrotoluene	1	0.0675	0.0730	0.062	ND	108	117	63-124	7.80	30
Di-n-octyl Phthalate	1	0.0740	0.0810	0.062	ND	118	130	23-176	9.08	30
1,2-Diphenylhydrazine	1	1.29	1.37	1.25	ND	103	109	66-123	6.21	30
Fluoranthene	1	0.0629	0.0673	0.062	ND	101	108	67-116	6.67	30
Fluorene	1	0.0655	0.0715	0.062	ND	105	114	66-117	8.78	30
Hexachlorobenzene	1	0.0598	0.0631	0.062	ND	96	101	64-112	5.37	30
Hexachlorobutadiene	1	0.0661	0.0684	0.062	ND	106	109	62-111	3.48	30
Hexachlorocyclopentadiene	1	5.80	6.52	6.25	ND	93	104,F1	39-96	11.7	30
Hexachloroethane	1	0.0589	0.0593	0.062	ND	94	95	54-109	0.744	30
Indeno (1,2,3-cd) pyrene	1	0.0611	0.0657	0.062	ND	98	105	39-159	7.25	30
Isophorone	1	1.35	1.48	1.25	ND	108,F1	118,F1	52-103	9.55	30
2-Methylnaphthalene	1	0.0699	0.0723	0.062	ND	112	116	66-121	3.32	30
2-Methylphenol (o-Cresol)	1	1.12	1.25	1.25	ND	90	100	68-118	11.2	30
3 & 4-Methylphenol (m,p-Cresol)	1	1.37	1.37	1.25	ND	109	109	30-130	0	30
Naphthalene	1	0.0634	0.0684	0.062	ND	101	110	62-114	7.61	30
2-Nitroaniline	1	7.00	7.36	6.25	ND	112	118	67-131	5.06	30
3-Nitroaniline	1	6.43	7.07	6.25	ND	103	113	66-120	9.55	30
4-Nitroaniline	1	6.50	7.29	6.25	ND	104	117	62-122	11.4	30
Nitrobenzene	1	1.38	1.38	1.25	ND	110	110	64-125	0	30
2-Nitrophenol	1	7.03	7.70	6.25	ND	112	123	57-148	9.10	30
4-Nitrophenol	1	6.46	7.08	6.25	ND	103	113	51-123	9.08	30
N-Nitrosodiphenylamine	1	1.33	1.37	1.25	ND	106	110	30-130	3.33	30
N-Nitrosodi-n-propylamine	1	1.22	1.30	1.25	ND	98	104	56-117	5.99	30
Pentachlorophenol	1	0.222	0.238	0.31	ND	71	76	49-141	6.82	30
Phenanthrene	1	0.0600	0.0657	0.062	ND	96	105	67-113	9.02	30
Phenol	1	0.0624	0.0656	0.062	ND	100	105	66-121	5.05	30
Pyrene	1	0.0645	0.0664	0.062	ND	101	104	67-120	2.93	30

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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/13/18	<b>BatchID:</b>	164831
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B/3640A
<b>Instrument:</b>	GC21	<b>Analytical Method:</b>	SW8270C
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164831 1809403-002AMS/MSD

### QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Pyridine	1	0.993	1.06	1.25	ND	79	85	70-130	6.52	30
1,2,4-Trichlorobenzene	1	1.36	1.42	1.25	ND	109	114,F1	65-112	4.71	30
2,4,5-Trichlorophenol	1	0.0697	0.0707	0.062	ND	112	113	71-130	1.44	30
2,4,6-Trichlorophenol	1	0.0732	0.0779	0.062	ND	117	125	68-132	6.25	30
<b>Surrogate Recovery</b>										
2-Fluorophenol	1	1.34	1.47	1.25		107	117	52-128	8.93	30
Phenol-d5	1	1.38	1.50	1.25		111	120	47-135	8.13	30
Nitrobenzene-d5	1	1.52	1.57	1.25		122	126	46-121	3.27	30
2-Fluorobiphenyl	1	1.31	1.36	1.25		105	109	46-110	4.38	30
2,4,6-Tribromophenol	1	1.43	1.44	1.25		114	115	36-112	0.353	30
4-Terphenyl-d14	1	1.33	1.36	1.25		106	108	45-114	2.05	30



