

March 1, 2018

Mr. Mark Detterman
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: Data Gap Investigation Report

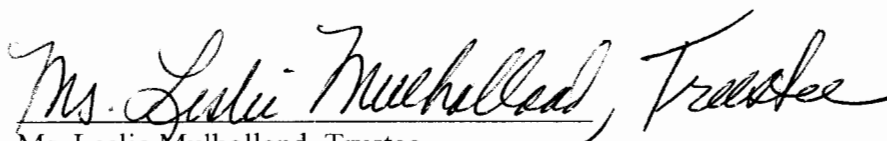
SITE: Mulholland Residence
132 Guilford Road, Piedmont, California
ACHCSA Fuel Leak Case No. RO0003070
Global ID #T10000002521

Dear Mr. Detterman:

Upon my authorization, Wheeler Group Environmental, LLC has prepared the attached *Data Gap Investigation Report*, dated February 28, 2018, for the above-referenced residential property at 132 Guilford Road in Piedmont, California. Wheeler Group has uploaded an electronic copy of the document to the State Water Resources Control Board's GeoTracker Database System, as well as the Alameda County Health Care Services Agency FTP Site. Should you have any questions, please contact Mr. Brent Wheeler, Manager of Wheeler Group Environmental, LLC (acting consultant for project) at (415) 686-8846 at your convenience.

I have read and acknowledge the content, recommendations, and and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resource Control Board's GeoTracker website.

Respectfully Submitted,

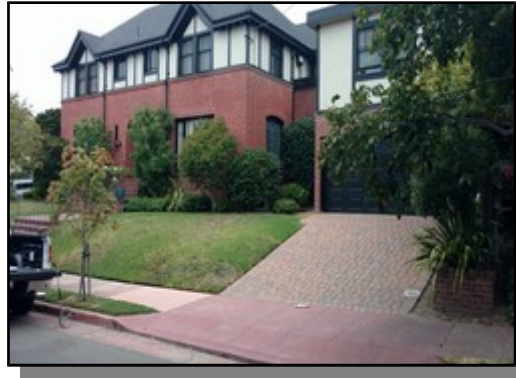


Ms. Leslie Mulholland, Trustee
Leslie Mulholland Trust

Distribution: 1. Addressee
2. Megan K. Walsh, Esq. (meganwalshesq@gmail.com)



DATA GAP INVESTIGATION REPORT



Mulholland Residence

132 Guilford Road, Piedmont, California 94611

APN 51-4676-19

GeoTracker Global ID No. T10000002521

Alameda County LOP Case No. RO0003070

WGE Project No. 2017110

February 28, 2018

Prepared For:

Leslie Mulholland Trust

132 Guilford Road, Piedmont, CA 94611

Prepared by:

Wheeler Group Environmental, LLC

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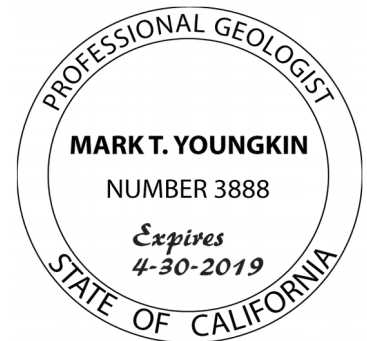
STATEMENT OF PROFESSIONAL CERTIFICATION

Document Title: Data Gap Investigation Report

Location: Mulholland Residence
132 Guilford Road, Piedmont, California

California Business and Professions Code Section 7835 specifies that all geologic plans, specifications, reports, or documents shall be prepared by a professional geologist or registered specialty geologist, or by a subordinate employee under his or her direction. In addition, the document shall be signed by the professional geologist or registered specialty geologist or stamped with his or her seal, either of which shall indicate his or her responsibility for them.

This document is prepared in accordance with the California Business and Professions Code Section 7835 by a "professional geologist" as defined in the Geologist and Geophysicist Act (California Business and Professions Code commencing with Section 7800).



Date: February 28, 2018

A handwritten signature in black ink, appearing to read 'Brent A. Wheeler', written over a horizontal line.

Brent A. Wheeler
Principal/Manager

A handwritten signature in purple ink, appearing to read 'Mark Youngkin', written over a horizontal line.

Mark Youngkin
Professional Geologist No. 3888

Wheeler Group Environmental, LLC

369-B Third Street, Suite #221, San Rafael, CA 94901, Phone: 415-686-8846
Email: bwheeler@wheelergroupervironmental.com

DATA GAP INVESTIGATION REPORT
132 Guilford Road, Piedmont, California

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DATA GAP INVESTIGATION REPORT
132 Guilford Road, Piedmont, California

APPENDICES

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Torrent Laboratory, Inc. Work Order No.: 1801189, January 25, 2018

Torrent Laboratory, Inc. Work Order No.: 1802007, February 06, 2018

Test America Laboratories, Inc. Job ID: 720-84312-1, January 26, 2018

APPENDIX C – BORING LOGS

Soil Boring Logs B1, B2, B3, B4, B5, B6 and B7

APPENDIX D – ADDITIONAL DOCUMENTATION

Authorized RP Agent Authorization Form dated August 2, 2017

October 25, 2017, Letter, Alameda County, Approval for Work Plan dated Aug. 25, 2017

December 29, 2017, Permit W2017-0983, Borehole(s) for Investigation

January 9, 2018 City of Piedmont Application for Permit for Street Excavation

Water Sampling Data Form

Sub-Slab Vapor Sampling Data Form

Grade Elevation Survey Data Sheet (1/18/18)

Non-Hazardous Waste Manifest

Documentation on Water Supply Irrigation Well at 125 Guilford Road

Well Completion Report for Water Supply Irrigation Well at 120 Hazel Lane

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DATA GAP INVESTIGATION REPORT

Mulholland Residence

132 Guilford Road, Piedmont, California

APN 51-4676-19

GeoTracker Global ID No. T10000002521

Alameda County LOP Case No. RO0003070

WGE Project No. 2017110



INTRODUCTION

On behalf of Leslie Mulholland Trust, property owner, Wheeler Group Environmental, LLC (Wheeler Group or WGE) submits this Data Gap Investigation Report for the residential property located at 132 Guilford Road in Piedmont, California (Site). In 2010, one 200-gallon heating oil underground storage tank (UST) was removed from the Guilford Road frontage of the property with evidence of a heating oil release to soil and possibly water. In its letters, the Alameda County Department of Environmental Health (ACDEH) required a work plan and Site Investigation Report be submitted presenting the results of subsurface investigation around the former UST location. The ACDEH also suggested that sampling two private water supply wells located potentially within the plume radius from the UST and additional soil borings with soil samples may be appropriate to address the outstanding data gaps. The goal of the subsurface investigation is to provide information pertinent to the consideration of the Site for case closure under the Low-Threat Underground Storage Tank Case Closure Policy.

Wheeler Group submitted its Data Gap Investigation Work Plan dated August 25, 2017. The ACDEH conditionally approved the work plan in its letter dated October 25, 2017, with technical comments to be incorporated into the scope of work. Wheeler Group incorporated the ACDEH conditions into its work plan implementation activities. For additional details, see the posted information for the Site address at the Geotracker website under GeoTracker Global ID No. T10000002521 and Alameda County LOP Case No. RO0003070. Wheeler Group performed the subsurface investigation and water well sampling during January-February 2018.

Figure 1 is a *Site Location Map* showing the general location of the Site in Alameda County. Figure 2 is a *Site Vicinity Map* showing land use of the surrounding residential neighborhood. Figure 3 titled *Site Plan* shows the features at the Site, location of the former heating oil UST, and location of borings and samples. Figure 4 titled *Geologic Map* provides information on the local geology. Figure 5 titled *Topographic Map* shows topography in the immediate area of the Site and location of nearby streams and water supply wells. Figure 6 is a *Potential TPH Plume Map* showing the Site and the location of the two closest water supply wells used for irrigation purposes. The potential TPH plume radius of 249 feet, shown as a red circle, is superimposed on the map to show the potential travel of petroleum contamination.

The appendices contain the figures, tables of laboratory analysis results, certified laboratory reports, photograph pages of the field sampling activities, boring logs, supporting documentation, and the GPP work plan approval letter dated August 25, 2017. Tables 1 thru 3 summarize the laboratory analysis results for soil, water and vapor samples collected during the UST removal and subsurface investigation activities. Table 4, attached, titled *Focused Site Conceptual Model for Mulholland Residence* has been updated with the results of the recent investigation. Table 5, attached, titled *Evaluation of Low Threat Closure Policy Criteria for Data Gaps at Mulholland Residence* incorporates the results of the subsurface investigation and further explains the findings and recommendations.

SITE LOCATION

The Site at 132 Guilford Road (Site) is located within a residential suburban neighborhood and surrounded by similar single-family residential structures. The Site is located at the north side of Guilford Road, approximately 136 feet west of its intersection with Highland Avenue in Piedmont, California; see Figure 1 titled *Site Location Map*. The Site occupies an approximately 100 by 64 foot hillside lot (approximately 6400 square foot) and is improved with a two-story single-family residence constructed circa 1930s. From the Site's position on a local ridge-top, the topography slopes to the west-southwest towards Piedmont Park and Bushy Dell Creek about 500 feet northwest of the Site.

Piedmont High School is located approximately 622 feet northwest of the Site. Piedmont Millennium High School is located approximately 830 feet west of the Site. Both high schools are located beyond the ravine of Bushy Dell Creek. Piedmont City Hall is located approximately 917 feet northwest of the Site. The drainage ravine of Wildwood Creek is located about 1130 feet south of the Site. Figure 2 titled *Site Vicinity Map* shows the surrounding neighborhood and location of two nearby private water supply wells at 125 Guilford Road and 120 Hazel Lane.

Adjoining the Site on the east is a similar residence at 781 Highland Avenue with an equivalent elevation. To the north is a similar residence at 124 Guilford Road that appears higher in elevation than the subject. Across Guilford Road to the south are similar residences at 131 and 135 Guilford Road that appear lower in elevation than the Site. To the west across Guilford Road is a similar residence at 129 Guilford Road that appears relatively similar in elevation to the subject.

