





Photo 1 – Gas furnace and water heating in the basement in the back



Photo 2 – Possible access to the crawl space from the basement



Photo 3 – Another possible access to the crawl space



Photo 4 – Downstairs in the back and door to the utility room (gas furnace and heaters)

### CASE NARRATIVE

Laboratory number: 285424  
Client: Eagle Env. Construction  
Project: SALISBURY PROJECT  
Location: Salisbury Project  
Request Date: 01/25/17  
Samples Received: 01/25/17

This data package contains sample and QC results for twenty eight soil samples, requested for the above referenced project on 01/25/17. The samples were received cold and intact.

#### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High recovery was observed for gasoline C7-C12 in the MSD of BC1-24' (lab # 285424-004); the LCS was within limits, and the associated RPD was within limits. High surrogate recovery was observed for bromofluorobenzene (FID) in BC5-10.5' (lab # 285424-023), due to interference from coeluting hydrocarbon peaks. None of the gasoline range organics chromatographic patterns resemble the stoddard solvent pattern. No other analytical problems were encountered.

#### TPH-Extractables by GC (EPA 8015B):

The TPH-Extractable chromatograms do not resemble diesel fuel. The reported results for the BC1 and BC4 samples are due to the gasoline present and the BC2 and BC3 results are due to the oil range hydrocarbons. The BC5 and BC6 samples contain oil or gas or both. No analytical problems were encountered.

#### Volatile Organics by GC/MS (EPA 8260B):

High responses were observed for isopropyl ether (DIPE) and tert-butyl alcohol (TBA) in the CCV analyzed 01/31/17 11:38; affected data was qualified with "b". High recoveries were observed for isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and tert-butyl alcohol (TBA) in the BS/BSD for batch 243950; the associated RPDs were within limits, and these high recoveries were not associated with any reported results. High recoveries were observed for isopropyl ether (DIPE) and ethyl tert-butyl ether (ETBE) in the MS/MSD for batch 243950; the parent sample was not a project sample, the associated RPDs were within limits, and these high recoveries were not associated with any reported results. Low recovery was observed for chlorobenzene in the MSD for batch 244042; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. BC1-10.5' (lab # 285424-003), BC4-16' (lab # 285424-018), and BC5-10.5' (lab # 285424-023) were diluted due to high hydrocarbons. BC4-10.5' (lab # 285424-017), BC6-10.5' (lab # 285424-028), and BC7-12' (lab # 285424-033) were diluted due to high non-target analytes. No other analytical problems were encountered.

TABLE 2  
SUMMARY OF CHEMICAL ANALYSES FOR TPH-G, TPH-ss, TEPH, BTEX, AND NAPHTHALENE  
GROUNDWATER SAMPLES COLLECTED FROM BOREHOLES DRILLED on 01/25/2017  
2145 35<sup>th</sup> Avenue  
Oakland, California

Sample ID	Description	Date Sampled	TPH <sup>(1)</sup> as Gasoline (µg/L) <sup>(2)</sup>	TEPH <sup>(3)</sup> as Diesel (µg/L)	TPH as Stoddard Solvent (µg/L)	TEPH as Motor Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)
BC6-W	Grab Groundwater Sample from boring BC6	01/25/2017	<b>11,000</b>	<b>920 Y<sup>(4)</sup></b>	<b>6,400 Y</b>	1,200	<b>300</b>	<b>61</b>	<b>370</b>	<b>518</b>	<b>53</b>
BC7-W	Grab Groundwater Sample from boring BC7	01/25/2017	<b>27,000</b>	<b>1,600 Y</b>	<b>17,000 Y</b>	450	<b>100</b>	<b>120</b>	<b>1000</b>	<b>356</b>	<b>360</b>
Groundwater Vapor Intrusion Human Health Risk Levels Table GW-3, shallow groundwater, residential use scenario <sup>(5)</sup>			-- <sup>(6)</sup>	--	--	--	<b>1.1</b>	<b>3,600</b>	<b>13</b>	<b>1,300</b>	<b>20</b>
Tier 1 ESLs <sup>(7)</sup>			<b>100</b>	<b>100</b>	<b>100</b>	<b>50,000</b>	<b>1.0</b>	<b>40</b>	<b>13</b>	<b>20</b>	<b>0.17</b>
Low Threat UST Case Closure Policy for Shallow Soil at least 5 feet below the foundation of the building (7.5 feet below ground surface at this site) Combined TPH-G and TPH-D <100 mg/kg <sup>(8)</sup>			--	--	--	--	<b>100</b>	--	--	--	--

**The water samples presented in this table (BC6-W and BC7-W) may not be representative of the shallow groundwater at this site due to murky condition (high content of silt and mud). The results reported could be partially attributed to the soil content and not to the groundwater content. Better groundwater results are obtained from a groundwater monitoring well.**

TPH<sup>(1)</sup> = Total volatile petroleum hydrocarbons by EPA Method 8015B

µg/L<sup>(2)</sup> = Microgram per liter

TEPH<sup>(3)</sup> = Total extractable petroleum hydrocarbons by EPA Method 8015B

(Y)<sup>(4)</sup> = Sample exhibits chromatographic pattern which does not resemble standard

<sup>(5)</sup> = Groundwater Vapor Intrusion Human Health Risk Levels Table GW-3, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final - Feb. 2016 (Rev. 3).

--<sup>(6)</sup> = Not applicable or listed for the specific compound

<sup>(7)</sup> = Tier 1 ESLs, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final - Feb. 2016 (Rev. 3).

<sup>(8)</sup> = Low-Threat Underground Storage Tank Case Closure Policy, the California State Water Resources Control Board, Appendix 3, Scenario 3, Page 12

**Bold** = Concentrations presented in bold where such a value is at or exceeds one of the environmental screening levels (ESLs).