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164796
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3050B
<b>Instrument:</b>	ICP-MS3	<b>Analytical Method:</b>	SW6020
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164796 1809403-001AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.50	-	-	-
Arsenic	ND	0.50	-	-	-
Barium	ND	5.0	-	-	-
Beryllium	ND	0.50	-	-	-
Cadmium	ND	0.25	-	-	-
Chromium	ND	0.50	-	-	-
Cobalt	ND	0.50	-	-	-
Copper	ND	0.50	-	-	-
Lead	ND	0.50	-	-	-
Mercury	ND	0.050	-	-	-
Molybdenum	ND	0.50	-	-	-
Nickel	ND	0.50	-	-	-
Selenium	ND	0.50	-	-	-
Silver	ND	0.50	-	-	-
Thallium	ND	0.50	-	-	-
Vanadium	ND	0.50	-	-	-
Zinc	ND	5.0	-	-	-
<b>Surrogate Recovery</b>					
Terbium	500		500	100	70-130

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164796
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3050B
<b>Instrument:</b>	ICP-MS3	<b>Analytical Method:</b>	SW6020
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164796 1809403-001AMS/MSD

### QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	53.3	54.0	50	107	108	75-125	1.36	20
Arsenic	50.2	50.3	50	100	101	75-125	0.159	20
Barium	515	528	500	103	106	75-125	2.40	20
Beryllium	51.0	51.2	50	102	102	75-125	0	20
Cadmium	50.3	51.7	50	101	103	75-125	2.67	20
Chromium	51.0	52.4	50	102	105	75-125	2.71	20
Cobalt	50.4	51.2	50	101	102	75-125	1.38	20
Copper	51.1	52.4	50	102	105	75-125	2.42	20
Lead	50.5	51.4	50	101	103	75-125	1.86	20
Mercury	1.21	1.24	1.25	97	99	75-125	2.53	20
Molybdenum	49.8	50.4	50	100	101	75-125	1.14	20
Nickel	51.6	52.6	50	103	105	75-125	1.86	20
Selenium	51.7	52.3	50	103	105	75-125	1.17	20
Silver	50.6	51.5	50	101	103	75-125	1.68	20
Thallium	50.0	51.0	50	100	102	75-125	1.92	20
Vanadium	51.1	52.0	50	102	104	75-125	1.90	20
Zinc	509	523	500	102	105	75-125	2.56	20

#### Surrogate Recovery

Terbium	493	505	500	99	101	70-130	2.53	20
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Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	1	55.8	55.7	50	ND	112	111	75-125	0.0717	20
Arsenic	1	52.5	53.0	50	2.496	100	101	75-125	0.947	20
Barium	1	546	546	500	ND	109	109	75-125	0	20
Beryllium	1	48.5	48.4	50	ND	97	96	75-125	0.206	20
Cadmium	1	52.5	53.0	50	ND	105	106	75-125	1.02	20
Chromium	1	78.7	82.8	50	19.92	118	126,F10	75-125	5.02	20
Cobalt	1	69.2	74.1	50	16.22	106	116	75-125	6.73	20
Copper	1	110	116	50	72.18	76	88	75-125	5.56	20
Lead	1	52.5	53.2	50	ND	105	106	75-125	1.21	20
Mercury	1	1.62	1.93	1.25	1.090	42,F10	67,F10	75-125	17.6	20
Molybdenum	1	52.8	53.0	50	ND	105	105	75-125	0	20
Nickel	1	71.5	74.2	50	16.99	109	114	75-125	3.70	20
Selenium	1	53.1	52.7	50	ND	106	105	75-125	0.794	20
Silver	1	52.3	52.7	50	ND	105	105	75-125	0	20