To the northwest across Guilford Road, an irrigation water well is present at the northeast corner of the 125 Guilford Road residence, with a higher surface elevation. Beyond the 125 and 129 Guilford Road properties is another private irrigation water well at 120 Hazel Lane. Documentation on the installation of irrigation wells at 125 Guilford Road and 120 Hazel Lane is attached in Appendix D titled Additional Documentation. As discussed later in this report, WGE collected water samples from both irrigation wells for the laboratory analysis of petroleum constituents.

SITE DESCRIPTION & CURRENT USE

The Site has been occupied for single-family residential purposes since the 1930s.

Posted Site Address:	132 Guilford Road
Site Location:	Piedmont
County:	Alameda
Elevation:	Appropriately 340 feet above mean sea level
Assessor's Parcel No:	51-4676-19
General Setting:	Residential Neighborhood
Property Type:	Single-family residence
Building Type:	Two-story wood frame with partial basement
Building size:	Approx. 3000 square feet
Lot Size:	Approx. 6400 square feet
Date of Construction	Circa 1930s
Basement:	Partial unfinished basement and utility room
Interior Layout:	Typical with multiple bedrooms and bathrooms
Exterior Layout:	Landscaping with detached garage
HVAC:	Natural gas and/or Electric
Source of Water:	Municipal Water District
Sewage Disposal:	Municipal
Solid Waste Disposal:	Municipal
Utilities:	Municipal water, electricity, natural gas, storm water, and sanitary sewer infrastructure is provided to the area by municipal companies
Primary Access:	Guilford Road
Number of Occupants:	One family
Current operations:	Residential

Figure 3 titled *Site Plan* shows the current configuration of the residence on the Site. The residential structure contains an attached garage with paver stone driveway leading to south side of Guilford Road. The residence is elevated on the lot approximately 4 feet above the west and south Guilford Road street frontage grades, respectively. The landscaped front yard slopes to the south and west towards the street frontage.

The house is situated on a partial basement used as a utility room under the southern portion of the residence. The residence was originally heated by a heating oil furnace (burner) formerly located in the basement against the northern wall. The location of the oil burner is still discernible by markings on the concrete floor. Product and return ½ inch diameter supply piping (now capped) protrudes from the basement floor along the wall at the former burner location. Using a handheld magnetometer, WGE detected traces of the buried supply piping leading beneath the basement floor towards the UST location. A possible UST vent pipe protrudes from the exterior residence wall at the southeast corner of the basement. The position of supply piping in the residence front yard could not be located with the metal detector equipment.

SUBSURFACE INVESTIGATION ACTIVITIES

To address the potential for petroleum contamination of soil and soil gas at the Site, Wheeler Group performed investigation activities by advancing seven (7) exploratory borings to a maximum depth of 14 feet fbg and recovering soil samples for laboratory chemical analysis. One (1) temporary sub-slab vapor probe was used to recover vapor data from beneath the basement floor, in the direct vicinity of the former oil burner and existing product supply piping. Wheeler Group performed the following investigation work in January and February 2017:

<i>Boring Label</i>	<i>Depth Feet</i>	<i>Subsurface Conditions</i>	<i>Sample Data Collected</i>
B1	6.5	Clay from 0-2 fbg, Silt from 2-6.5 fbg, GeoProbe refusal on weathered bedrock at 6.5 fbg, no free water in borehole	Soil samples at 3, 5 and 6.5 fbg
B2	6 drilled at 25° angle	Silt from 0-6 fbg, GeoProbe refusal on weathered bedrock at 6 fbg, no free water in borehole	Soil samples at 2.5, 5 and 6 fbg
B3	14	Sand from 0 to 2.5 fbg, Silt from 0-14 fbg, GeoProbe refusal on weathered bedrock at 6.5 fbg, Hollow Stem Augur refusal at 14 fbg on hard bedrock, no free water in borehole	Soil samples at 2.5, 4, 5, 6.5, 10 and 14 fbg
B4	7	Silt from 0-7 fbg, GeoProbe refusal on weathered bedrock at 7 fbg, no free water in borehole	Soil sample at 2.5, 5.5 and 7 fbg
B5	13	Sand from 0 to 13 fbg, GeoProbe refusal on weathered bedrock at 8.5 fbg, Hollow Stem Augur refusal at 13 fbg on hard bedrock, drainage water in borehole tremie grout	Soil sample at 2.5, 5, 7, 8.5 and 13 fbg
B6	1.5 product line	Silt from 0-1.5 fbg, hand augur refusal on weathered bedrock at 1.5 fbg, no free water in borehole	No soil sample
B7	5 drilled at 30° angle	Silt from 0-5 fbg, GeoProbe refusal on weathered bedrock at 5 fbg, no free water in borehole	Soil sample at 2.5 and 5 fbg
SS1	0.5	Temporary sub-slab vapor probe in basement floor in vicinity of former heating oil burner and underground product lines	Sub-slab vapor sample from beneath concrete floor slab
2 Private Wells	Surface	Water sampling of two private water supply irrigation wells at 120 Hazel Lane and 125 Guilford Road	Grab water sample from two well head spigots

Figure 3 titled Site Plan shows the current layout of the property, ground floor living space, basement living space, garage and exterior areas of the Site. The subsurface investigation boring / field point sample locations are also shown on Figure 3. Photograph Pages 1-6 of Appendix A show photographs of the boring & field point sample locations and subsurface investigation activities performed at the Site. The following sections describe the procedures and results of the investigation work.

Drilling & Soil Sampling

On January 17 & 18, 2018, soil boring Field Points B1 thru B7, located in the residence front yard, were drilled by Enprobe Environmental Drilling Services (Enprobe) of Oroville, California, a California-licensed Water Well Drilling Contractor (C-57). Photographs of the drilling and sampling activities are presented in photograph numbers 1-7 on Photograph Page 1 and 2 of Appendix A.

At each field point, where warranted, EnProbe hand augured a 2.25 inch diameter borehole to an approximate depth of 4½ fbg while simultaneously transferring soil cuttings to a 5-gallon plastic bucket. The purpose of the hand-auger drilling was to clear the boring locations for marked or unmarked underground utilities. Due to Site access constraints, Boring B6 was drilled using a hand auger and encountered drilling refusal on dense rock at 1.5 fbg. No free water or evidence of a shallow aquifer was observed during the drilling of the boreholes. The borings encountered clay and silt material to the top of weathered Franciscan sandstone bedrock at depths of 1.5-8.5 fbg. Soil boring logs B1 thru B7 are presented in Appendix C attached to this report

Using a rubber track-mounted, hydraulic GeoProbe drilling rig (Model 78222DT Combo Track Rig) equipped with 2.25-inch-diameter steel, concentrically-cased steel drill tubes, EnProbe initially advanced borings B1, B2, B3, B4, B5 and B7 to a maximum depth of 8.5 fbg, prior to encountering drilling refusal on weathered bedrock. Discrete soil samples were collected in each borehole between 2.5 and 8.5 fbg by advancing a butyrate plastic, tube-lined core sampler (1.5-inch-inner diameter) approximately 4 feet into relatively undisturbed soil. Soil samples were collected continuously, specifically at changes of lithology, and at areas showing obvious contamination (i.e., visual staining & hydrocarbon odor). All down-hole drilling and sampling equipment was cleaned between each sampling location using a non-phosphate Alconox® solution and double rinsed using clean, potable water.

Upon GeoProbe drilling refusal encountered in B3 and B5 at 6.5 and 8.5 fbg respectively, EnProbe drilled each boring to a maximum depth of 14 and 13 fbg using 8.25"-diameter hollow stem augers. Hollow stem auger drilling refusal on bedrock was encountered in B3 and B5 at 14 and 13 fbg, respectively. At designated depths, EnProbe extracted the center rod/plug, then advanced the GeoProbe core sampler approximately 0.5 to 1 foot (maximum sample depth prior to refusal) to recover additional discrete soil samples. Photographs of the drilling and sampling activities utilizing rotary hollow stem auger drilling equipment are presented in photograph numbers 8-9 on Photograph Page 3 of Appendix A

Wheeler Group classified and logged all soil extracted from each borehole using the Unified Soil Classification System and Munsell Soil Color Chart, and monitored and recorded the organic vapor concentrations of soil samples using a calibrated MiniRae® photo ionization detector (PID). Soil samples retained for laboratory analysis of petroleum hydrocarbons were immediately sealed with Teflon and plastic end caps, appropriately labeled, and placed in a cooler chilled to approximately 4° Centigrade.

Following completion of soil sampling activities, EnProbe periodically measured for the presence of groundwater in each borehole using an electronic water level meter and/or oil/water interface meter, and subsequently backfilled each borehole with neat Portland cement up to approximately 1 fbg. Drainage water was observed in the borehole at Field Point B5 and the well was sealed by tremie grouting, as required by Alameda County Public Works Agency (ACPWA) Inspector, Mr. Eneyew Amberber. The balance of each borehole was backfilled with appropriate cover material to restore original Site conditions. All backfilling activities were overseen by ACPWA Inspector Amberber. Photographs of the borehole sealing activities are presented in photograph numbers 10-11 on Photograph Page 3 of Appendix A

Product Line Confirmation Soil Sampling

On January 18, 2018, WGE and EnProbe located the underground product line beneath the basement concrete floor utilizing a handheld magnetometer. WGE was unable to locate the product line in the front yard of the residence using the metal detector. Boring B6 was located along the assumed alignment of the product line from the oil burner to the former UST location. WGE in collaboration with EnProbe attempted product line confirmation soil sampling at location B6, as shown in Figure 3 – Site Plan as a Dashed Line. At soil boring Field Point B6, EnProbe hand augured a 2.25-inch-diameter borehole to approximate 1.5 fbg while simultaneously transferring the auger soil cuttings to a 5-gallon plastic bucket. Drilling refusal was encountered at a depth of 1.5 fbg on dense rock. Because the refusal depth was above the assumed product line depth and no evidence of petroleum contamination was observed, no soil sample was recovered at Field Point B6.

Results of Laboratory Analyses of Soil Samples

On January 19, 2018, Wheeler Group submitted 22 exterior boring soil samples, respectively, under chain of custody command to Torrent Laboratory, Inc. (Torrent) in Milpitas, California for analysis of BTEX, Naphthalene and MTBE by EPA Method 8260B, and for TPH as diesel range organics (DRO) by EPA Method 8015M. Torrent issued certified analytical reports of soil sample results:

Torrent Laboratory, Inc. Work Order No.: 1801189, January 25, 2018

The certified laboratory analytical report is presented in Appendix B. According to the reports, no issues were encountered with the receiving, preparation, analysis or reporting of the results. Table 1 in Appendix A summarizes the soil sample laboratory analytical results for site investigation activities. The reported concentrations of petroleum

hydrocarbons are compared to the Regional Water Quality Control Board San Francisco Bay Region's Tier I Environmental Screening Levels (ESL) as shown on the table. Two sample values exceeding (or potentially exceeding) Tier 1 levels are shown in bold on Table 1.