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164796
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3050B
<b>Instrument:</b>	ICP-MS3	<b>Analytical Method:</b>	SW6020
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164796 1809403-001AMS/MSD

### QC Summary Report for Metals

Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Thallium	1	52.4	52.6	50	ND	105	105	75-125	0	20
Vanadium	1	183	181	50	130.4	105	101	75-125	0.990	20
Zinc	1	529	561	500	10.24	104	110	75-125	5.87	20
<b>Surrogate Recovery</b>										
Terbium	1	528	531	500		106	106	70-130	0	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.5	ND	-	-
Arsenic	ND<2.5	2.496	-	-
Barium	ND<25	ND	-	-
Beryllium	ND<2.5	ND	-	-
Cadmium	ND<1.2	ND	-	-
Chromium	19.0	19.92	4.62	20
Cobalt	15.2	16.22	6.29	20
Copper	64.0	72.18	11.3	20
Lead	ND<2.5	ND	-	-
Mercury	0.915	1.090	16.1	-
Molybdenum	ND<2.5	ND	-	-
Nickel	15.8	16.99	7.00	20
Selenium	ND<2.5	ND	-	-
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	121	130.4	7.21	20
Zinc	ND<25	10.24	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164797
<b>Date Analyzed:</b>	9/12/18 - 9/13/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC19	<b>Analytical Method:</b>	SW8021B/8015Bm
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164797 1809403-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	1.0	-	-	-
MTBE	ND	0.050	-	-	-
Benzene	ND	0.0050	-	-	-
Toluene	ND	0.0050	-	-	-
Ethylbenzene	ND	0.0050	-	-	-
m,p-Xylene	ND	0.010	-	-	-
o-Xylene	ND	0.0050	-	-	-
Xylenes	ND	0.0050	-	-	-
<b>Surrogate Recovery</b>					
2-Fluorotoluene	0.0746		0.10	75	75-134

(Cont.)



## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164797
<b>Date Analyzed:</b>	9/12/18 - 9/13/18	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC19	<b>Analytical Method:</b>	SW8021B/8015Bm
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164797 1809403-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.580	0.585	0.60	97	97	82-118	0	20
MTBE	0.0888	0.0864	0.10	89	86	61-119	2.85	20
Benzene	0.0934	0.0932	0.10	93	93	77-128	0	20
Toluene	0.0949	0.0952	0.10	95	95	74-132	0	20
Ethylbenzene	0.0960	0.0951	0.10	96	95	84-127	0.841	20
m,p-Xylene	0.194	0.194	0.20	97	97	80-120	0	20
o-Xylene	0.0964	0.0958	0.10	96	96	80-120	0	20
Xylenes	0.291	0.290	0.30	97	97	86-129	0	20

#### Surrogate Recovery

2-Fluorotoluene	0.0894	0.0897	0.10	89	90	75-134	0.366	20
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Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	1	0.542	0.518	0.60	ND	90	86	58-129	4.34	20
MTBE	1	0.0842	0.0769	0.10	ND	84	77	47-118	9.05	20
Benzene	1	0.0837	0.0804	0.10	ND	84	80	55-129	3.95	20
Toluene	1	0.0862	0.0820	0.10	ND	86	82	56-130	4.93	20
Ethylbenzene	1	0.0865	0.0826	0.10	ND	86	83	63-129	4.57	20
m,p-Xylene	1	0.176	0.169	0.20	ND	88	84	80-120	4.62	20
o-Xylene	1	0.0878	0.0832	0.10	ND	88	83	80-120	5.37	20
Xylenes	1	0.264	0.252	0.30	ND	88	84	64-131	4.87	20

#### Surrogate Recovery

2-Fluorotoluene	1	0.0807	0.0771	0.10		81	77	62-126	4.56	20
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## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164817
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW9045C
<b>Instrument:</b>	WetChem	<b>Analytical Method:</b>	SW9045C
<b>Matrix:</b>	Soil	<b>Unit:</b>	pH units @ 25°C
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA		