For the exterior borings used to assess the extent of residual contamination in the vicinity of the former UST, no soil samples collected in borings B1, B2, B4, B5 and B7 between 2.5 and 14 fbg exceeded the Tier I ESL values for TPH as diesel range organics, Naphthalene, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) or MTBE. The TPH as diesel concentrations in these soil samples ranged from non-detectable to 7.37 mg/Kg below the Tier I ESL value of 230 mg/Kg.

As shown on Table 1, two soil samples collected in boring B3 at 2.5 and 4 fbg slightly exceeded the ESL value for TPH as diesel, with concentrations in these soil samples of 231 and 282 mg/kg. Naphthalene, BTEX and MTBE in these two soil samples did not exceed the ESL values. Naphthalene, BTEX and MTBE were not detected in any of the soil samples collected in the Site investigation borings.

As noted on the certified laboratory reports in Appendix B, the laboratory reported that "Diesel result due to over-lapping of oil range into diesel range." or "Presence of discrete peaks not typical of diesel reference pattern." or "Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel." WGE believes the discrepancy reported by the laboratory is due to the product tested being aged heating oil that is different than standard diesel fuel.

Sub-Slab Vapor Point Installation & Sampling

On January 18, 2018, following completion of exterior drilling activities, EnProbe installed one sub-slab vapor sampling point within the concrete floor of the basement furnace room. Pictures of the vapor pin installation are shown in photographs number 12-15 on Photograph Page 4 of Appendix A. Two ½ inch diameter heating oil supply line are capped at the basement wall as shown in photograph 13. EnProbe located the underground product line beneath the basement concrete floor utilizing a handheld magnetometer. The vapor pin was installed in close proximity to the former oil burner furnace and above the alignment of the buried supply line as shown in the photographs.

EnProbe initially drilled a 1.5-inch-diameter hole approximately 1.75 inches into the concrete slab floor using a hammer drill and concrete drill bit, clearing the hole of concrete cuttings/dust using a bottle brush. EnProbe then placed a Stainless Steel drilling guide within the concrete, and drilled a 5/8-inch-diameter hole through the slab floor approximately 1 to 1.5 inches into the underlying soil. Additional concrete cuttings and dust were cleared with a bottle brush. Using an appropriate vapor pin installation tool and hammer, EnProbe then installed a silicone sleeve-wrapped, stainless Vapor Pin™ supplied by Cox-Colvin & Associates, Inc., flush to grade surface. EnProbe placed a small rubber cap over the vapor pin nipple and completed the assembly with a plastic flush mount protective cover. The location of the sub-slab vapor point (FPN SS1) is shown in Figure 3 – Site Plan.

On February 1, 2018, Wheeler Group personnel returned to the Site to perform sub-slab vapor sampling at Field Sampling Point SS1—in accordance with the procedures presented in Wheeler Group’s August 25, 2017 Data Gap Investigation Work Plan, per the associated conditions in the ACDEH’s October 25, 2017 Conditional Work Plan Approval Letter, and per California EPA DTSC and SF Bay Regional Water Quality Control Board’s July 2015 Advisory for Active Soil Gas Investigation document. No significant rain event occurred within 5 days of the sub-slab sampling. Pictures of the vapor sampling are shown in photographs number 22-27 on Photograph Page 6 of Appendix A.

One sub-slab vapor sample and one duplicate sub-slab vapor sample (FPN SS1) were collected in 6-liter Summa canisters and analyzed for VOCs by EPA Method TO-15 and for Fixed Gases (Oxygen, Carbon Dioxide, Methane) by ASTM Method D1946. A sub-slab sample was also collected from SS1 using Thermal Desorption Tubes and analyzed for TPH as diesel range organics and Naphthalene by EPA Method TO-17. Using a Summa canister, one additional air sample was collected from the interior of the shroud and analyzed for isopropyl alcohol (2-Propanol; leak check compound) only by EPA Method TO-15. Throughout the duration of the sub-slab sampling event (@ 85 to 92 minutes), Wheeler Group monitored and recorded the interior shroud air concentration every 2 minutes using a photo ionization detector.

Laboratory Analyses of Sub-Slab Vapor Sample

Wheeler Group submitted the sub-slab vapor sample SS1 under chain of custody command to Torrent Laboratory, Inc. (Torrent) in Milpitas, California on February 1, 2018. A copy of Wheeler Group’s Sub-Slab Vapor Sampling Data Form for this event is provided in Appendix D. Torrent issued certified analytical reports of sub-slab vapor and air sample results:

Torrent Laboratory, Inc. Work Order No.: 1802007 Rev: 1, February 06, 2018

The certified laboratory analytical reports are presented in Appendix B. According to the reports, no issues were encountered with the receiving, preparation, analysis or reporting of the results. Table 3 in Appendix A summarizes the sub-slab vapor sample laboratory analytical results for the site investigation activities. The reported concentrations of petroleum hydrocarbons are compared to the Regional Water Quality Control Board San Francisco Bay Region’s Tier I Environmental Screening Levels (ESL) as shown on Table 3. Values exceeding (or potentially exceeding) Tier 1 levels are shown in bold type. Isopropyl alcohol (2-Propanol) was reported in vapor sample SS1 at a concentration of **9800 $\mu\text{g}/\text{m}^3$** , which is less than 5% of the IPA concentration in the associated shroud sample of 230000 $\mu\text{g}/\text{m}^3$.

Sub-slab soil vapor samples SS1 and SS1 Duplicate were recovered beneath the concrete slab in the furnace room as shown on Figure 3 titled Site Plan. No TPH as Diesel Range Organics (DRO) was reported in the vapor sample above the Practical Quantitation Limit (PQL) of 25 $\mu\text{g}/\text{m}^3$ and below the ESL value for soil gas of 68000 $\mu\text{g}/\text{m}^3$. Naphthalene, Benzene, Ethylbenzene, and MTBE were not detected above respective PQLs. Toluene and

total Xylenes were reported at 8.4 and 4.6 $\mu\text{g}/\text{m}^3$, below the Tier I ESL values of 160,000 and 52,000 $\mu\text{g}/\text{m}^3$, respectively. The sub-slab vapor sample contained 3.7% Oxygen, 7.3% Carbon Dioxide, and non detectable Methane gas (ND<0.18%).

Grade Elevation Site Survey

On January 18, 2018, Wheeler Group personnel performed a grade elevation survey of all exterior field sampling points and spot locations along the south side of the residence. A picture of the grade elevation survey is shown in photograph number 16 on Photograph Page 5 of Appendix A. The survey was required due to the notable difference in grade elevations between designated borehole locations, as well as the change in topographic slope between the front yard (south) and residence. The top of concrete at the north curb return of driveway of residence with address of 125 Guilford Road was used as an arbitrary datum point, with an assumed elevation of 345 feet (not Mean Sea Level). Wheeler Group performed the grade elevation survey using a TOPCON Model RL20 Rotary Laser Level and CST/Berger leveling rod, with measurements recorded to the nearest 0.01 foot. The grade elevations of various survey points are shown on Figure 3 Site Plan. Wheeler Group's Survey Data Sheet for this event (included in Appendix D), shows the approximate grade elevations for exterior Field Points B1 thru B7. Based on the grade elevation survey results, the difference in elevation between the Field Points B3 and B6 is approximately 4¼ feet, with topography generally sloping toward the south and west.

Water Sampling of Offsite Irrigation Wells

To the northwest across Guilford Road from the Site, a water supply irrigation water well is present at the northeast corner of the 125 Guilford Road residence. Beyond the 125 and 129 Guilford Road properties is another private irrigation water well at 120 Hazel Lane. Available documentation on the installation of irrigation wells at 125 Guilford Road and 120 Hazel Lane is attached in Appendix D titled Additional Documentation. The grade elevation survey indicates the well head at 125 Guilford Road is approximately 9 feet higher in elevation than at Field Point B1. Pictures of the water sampling are shown in photographs number 17-21 on Photograph Page 5 of Appendix A.

On January 18, 2018, WGE, in collaboration with Dysert Environmental, Inc. (DEI), recovered a grab water sample from the spigots on the well heads at 120 Hazel Lane and 125 Guilford Road. The water was purged until measured water parameters stabilized as indicated on the water sampling forms in Appendix D. No evidence of petroleum contamination was observed during the water sampling.

The water supply well at 125 Guilford Road was installed in 2016 under Alameda County Public Works Agency permit number W2015-0921. The well was installed with 5 inch diameter casing to a depth of 200 fbg. Slotted well screen with 0.032 inch slot size was installed from 77 to 137 feet and from 157 to 197 fbg, with #8 filter pack sand placed between 52 to 200 fbg. Water level was measured on February 16, 2016, at 15 fbg with an estimated water yield of 60 gallons per minute.

In the 125 Guilford Road irrigation well, the driller reported topsoil from 0 to 2 fbg, dark brown and black rock from 2 to 38 fbg, grey rock with some white and green rock from 38 to 160 fbg, and grey rock with black silty layers from 160 to 200 fbg. WGE interprets this description to indicate the well encountered weathered Franciscan sandstone and shale from 2 to 38 fbg, Franciscan melange—sandstone with greenstone and/or serpentinite from 38 to 160 fbg, and Franciscan sandstone and shale from 160 to 200 fbg. Water is believed to be present in fracture systems within the hard crystalline Franciscan bedrock.

Alameda County well records indicate the 5"-diameter irrigation well at 120 Hazel Lane was installed in October 1992 to a total depth of 275 feet with depth to water at 51 feet. The property owner provided WGE with the Well Completion Report for the 120 Hazel Lane water supply irrigation well. The Well Completion Report was completed by Glenn Martell & Son, Inc., on November 23, 1992. The well was drilled between October 19th and November 3rd, 1992, to a total depth of 300 fbg and completed to a final depth of 275 fbg.

The 120 Hazel Lane well was completed from 0 to 55 fbg with 4.5 inch internal diameter cemented casing. Casing with a 4.5 inch internal diameter and 0.040 inch slot size with "Aqua. Sand" was installed from 55 to 275 fbg. The well as tested produced 35 gallons per minute at 80 fbg. The standing water level was measured at 51 fbg. The geologic log recorded: 0-60 Yellow brown shale & clay w/ streaks of brown sandstone, 60-125 Fractured grey sandstone & shale w/streaks of grey clay, 125-137 Shaley clay w/fractured grey sandstone, 137-145 Grey clay w/streaks of grey sandstone, 145-300 Grey & blue sandstone w/streaks of white & grey clay. WGE interprets this description to indicate the well encountered weathered Franciscan sandstone and shale from 0 to 60 fbg, fractured Franciscan sandstone and shale from 160 to 145 fbg, and Franciscan melange—sandstone with greenstone and/or serpentinite from 135 to 300 fbg, and. Water is believed to be present in fracture systems within the hard crystalline Franciscan bedrock.

Laboratory Analyses of Water Samples

On January 19, 2018, DEI submitted the water supply irrigation water samples from 120 Hazel Lane (Sample ID 120 Hazel) and 125 Guilford Road (Sample ID 125 Guilford) under chain of custody command to TestAmerica Laboratories, Inc. in Pleasanton, California for analysis of BTEX, Naphthalene and MTBE by EPA Method 8260B/CA LUFT MS, and for Diesel Range Organics (DRO) by EPA Method 8015B. Torrent issued certified analytical reports of water sample results:

TestAmerica Laboratories, Inc. Job I.D.: 720-84312-1, January 26, 2018

The certified laboratory analytical report is presented in Appendix B. According to the report, no issues were encountered with the receiving, preparation, analysis or reporting of the results. The laboratory reported no detectable concentrations of MTBE, Benzene, Ethylbenzene, Naphthalene, Toluene, Total Xylenes, Diesel Range Organics (C10-C28) or Motor Oil Range Organics (C24-C36) in the two water samples from 120 Hazel Lane and 125 Guilford Road irrigation wells.

FOCUSED SITE CONCEPTUAL MODEL

The updated focused site conceptual model (SCM) is presented in Table 4 in Appendix A. The ACDEH suggested in its correspondence that additional subsurface investigation and the sampling of private water supply wells is a minimum work scope necessary to advance the case to closure. ACDEH is considering a deed restriction to protect future land use from direct contact, volatilization to air and vapor intrusion risks posed by residual heating oil contamination. To avoid a deed restriction or notification on the property, it appeared necessary to delineate the degree and extent of residual heating oil contamination remaining at the margins of the 2010 excavation. Soil bores surrounding the former excavation limits would prove that residual soil contamination does not pose a risk to current and future land use. Additional water sampling was needed from the private water supply wells to discount potential risks. The following table presents the results of the subsurface investigation in addressing data gaps:

Data Gaps Summary and Results of Subsurface Investigation

<i>Data Gap</i>	<i>Data Gap Description</i>	<i>Investigation Results to Address Data Gap</i>	<i>Rationale</i>
1	The magnitude and extent of residual heating oil contamination of soil has not been delineated at the former UST location	Seven (7) exploratory borings drilled in front yard of residence surrounding former UST location and along supply piping run with collection of 22 soil samples at soil intervals with petroleum staining and elevated PID readings.	Laboratory analysis of 22 soil samples revealed only two samples above Tier I ESL with DRO at 231 and 282 mg/kg at former fill port location. No BTEX, naphthalene, or MTBE detected in soil samples.
2	The magnitude and lateral extent of heating oil impact to groundwater has not been evaluated	No free water encountered during drilling. Field Point B5 contained drainage water requiring tremie grouting. Water sampling of two irrigation wells.	No shallow groundwater identified during drilling. Laboratory reported no detectable petroleum constituents in two water samples from irrigation wells.
3	The direction of groundwater flow has not been determined	No shallow groundwater identified during drilling. Water sampling of two irrigation wells in topographic down-gradient direction within estimated mature heating oil plume length. Laboratory reported no detectable petroleum constituents in two water samples from irrigation wells.	Laboratory reported no detectable petroleum constituents in two water samples from irrigation wells at 120 Hazel Lane and 125 Guilford Road.
4	Site has not been evaluated for naphthalene contamination	In the seven (7) exploratory borings surrounding the former UST location, 22 soil samples were recovered for laboratory analyses.	Laboratory analysis of 22 soil samples revealed no BTEX, naphthalene, or MTBE detected in soil samples.

5	Sensitive receptors exist at two private water wells located in close proximity to the estimated potential TPH plume length	WGE provided for the collection of grab groundwater samples from two private water supply irrigation well head spigots for analysis of petroleum hydrocarbons.	Laboratory reported no detectable petroleum constituents in two water samples from irrigation wells at 120 Hazel Lane and 125 Guilford Road.
6	The condition of subsurface product piping beneath the floor slab of the basement has not been evaluated for a heating oil release	EnProbe installed one temporary sub-slab vapor probe to screen the basement floor for a heating oil release from supply piping or from former oil burner location.	The laboratory reported that detectable petroleum constituents in the sub-slab vapor sample were below applicable Tier I ESL values.

Based on the results of the January-February subsurface investigation, WGE proposes that outstanding data gaps have been resolved.

EVALUATION OF LOW THREAT CLOSURE POLICY CRITERIA

To achieve regulatory case closure under the LTCP criteria with unrestricted land use and no deed restriction, additional subsurface investigation was required at the Site in addition to water sampling of two offsite private water supply wells. The updated Table 5 titled *Evaluation of Low Threat Closure Policy for Data Gaps at Mulholland Residence* is presented in Appendix A. The evaluation of Low-Threat Underground Storage Tank Case Closure Policy (LTCP) criteria for data gaps is presented in Table 5.

GEOTRACKER UPLOAD

Wheeler Group uploaded all laboratory analytical reports (EDF) to the State Water Resources Control Board's GeoTracker Database System. Wheeler Group also uploaded a copy of all boring logs (GEO_BORE), a revised Site Plan (GEO_MAP) and a copy of the report of findings (GEO_REPORT) in Portable Data Format (PDF) to the GeoTracker Database.

WASTE MANAGEMENT

All waste soil cuttings and other soil waste generated during soil boring and sample collection activities were transferred to a 55-gallon, D.O.T.-approved steel drum(s) for temporary storage in a secure area. Equipment wash and rinse water generated from the decontamination of drilling and sampling equipment was transferred to a separate 55-gallon steel drum for temporary storage onsite. Following receipt of soil sample analytical data and waste profiling, Big Sky Environmental Solutions, on February 7, 2018, transported the solid and liquid waste drums under Non-Hazardous Waste Manifest No. 020518001 to the Big Sky Enterprises disposal facility in Benicia, California. A copy of the Non-Hazardous Waste Manifest is included in Appendix D.

CONCLUSIONS AND RECOMMENDATION

Based on the results of the January-February 2018 subsurface investigation, WGE summarizes the following conclusions as follows:

- As summarized in Table 1, all 22 soil samples had Naphthalene, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and MTBE below Tier I ESL values.
- Residual heating oil contaminated soil remains at the bottom of the UST cavity with a Total Petroleum Hydrocarbons (TPH) as Diesel Range Organics (DRO) concentration of 217 mg/kg, below the Tier I ESL value of 230 mg/kg. Exploratory boring and soil sampling surrounding the former UST location indicates the remaining volume of heating oil contaminated soil is small.
- Soil with Total Petroleum Hydrocarbons TPH as DRO above Tier I ESL value of 230 mg/kg was only encountered in boring B3 at the former fill port location. In boring B3, soil samples at 2.5 and 4 fbg had TPH as DRO concentrations of 231 and 282 mg/kg, slightly above the Tier I ESL value for TPH as DRO of 230 mg/kg. In boring B3, the soil samples at 5, 6.5 and 10 fbg had TPH as DRO concentrations of 11.7, 12.7 and 4.83 mg/kg, below the Tier I ESL value.
- Weathered Franciscan formation bedrock was encountered at approximately 1.5-8.5 fbg in the exploratory borings. Dense bedrock and rotary hollow stem auger drilling refusal occurred at 13-14 fbg.
- As summarized on Table 3, concentrations of TPH as DRO or other volatile organic compounds in Sub-slab vapor sample SS1 did not exceed Tier I ESL values.
- No free water or evidence of a shallow groundwater aquifer was encountered in the exploratory borings on the Site. Water accumulating in the UST over-excavation cavity is attributed to rain water. In boring B5, accumulated water was attributed to drainage water from onsite irrigation.
- Water sampling of nearby domestic water supply irrigation wells at 120 Hazel Lane and 125 Guilford Road did not detect petroleum contamination. Table 2 presents the results of the samples collected from both wells.

Based on the results of the subsurface investigation, the residual soil contamination is low in concentration and should naturally degrade within a reasonable time frame. Table 1 of the LTCP indicates the residual heating oil contamination does not present a significant risk to residential use or construction workers from direct contact or outdoor air exposure. Soil and vapor sampling does not reveal a significant vapor intrusion concern at the Site or nearby properties. Water sampling at two nearby irrigation wells indicates no detectable petroleum contamination and no groundwater plume was detected.

WGE recommends the ACDEH close LOP Case No. RO0003070 under the Low Threat Closure Policy.

REPORT PREPARATION & DISTRIBUTION

Following the completion of all field work and receipt of all pending analytical data, Wheeler Group reviewed the field / analytical data and prepared a technical report summarizing the field work completed and data collected. The report discusses the activities and findings of the subsurface investigation and presents the findings of the work. The report was submitted to the following parties:

Ms. Leslie Mulholland
Leslie Mulholland Trust
132 Guilford Road
Piedmont, California 94611
airleslie@hotmail.com

1 PDF Work Plan via Email

Megan K. Walsh, Esq.
Owner/Lead Attorney
Oakland, California
meganwalshesq@gmail.com

1 PDF Work Plan via Email

Mark Detterman, PG, CEG
Alameda County
Department of Environment Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577
mark.detterman@acgov.org

1 PDF Work Plan via GeoTracker

1 PDF Work Plan via ACDEH-FTP

LIMITATIONS

It should be understood that all environmental assessments are inherently limited in that conclusions are drawn and recommendations developed from information obtained from limited research and visual observations. Subsurface conditions change significantly with distance and time and therefore may differ from the conditions implied by subsurface investigation. Existing hazardous materials and contaminants can escape detection using existing methods. The work performed in conjunction with this assessment and the data developed are intended as a description of available information at the dates and location given. Wheeler Group's professional services have been performed, with findings obtained and recommendations prepared in accordance with customary principles and practices in the field of environmental science, at the time of the assessment. This warranty is in lieu of all other warranties either expressed or implied.