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1809403-001A	8.48	1	8.50	1	0.02	0.1

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164818
<b>Date Analyzed:</b>	9/12/18	<b>Extraction Method:</b>	SW9045C
<b>Instrument:</b>	WetChem	<b>Analytical Method:</b>	SW9045C
<b>Matrix:</b>	Soil	<b>Unit:</b>	pH units @ 25°C
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA		

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1809403-011A	8.12	1	8.10	1	0.02	0.1





## Quality Control Report

<b>Client:</b>	Environmental Technical Services, Inc.	<b>WorkOrder:</b>	1809403
<b>Date Prepared:</b>	9/12/18	<b>BatchID:</b>	164790
<b>Date Analyzed:</b>	9/13/18	<b>Extraction Method:</b>	SW3550B
<b>Instrument:</b>	GC6B	<b>Analytical Method:</b>	SW8015B
<b>Matrix:</b>	Soil	<b>Unit:</b>	mg/Kg
<b>Project:</b>	PSC-1816B; PG&E 205 Brush Street, Oakland, CA	<b>Sample ID:</b>	MB/LCS/LCSD-164790 1809403-001AMS/MSD

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	5.0	-	-	-
<b>Surrogate Recovery</b>					
C9	21.5		25	86	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	36.2	36.1	40	90	90	75-128	0	30
<b>Surrogate Recovery</b>								
C9	21.3	21.4	25	85	86	72-122	0.318	30

Analyte	DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1	33.9	35.6	40	ND	85	89	71-134	5.01	30
<b>Surrogate Recovery</b>										
C9	1	21.4	21.2	25		86	85	78-126	1.20	30



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1809403

ClientCode: ETR

- WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag  
 Detection Summary   
  Dry-Weight

**Report to:**

Kody Khodayari  
Environmental Technical Services, Inc.  
7950 Dublin Boulevard, Ste. 309  
Dublin, CA 94568  
(510) 410-9221    FAX: 925-361-5618

Email: KodyK@ETSconsults.com  
cc/3rd Party: jackiek@etsconsults.com;  
PO:  
Project: PSC-1816B; PG&E 205 Brush Street,  
Oakland, CA

**Bill to:**

Accounts Payable  
Environmental Technical Services, Inc.  
7950 Dublin Boulevard, Ste. 309  
Dublin, CA 94568  
send separate from report

**Requested TAT: 1 day;**

**Date Received: 09/12/2018**

**Date Logged: 09/12/2018**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1809403-001	205 BS-091218-AB1 3/4" AB	Soil	9/12/2018 10:35	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		
1809403-002	205 BS-091218-AB2 3/4" AB	Soil	9/12/2018 10:40	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-003	205 BS-091218-AB3 3/4" AB	Soil	9/12/2018 10:44	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-004	205 BS-091218-AB4 3/4" AB	Soil	9/12/2018 10:48	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-005	205 BS-091218-AB5 3/4" AB	Soil	9/12/2018 10:57	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-006	205 BS-091218-AB6 3/4" AB	Soil	9/12/2018 10:59	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-007	205 BS-091218-DT1 1/2" DUST TAILINGS	Soil	9/12/2018 11:32	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		
1809403-008	205 BS-091218-DT2 1/2" DUST TAILINGS	Soil	9/12/2018 11:34	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-009	205 BS-091218-DT3 1/2" DUST TAILINGS	Soil	9/12/2018 11:35	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-010	205 BS-091218-DT4 1/2" DUST TAILINGS	Soil	9/12/2018 11:36	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-011	205 BS-091218-DT5 1/2" DUST TAILINGS	Soil	9/12/2018 11:38	<input type="checkbox"/>	A				A	A	A	A	A	A	A		
1809403-012	205 BS-091218-DT6 1/2" DUST TAILINGS	Soil	9/12/2018 11:39	<input type="checkbox"/>	A				A	A	A	A	A	A	A		

**Test Legend:**

1	7199_TTLC_LL_S [J]	2	8081pcB_ESL_LL_S	3	8151_S	4	8260B_Scan-SIM_S
5	8270_SCSM_S [J]	6	CAM17MS_TTLC_S	7	CR3calc_S [N]	8	G-MBTX_S
9	PH_S	10	TPH(DMO)_S	11		12	

**Prepared by: Nancy Palacios**

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup Multi Range\_S.