Wheeler Group is not responsible for the accuracy of information reported by others or the independent conclusions, opinions or recommendations made by others based on the field exploration presented in this report. The findings contained in this report are based upon information contained in previous reports of corrective action activities performed at the Site and based upon site conditions as they existed at the time of the investigation, and are subject to change. The scope of services conducted in execution of this phase of investigation may not be appropriate to satisfy the needs of other users and any use or reuse of this document and any of its information presented herein is at the sole risk of said user. The figures, drawings and plates presented in this report are only for the purposes of environmental assessment and no other use is recommended. No other third party may rely on this report, figures or plates for any other purpose.

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DATA GAP INVESTIGATION REPORT

132 Guilford Road, Piedmont, California
WGE Project No. 2017110

APPENDIX A

FIGURES, TABLES & PHOTOGRAPH PAGES

APPENDIX A – FIGURES, TABLES & PHOTOGRAPH PAGES

Figure 1 – Site Location Map

Figure 2 – Site Vicinity Map

Figure 3 – Site Plan

Figure 4 – Geologic Map

Figure 5 – Topographic Map

Figure 6 – Potential TPH Plume Map

Table 1 – Soil Sampling & Laboratory Analysis Results, UST Removal & Data Gap Investigation

Table 2 – Water Sample Laboratory Analysis Results, UST Removal & Data Gap Investigation

Table 3 – Soil Vapor Sampling & Laboratory Analysis Results, Data Gap Investigation

Table 4 – Focused Site Conceptual Model for Mulholland Residence at 132 Guilford Road

Table 5 – Evaluation of Low Threat Closure Policy Criteria for Data Gaps at Mulholland Residence

Photographs Page 1

Photographs Page 2

Photographs Page 3

Photographs Page 4

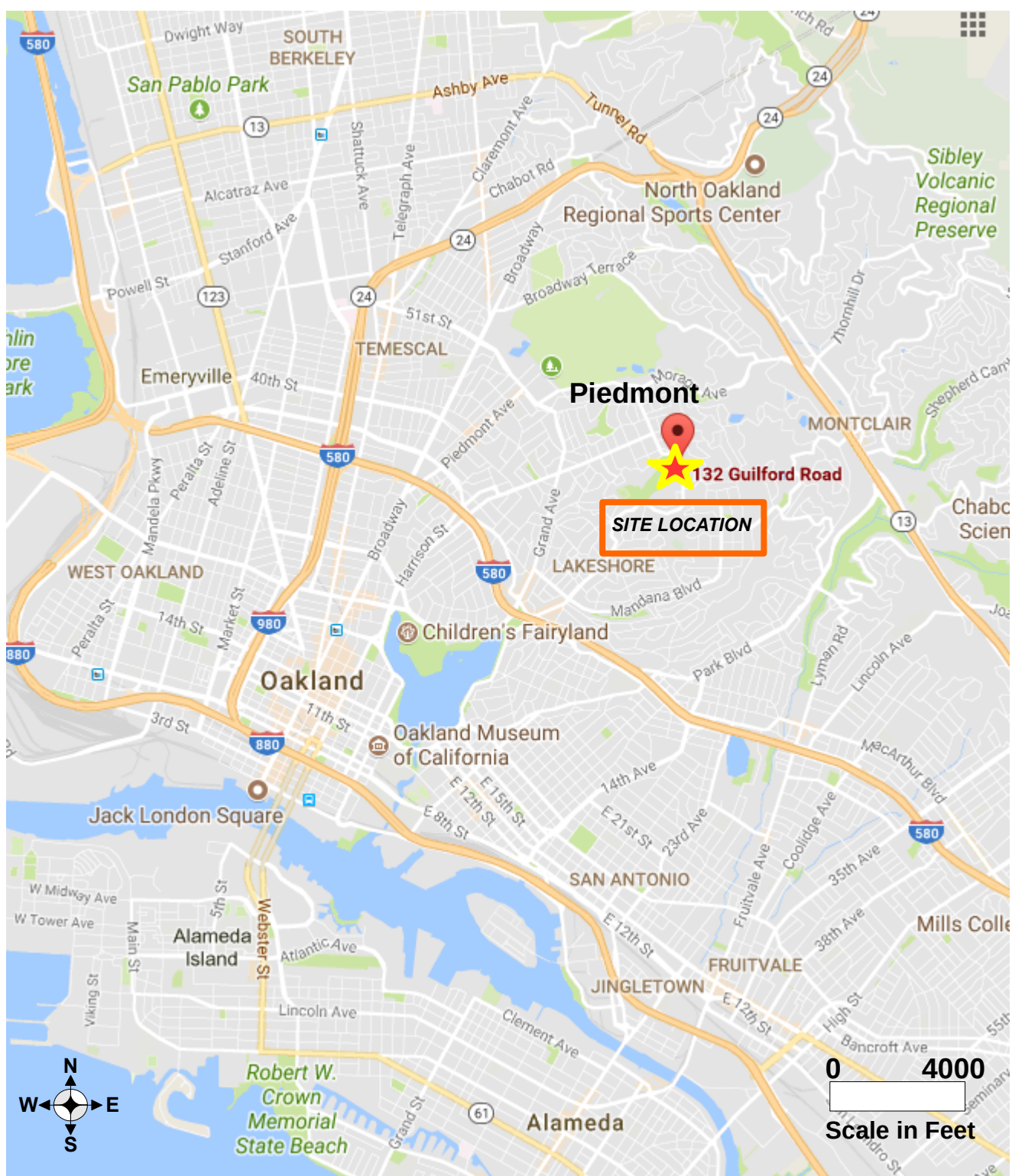
Photographs Page 5

Photographs Page 6

Wheeler Group Environmental, LLC

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Phone: 415-686-8846



Base map is a low resolution screen capture from Google Map data 2017

WHEELER GROUP ENVIRONMENTAL, LLC

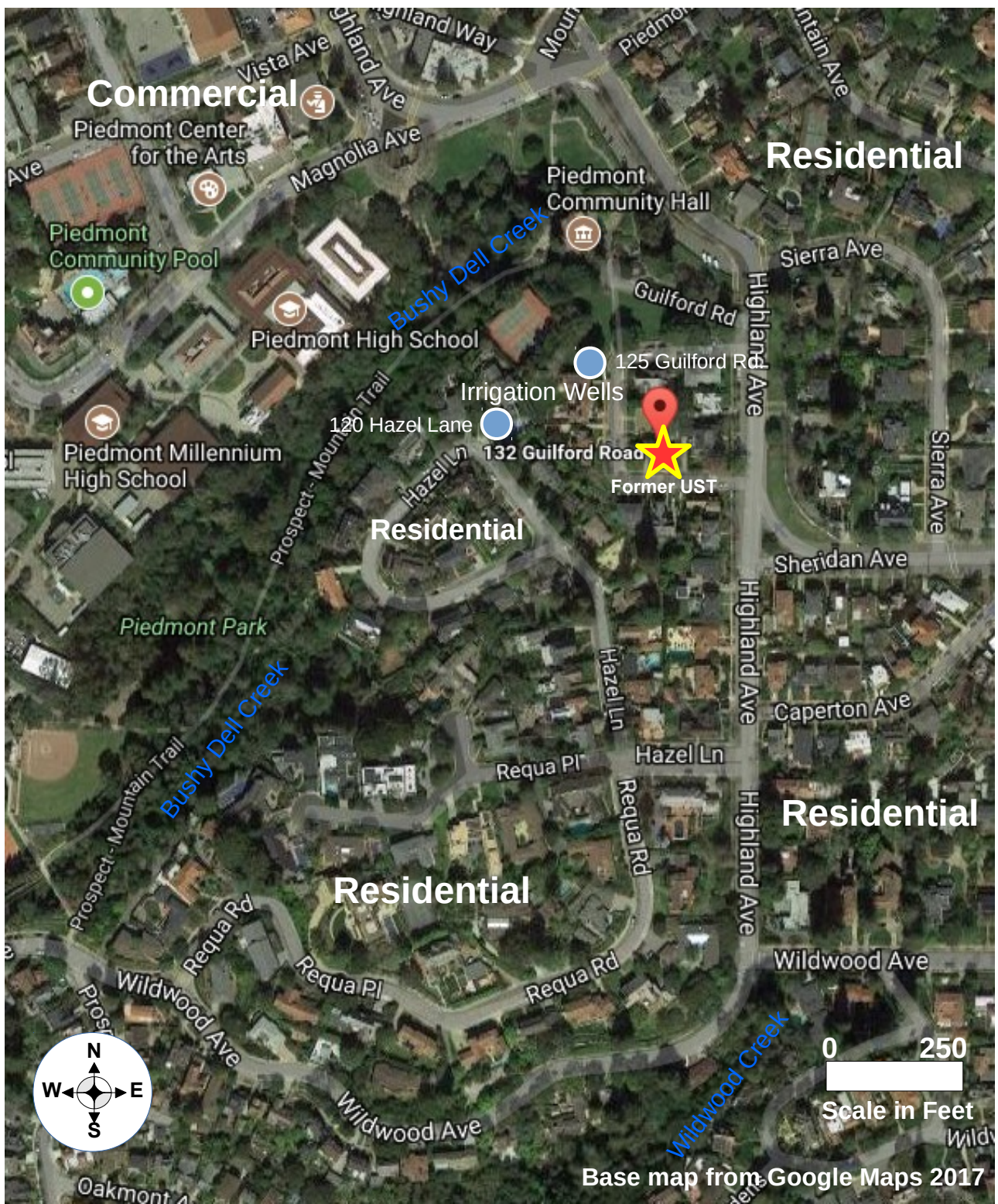


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SITE LOCATION MAP

Data Gap Investigation Report
 132 Guilford Road, Piedmont, California



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SITE VICINITY MAP

Data Gap Investigation Report

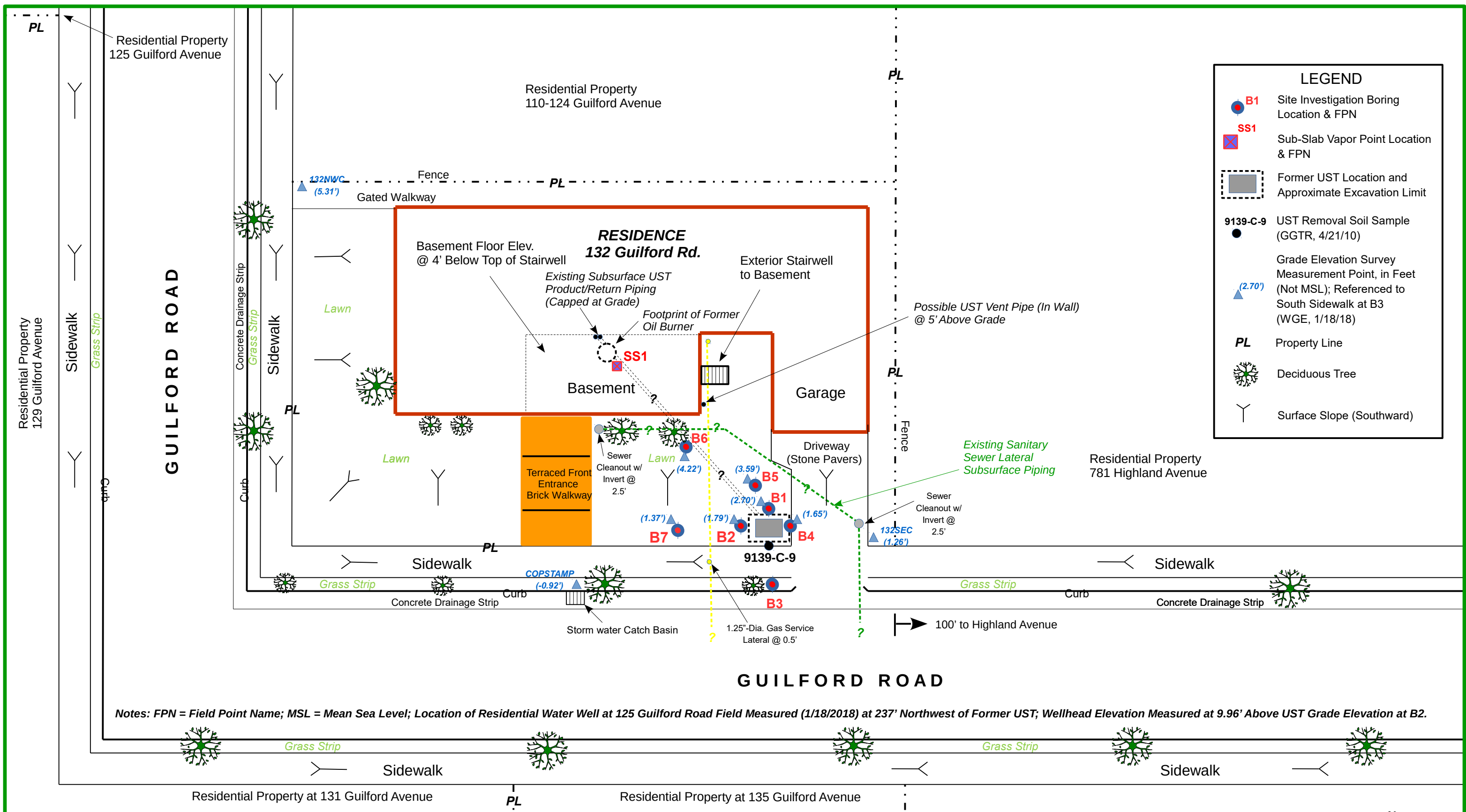
132 Guilford Road, Piedmont, California

WGE No. 2017110

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Drawing: MY Feb. 2018

Figure 2

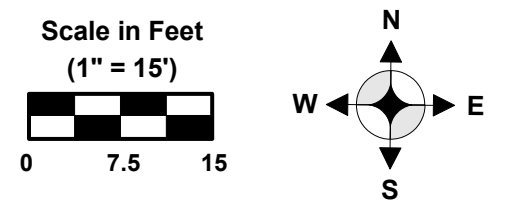


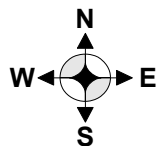
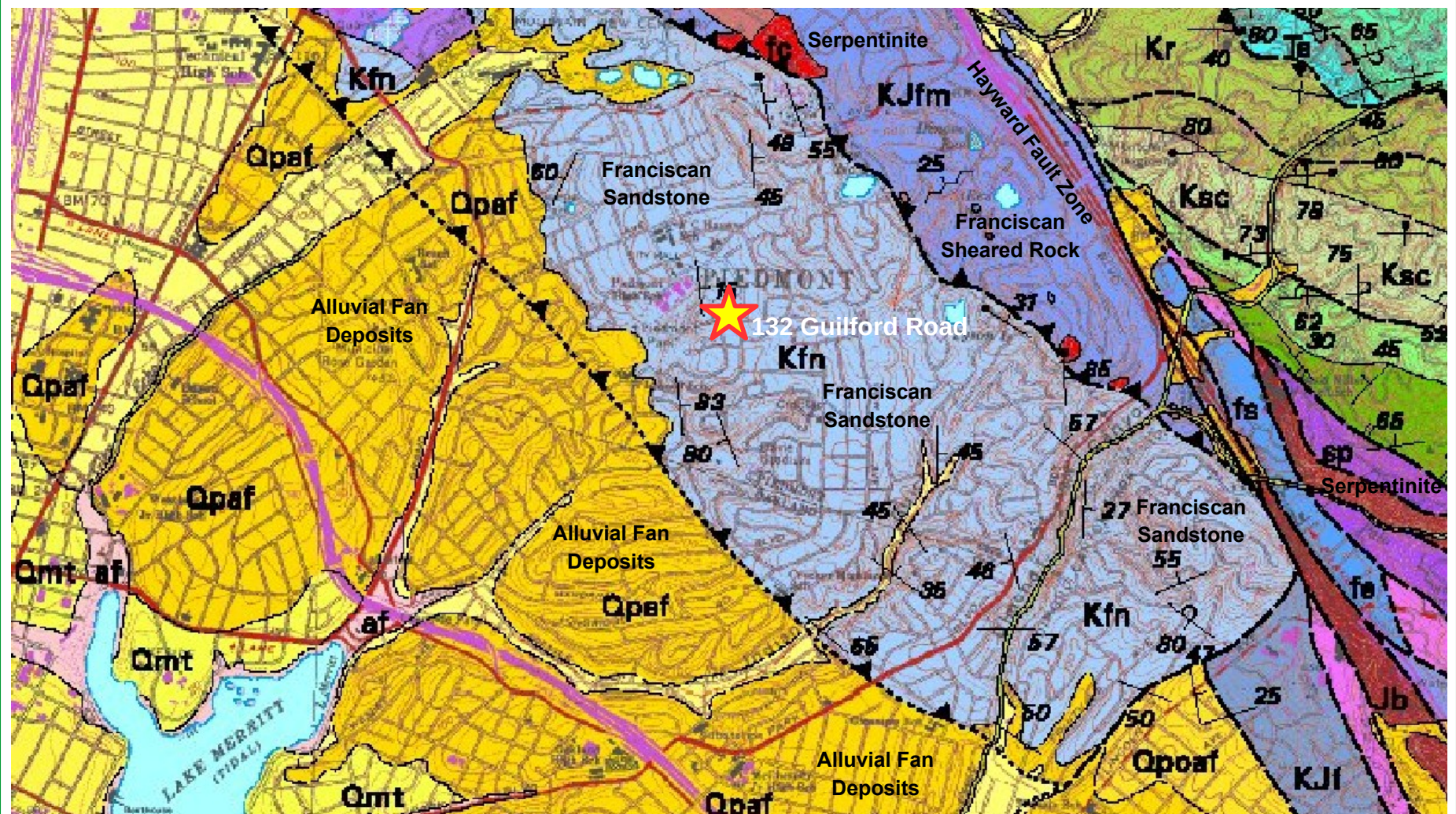
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SITE PLAN
Data Gap Investigation Report
 132 Guilford Road
 Piedmont, California

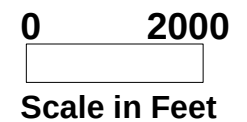
WGE Project No. 2017110
 Revision By: baw/01-18
 FN: 2017110_Fig3_SitePlan
Figure 3

Residential Property
 137 Guilford Avenue





A portion of Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California: Miscellaneous Field Studies MF-2342 by U.S. Geological Survey 2000; see pamphlet text for explanation of geologic units shown on map