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**Client Contact:** Kody Khodayari  
**Contact's Email:** KodyK@ETSconsults.com

**Work Order:** 1809403  
**QC Level:** LEVEL 2  
**Date Logged:** 9/12/2018

**Comments:**

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1809403-001A	205 BS-091218-AB1 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:35	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs, Scan SIM)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						1 day	<input type="checkbox"/>
SW7199 (Hexavalent chromium, Low-Level)	<input type="checkbox"/>	1 day	<input type="checkbox"/>										
1809403-002A	205 BS-091218-AB2 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:40	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**Client Contact:** Kody Khodayari  
**Contact's Email:** KodyK@ETSconsults.com

**Work Order:** 1809403  
**QC Level:** LEVEL 2  
**Date Logged:** 9/12/2018

**Comments:**

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1809403-003A	205 BS-091218-AB3 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:44	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-004A	205 BS-091218-AB4 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:48	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-005A	205 BS-091218-AB5 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:57	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**Client Contact:** Kody Khodayari  
**Contact's Email:** KodyK@ETSconsults.com

**Work Order:** 1809403  
**QC Level:** LEVEL 2  
**Date Logged:** 9/12/2018

**Comments:**

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1809403-005A	205 BS-091218-AB5 3/4" AB	Soil	SW8270C (Low Level SVOCs)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:57	1 day		<input type="checkbox"/>			
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-006A	205 BS-091218-AB6 3/4" AB	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 10:59	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-007A	205 BS-091218-DT1 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:32	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs, Scan SIM)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
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### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**Client Contact:** Kody Khodayari  
**Contact's Email:** KodyK@ETSconsults.com

**Work Order:** 1809403  
**QC Level:** LEVEL 2  
**Date Logged:** 9/12/2018

**Comments:**

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1809403-007A	205 BS-091218-DT1 1/2" DUST TAILINGS	Soil	SW8081A/8082 (OC Pesticides+PCBs) ESLs	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:32	1 day		<input type="checkbox"/>	
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
1809403-008A	205 BS-091218-DT2 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:34	1 day		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>		1 day	<input checked="" type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
1809403-009A	205 BS-091218-DT3 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:35	1 day		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>		1 day	<input checked="" type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>		1 day	<input type="checkbox"/>		
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>	1 day		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA  
**Client Contact:** Kody Khodayari  
**Contact's Email:** KodyK@ETSconsults.com    **Comments:**

**Work Order:** 1809403  
**QC Level:** LEVEL 2  
**Date Logged:** 9/12/2018

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1809403-010A	205 BS-091218-DT4 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:36	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-011A	205 BS-091218-DT5 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:38	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1809403-012A	205 BS-091218-DT6 1/2" DUST TAILINGS	Soil	SW9045C (pH)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:39	1 day		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW6010B/E218.6m (Chromium III)			<input type="checkbox"/>						1 day	<input checked="" type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
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### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL TECHNICAL SERVICES, INC.    **Project:** PSC-1816B; PG&E 205 Brush Street, Oakland, CA    **Work Order:** 1809403  
**Client Contact:** Kody Khodayari    **QC Level:** LEVEL 2  
**Contact's Email:** KodyK@ETSconsults.com    **Comments:**    **Date Logged:** 9/12/2018