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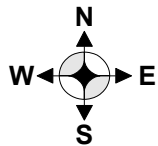
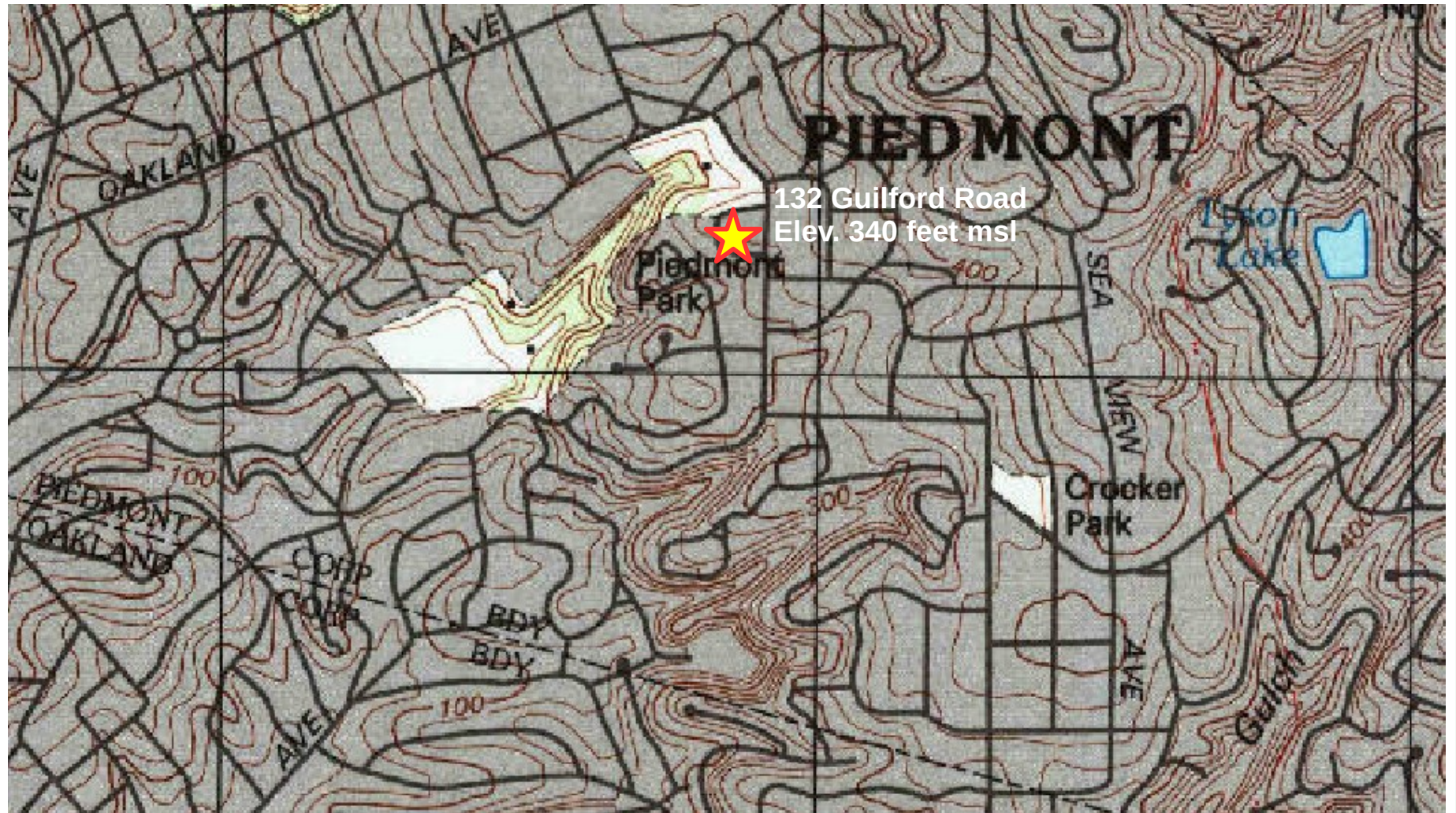
GEOLOGIC MAP
Data Gap Investigation Report
 132 Guilford Road, Piedmont, CA

Project No. 2017110

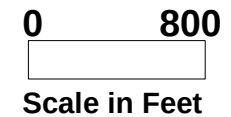
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Drawing by: MY Feb. 2018

Figure 4



A portion of Oakland East Quadrangle, California: topographic quadrangle map by United States Geological Survey dated 1997; Scale 1:24,000; contour interval is 20 feet



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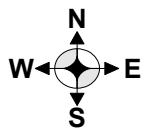
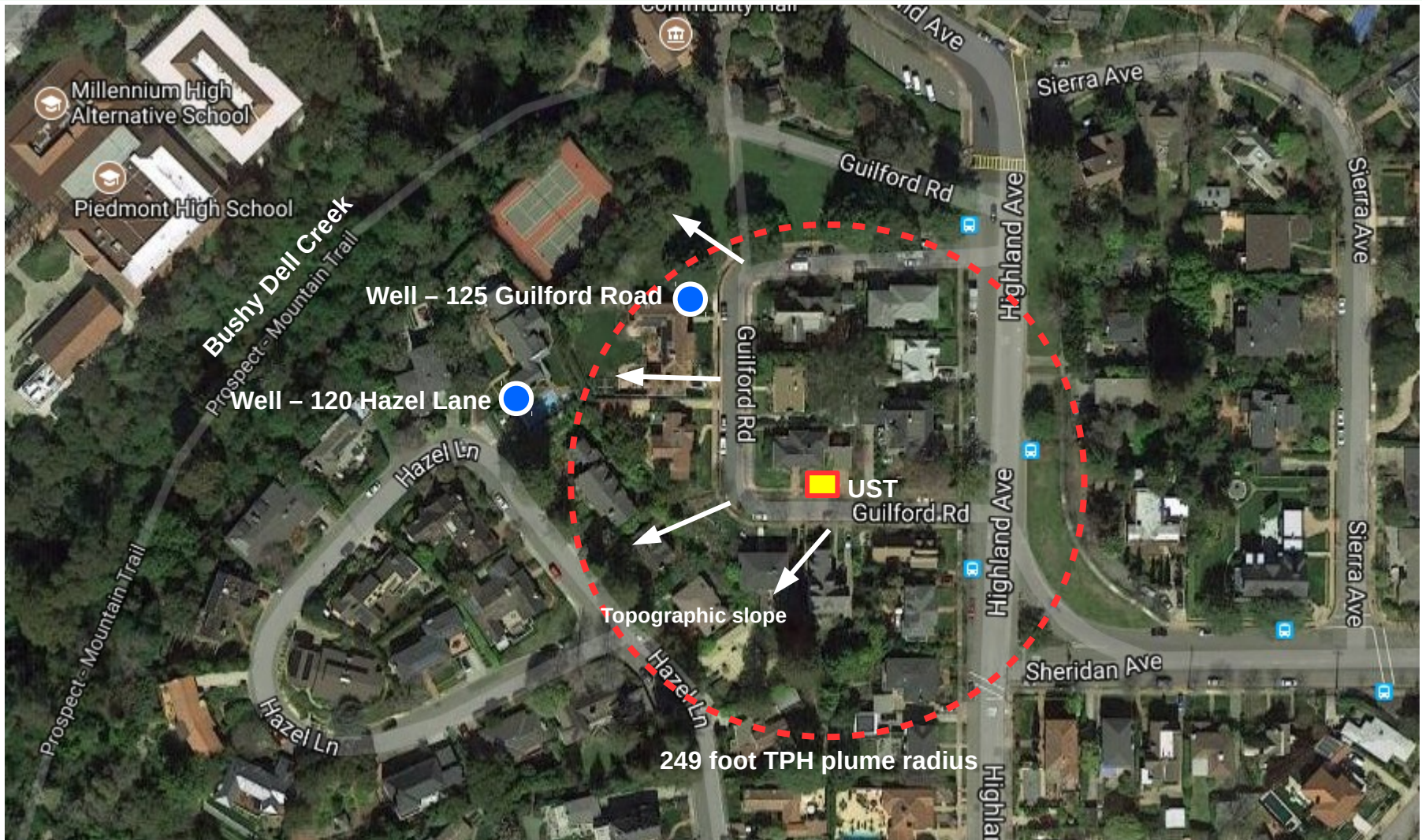
TOPOGRAPHIC MAP
Data Gap Investigation Report
132 Guilford Road, Piedmont, CA

Project No. 2017110

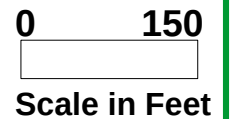
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Figure 5



Potential TPH plume from heating oil UST at 132 Guilford Road based on 249 foot diameter potential plume diameter. The nearest well at 125 Guilford Road is within the plume radius. Other well at 120 Hazel Lane is just outside the potential plume estimate. Direction of topographic slope shown by white arrows. Base map from Google Maps 2017 with annotations by Wheeler Group Environmental, LLC.



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POTENTIAL TPH PLUME MAP
Data Gap Investigation Report
 132 Guilford Road, Piedmont, CA

Project No. 2017110

FN: 2017110_Fig6_PlumeMap_Feb2018.odg

Drawing By: MY Feb. 2018

Figure 6

TABLE 1
Soil Sampling & Laboratory Analysis Results
UST Removal & Data Gap Investigation
132 Guilford Avenue, Piedmont, CA

Results in milligrams per kilogram (mg/kg)

<i>Field Point Name / Sample ID</i>	<i>Sampling Date</i>	<i>Depth Feet</i>	<i>Field VOCs ppm*</i>	<i>TPH-DRO</i> ¹	<i>Benzene</i>	<i>Toluene</i>	<i>Ethylbenzene</i>	<i>Total Xylenes</i>	<i>Naphthalene</i>	<i>MTBE</i>
UST Removal - April 2010										
9139-C-9 ²	04/21/2010	9	NM	217	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.19)	NA	ND(0.048)
9139-SP(A-D)Comp ²	04/21/2010	NA	NM	5080	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.4)	NA	ND(0.1)
Data Gap Investigation - January 2018										
B1 / B1-3	01/17/2018	3	0.0	2.45 ³	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B1 / B1-5	01/17/2018	5	0.0	ND (2.0)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B1 / B1-6.5	01/17/2018	6.5	0.1	ND (2.0)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B2 / B2-2.5	01/17/2018	2.5	0.0	6.15 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B2 / B2-5	01/17/2018	5	0.0	7.37 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B2 / B2-6	01/17/2018	6	0.0	2.00 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-2.5	01/17/2018	2.5	0.9	231 ⁵	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-4	01/17/2018	4	4.4	282 ⁵	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-5	01/17/2018	5	0.1	11.7 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-6.5	01/17/2018	6.5	0.0	12.7 ⁵	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-10	01/18/2018	10	0.0	4.83 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B3 / B3-14	01/18/2018	14	0.0	2.19 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B4 / B4-2.5	01/17/2018	2.5	0.0	ND (4.0)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B4 / B4-5.5	01/17/2018	5.5	0.1	2.76 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B4 / B4-7	01/17/2018	7	0.0	2.02 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B5 / B5-2.5	01/17/2018	2.5	0.0	2.27 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B5 / B5-5	01/17/2018	5	0.0	ND (2.0)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B5 / B5-7	01/17/2018	7	0.0	ND (2.0)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B5 / B5-8.5	01/17/2018	8.5	0.0	3.34 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B5 / B5-13	01/17/2018	13	0.0	4.11 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B7 / B7-2.5	01/17/2018	2.5	0.0	2.66 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
B7 / B7-5	01/17/2018	5	0.0	2.36 ⁴	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
SF BAY RWQCB February 2016 Tier 1 ESL				230	0.044	2.9	1.4	2.3	0.033	0.023

Table 2 Abbreviations and Notes on Following Page

TABLE 1 (Cont'd)
Soil Sampling & Laboratory Analysis Results
Data Gap Investigation