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1809403-012A	205 BS-091218-DT6 1/2" DUST TAILINGS	Soil	SW6020 (CAM 17)	1	8OZ GJ, Unpres	<input type="checkbox"/>	9/12/2018 11:39	1 day		<input type="checkbox"/>	
			SW8270C (Low Level SVOCs)			<input type="checkbox"/>		1 day		<input type="checkbox"/>	
			SW7199 (Hexavalent chromium, Low-Level)			<input type="checkbox"/>		1 day		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
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### Sample Receipt Checklist

Client Name: **Environmental Technical Services, Inc.**  
Project: **PSC-1816B; PG&E 205 Brush Street, Oakland, CA**  
WorkOrder No: **1809403** Matrix: Soil  
Carrier: Client Drop-In

Date and Time Received: **9/12/2018 13:30**  
Date Logged: **9/12/2018**  
Received by: **Lilly Ortiz**  
Logged by: **Nancy Palacios**

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
Chain of custody signed when relinquished and received? Yes  No   
Chain of custody agrees with sample labels? Yes  No   
Sample IDs noted by Client on COC? Yes  No   
Date and Time of collection noted by Client on COC? Yes  No   
Sampler's name noted on COC? Yes  No   
COC agrees with Quote? Yes  No  NA

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
Shipping container/cooler in good condition? Yes  No   
Samples in proper containers/bottles? Yes  No   
Sample containers intact? Yes  No   
Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No  NA   
Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

Sample/Temp Blank temperature Temp: 3.8°C NA   
Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
Sample labels checked for correct preservation? Yes  No   
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA

#### UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)? Yes  No  NA

Free Chlorine tested and acceptable upon receipt (<0.1mg/L)? Yes  No  NA

Comments:



# EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577  
Phone/Fax: (510) 895-3675 / (510) 895-3680  
<http://www.EMSL.com> / [sanleandrolab@emsl.com](mailto:sanleandrolab@emsl.com)

**EMSL Order:** 091819810  
**Customer ID:** ETSV78  
**Customer PO:** PSC-1816B  
**Project ID:** PSC-1816B

**Attention:** Kody Khodayari  
Environmental Technical Services, Inc.  
7950 Dublin Boulevard, Suite 309  
Dublin, CA 94568

**Phone:** (925) 364-7297  
**Fax:** (925) 361-5618  
**Received:** 09/12/2018 4:15 PM  
**Analysis Date:** 09/13/2018  
**Collected:** 09/12/2018

**Project:** PSC-1816B - PSC - CEMEX QUARRY, CLAYTON, CA (PSC-1816B)

## Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
205BS-091218-AB1 <i>091819810-0001</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-AB2 <i>091819810-0002</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-AB3 <i>091819810-0003</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-AB4 <i>091819810-0004</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-AB5 <i>091819810-0005</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-AB6 <i>091819810-0006</i>	3/4" AGGREGATE BASE - CEMEX QUARRY	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
205BS-091218-DT1 <i>091819810-0007</i>	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
205BS-091218-DT2 <i>091819810-0008</i>	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
205BS-091218-DT3 <i>091819810-0009</i>	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
205BS-091218-DT4 <i>091819810-0010</i>	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 09/13/2018 14:41:42



# EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577  
Phone/Fax: (510) 895-3675 / (510) 895-3680  
<http://www.EMSL.com> / [sanleandrolab@emsl.com](mailto:sanleandrolab@emsl.com)

**EMSL Order:** 091819810  
**Customer ID:** ETSV78  
**Customer PO:** PSC-1816B  
**Project ID:** PSC-1816B

**Attention:** Kody Khodayari  
Environmental Technical Services, Inc.  
7950 Dublin Boulevard, Suite 309  
Dublin, CA 94568

**Phone:** (925) 364-7297  
**Fax:** (925) 361-5618  
**Received:** 09/12/2018 4:15 PM  
**Analysis Date:** 09/13/2018  
**Collected:** 09/12/2018

**Project:** PSC-1816B - PSC - CEMEX QUARRY, CLAYTON, CA (PSC-1816B)

## Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
205BS-091218-DT5 091819810-0011	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
205BS-091218-DT6 091819810-0012	1/2" DUST TAILINGS - CEMEX QUARRY	Gray Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

Analyst(s)  
Cecilia Yu (6)  
Jared Martin (6)

  
Matthew Batongbacal  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 09/13/2018 14:41:42



0918/9810

### Environmental Technical Services, Inc.

7950 Dublin Boulevard, Suite 309, Dublin, CA 94568

Phone: (925) 364-7297 – Fax: (925) 361-5618

### BULK SAMPLE DATA SHEET

Date: 9/12/18

Page 1 of 2

Client: <u>PSC</u>					Inspector Name: <u>Jackie Kryzszak</u>				
Project Location: <u>Cemex Quarry, Clayton, CA</u>					Project No.: <u>PSC-1816 B</u>				
Analytical Specs: (Circle Type of Analysis) PLM - PC - AA - <u>Other (See Comments)</u>					Rush <u>24 Hr</u> - 48 Hr - 72 hr			Call - Fax	
Sample #	Material	Location	Quantity/ Thickness	Cond.	Fri.	Comments:			
<u>205BS-091218-AB1</u>	<u>3/4" Aggregate Base</u>	<u>Cemex Quarry</u>							<u>CARB 435 Level A (24-hr)</u>
<u>" - AB2</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - AB3</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - AB4</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - AB5</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - AB6</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - DT1</u>	<u>1/2" Dust Tailings</u>	<u>" "</u>							<u>"</u>
<u>" - DT2</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - DT3</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
<u>" - DT4</u>	<u>" "</u>	<u>" "</u>							<u>"</u>
Abbreviations: Cond. = Condition; G = Good, D = Damaged, SD = Significantly Damaged Fri. = Friability; N = Not Friable, L = Low, M = Medium, H = High, Cont. = Contact Potential; Vib. = Vibration; Air Er. = Air Erosion; N = None, L = Low, M = Moderate, H = High									

Relinquished By: [Signature]  
 Received By: [Signature]

Name (printed) & Company: Kody/ETS  
 Name (printed) & Company: [Signature]

Date/Time: 9/12/18 16:10  
 Date/Time: 9/12/18 4:15pm (W-I)



**Environmental Technical Services, Inc.**

7950 Dublin Boulevard, Suite 309, Dublin, CA 94568  
 Phone: (925) 364-7297 - Fax: (925) 361-5618

**BULK SAMPLE DATA SHEET**

Date: 9/12/18

Page 2 of 2

Client: PS&C

Inspector Name: Tackie Kyzarsak

Project Location: Cemex Quarry, Clayton, CA

Project No.: PS&C-1816B

Analytical Specs: (Circle Type of Analysis) PLM - PC - AA - Other (See Comments)

Rush - 24 Hr - 48 Hr - 72 hr Call - Fax

Sample #	Material	Location	Quantity/ Thickness	Cond.	Fri.	Comments:		
						Cont.	Vib.	Air Er.
<u>205RS-DT5</u>	<u>1/2" Dust-Tailings</u>	<u>Cemex Quarry</u>						<u>Other</u> <u>CARB 435</u> <u>level A</u>
<u>1-DT6</u>	<u>"</u>	<u>"</u>						<u>"</u>

Abbreviations: Cond. = Condition; G = Good, D = Damaged, SD = Significantly Damaged  
 Fri. = Friability; N = Not Friable, L = Low, M = Medium, H = High  
 Cont. = Contact Potential; Vib. = Vibration; Air Er. = Air Erosion; N = None, L = Low, M = Moderate, H = High

Relinquished By: [Signature]

Name (printed) & Company: [Signature]

Name (printed) & Company: Rady/ETS

Date/Time: 9/12/18 16:10

Received By: [Signature]

Name (printed) & Company: [Signature]

Name (printed) & Company: [Signature]

Date/Time: 9/12/18 4:15pm (w-1)

091819810