132 Guilford Avenue, Piedmont, CA

Table 1 Notes

Abbreviations:

TPH = total petroleum hydrocarbons; MTBE – Methyl tertiary butyl ether
ND = Not Detected above Practical Quantitation Limit (PQL) shown in parentheses
NA = Not Analyzed
NM = Not Measured

Notes:

- 1 – DRO (Diesel Range Organics) = C10-C28
 - 2 – Sample also analyzed for 1,2-EDB=1,2-Dibromoethane; 1,2-EDC=1,2-Dichloroethane; DIPE=Di-Isopropyl ether; ETBE=Ethyl Tert Butyl Ether; TAME=Tert-Amyl Methyl Ether; TBA=Tert-Butyl Alcohol (All results ND<MDL; See GGTR UST Closure Report, dated May 18, 2010); Stockpile Sample also analyzed for Total Lead (Result = 45.4 mg/kg).
 - 3 – Diesel result due to over-lapping of oil range into diesel range.
 - 4 – Presence of discrete peaks not typical of diesel reference pattern.
 - 5 – Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel.
- * – Measured using calibrated photoionization detector (PID)

Tier 1 ESL = SF Bay Regional Water Quality Control Board (February 2016) Environmental Screening Level

TABLE 2
Water Sample Laboratory Analysis Results for Petroleum Hydrocarbons
UST Removal & Data Gap Investigation
 132 Guilford Road, Piedmont, California

Field Point Name / Sample ID	Sampling Date	Depth Feet	Results in micrograms per Liter (ug/L)							
			TPH as Diesel µg/L	TPH as Motor Oil µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L	MTBE µg/L	Naphtha µg/L
UST Removal - April 2010										
9139-PW 1	04/21/2010	Perched Water in Drum	11,000	NA	ND (0.6)	1.5	ND (0.6)	4.7	ND (1)	NA
Data Gap Investigation - January 2018										
125 Guilford / 125GII	01/18/2018	Spigot	ND (28)	ND (67)	ND (0.25)	ND (0.17)	ND (0.13)	ND (0.40)	ND (0.069)	ND (0.22)
120 Hazel / 120HAZE	01/18/2018	Spigot	ND (28)	ND (68)	ND (0.25)	ND (0.17)	ND (0.13)	ND (0.40)	ND (0.069)	ND (0.22)
SF BAY RWQCB February 2016 Tier 1 ESL			100	Note 2	1	40	13	20	5	0.12

Table 2 Notes

Abbreviations:

- TPH = total petroleum hydrocarbons; MTBE – Methyl tertiary butyl ether; Naphtha = Naphthalene
- ND = Not Detected above Method Detection Limit (MDL) shown in parentheses, unless otherwise noted
- NA = Not Analyzed
- NM = Not Measured

Notes:

- 1 = Sample also analyzed for Fuel Oxygenates, with results in ug/L: 1,2-Dibromoethane (ND<0.4); 1,2-Dichloroethane (ND<0.6); Di-Isopropyl ether (ND<1); Ethyl Tert Butyl Ether (ND<1); Tert-Amyl Methyl Ether (ND<1); Tert-Butyl Alcohol (ND<10).
- 2 = Tier I ESL has Note 3 on Table on Page 2 as follows: "TPH motor oil is not soluble. TPH motor oil in water most likely are petroleum degradates"

Tier 1 ESL = SF Bay Regional Water Quality Control Board (February 2016) Environmental Screening Level

TABLE 3
Soil Vapor Sampling & Laboratory Analysis Results
Data Gap Investigation

132 Guilford Road, Piedmont, CA

Results in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

<i>Field Point Name / Sample ID</i>	<i>Sampling Date</i>	<i>Sample Type</i>	<i>Sample Location</i>	<i>Sample Intake, Feet Above Grade</i>	<i>Diesel Range Organics</i>	<i>2-Propanol / IPA</i>	<i>Benzene</i>	<i>Toluene</i>	<i>Ethylbenzene</i>	<i>Total Xylenes</i>	<i>Naphthalene</i>	<i>MTBE</i>	<i>Hexane</i>
SS1 ¹	02/01/18	Sub-Slab Vapor	Furnace Room	Sub-slab	ND (25) ²	9800	ND (1.6)	8.4	ND (2.2)	4.6	ND (2.6) ³	ND (1.8)	17
SS1 / SS1 DUP	02/01/18	Sub-Slab Vapor	Furnace Room	Sub-slab	NA	8900	ND (40)	ND (47)	ND (54)	ND (54)	ND (66) ⁴	ND (45)	ND (44)
SS1SHROUD	02/01/18	Shroud	Furnace Room	Shroud (1')	NA	230000	NA	NA	NA	NA	NA	NA	NA
SF BAY RWQCB February 2016 Tier 1 ESL				Sub-Slab/ Soil Gas	68000	NE	48	160000	560	52000	41	5400	NE

Table 3 Notes

Abbreviations: ND = Not Detected above Practical Quantitation Limit (PQL) shown in parentheses, unless otherwise noted
 NA = Not Analyzed
 NE = Not Established
 IPA=isopropyl alcohol, MTBE=methyl tertiary butyl ether

Notes:

- 1 – Sample Additionally Analyzed for Oxygen (3.7%), Carbon Dioxide (7.3%) & Methane (ND<0.18%) by ASTM D1946
- 2 – Collected in Thermal Desorption Tubes (2) and Analyzed by EPA Method TO-17
- 3 – Naphthalene Analyzed by EPA Method TO-15 (ND<2.6 $\mu\text{g}/\text{m}^3$) and by EPA Method TO-17 (ND<5.0 $\mu\text{g}/\text{m}^3$); reported using Practical Quantitation Limit
- 4 – Naphthalene Analyzed by EPA Method TO-15 (ND<66 $\mu\text{g}/\text{m}^3$); reported using Practical Quantitation Limit

Tier 1 ESL = SF Bay Regional Water Quality Control Board (February 2016) Environmental Screening Level

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
Site ID	Mulholland Residence, 132 Guilford Road, Piedmont, California, APN 51-4676-19 Alameda County LOP Case No. RO0003070 and GeoTracker Global ID No. T10000002521	
Current Land Use and Description	The approximately 6400 square foot lot is occupied by a 1930s two-story single-family residence in a residential neighborhood with similar single-family residences. There are no current plans to redevelop the Site. The residence at the Site was constructed in the 1930s with a heating oil furnace located in the partial basement beneath the southern portion of the residence, see Figure 3 titled Site Plan. Wheeler Group observed the former location of the oil burner with capped supply lines in the partial basement utility room during a Site inspection on August 9, 2017. Municipal water, electricity, natural gas and sewer infrastructure is provided to the area.	None
Topography	The Site is located at an approximate elevation of 340 feet mean sea level on top of a local east-west trending Franciscan bedrock ridge. The topographic slope is away from the former UST location towards the south and west. Drainage ravines are located to the northwest, west and southwest of the Site with elevation drops up to approximately 180 feet below the elevation of the subject property. Figure 5 titled Topographic Map shows the local topography surrounding the Site and the location of nearby drainage ravines.	None
Surface Water	No surface water is located on the Site or within approximately 500 feet of the former UST location. From the Site's position on a local ridge-top, the topography slopes to the south and west towards Piedmont Park and the surface exposure of Bushy Dell Creek about 500 feet west of the former UST location. The drainage ravine of Wildwood Creek is located about 1130 feet south of the Site.	None
Geology Regional	The U.S. Geological Survey map titled <i>Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California</i> , Miscellaneous Field Studies MF-2342, dated 2000, contains geologic information for the Site vicinity. Figure 4 titled Geologic Map shows an excerpt from the published geologic map showing the subject property. According to the geologic map, the Site is directly underlain by the Franciscan formation, composed of sandstone, shale, basalt, serpentinite, chert, limestone, and other rocks. Franciscan sandstone, labeled as Kfn, is shown on the map at the Site. The sandstone is massive, with shale partings and shale interbeds. The sandstone is dark greenish-gray where fresh and weathers to yellowish-brown. During the 2010 UST removal, hard bedrock was encountered at 9 fbg in the UST over excavation. During the January 2018 subsurface investigation, weathered sandstone-siltstone bedrock occurs from 1.5-8.5 feet of surface. Hard bedrock as indicated by rotary hollow stem augur drilling refusal was encountered at 13-14 fbg. The nearby water supply irrigation well at 125 Guilford Road appears to have penetrated Franciscan formation melange, sandstone and shale to the total depth of 200 fbg.	None

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
Geology Local	Piedmont City Hall is located approximately 917 feet northwest of the Site and approximately the same elevation. The GeoTracker website contains a 2012 site investigation document by Aqua Science Engineers, Inc. (ASE) dated June 18, 2012, for the Piedmont City Hall LUST case. During their leaking fuel tank investigation, ASE drilled three borings to a total depth of 30 feet below grade (fbg). ASE drilled boring BH-A with a mud rotary drill rig encountering loose silty clay and silty sand to a depth of 4 fbg where free water was observed. From 4-8 fbg, hard shale and chert of the Franciscan bedrock was found. Hard grey greywacke sandstone occurred from 8 to 23 fbg followed by black shale from 23 to 29 fbg, and hard grey greywacke sandstone to drilling refusal at a total depth of 30.1 fbg. The irrigation well at 125 Guilford Road appears to have penetrated Franciscan formation melange, greywacke sandstone and shale to a depth of 200 fbg.	None
Geology Site Conditions	Golden Gate Tank Removal, Inc. (GGTR) summarizes the removal of the subject’s underground storage tank (UST) in its Tank Closure Report dated May 18, 2010: “The overburden soil and the soil underlying the tank was predominantly rock/silt.” The report also indicates that the over-excavation of petroleum contaminated soil from beneath the former UST location encountered hard bedrock at a depth of 9½ fbg as indicated in the following sentence: “Due to the presence of bedrock, soil sample 9139-C-9 was collected 4’ below center tank bottom at approximately 9 fbg, following over excavation.” During the January-February 2018 subsurface investigation, clay, sand and silt was encountered from surface to 13-14 feet below grade representing weathered sandstone-siltstone Franciscan bedrock. Hard Franciscan sandstone bedrock was encountered at 13-14 fbg as indicated by drilling refusal with rotary hollow stem augur equipment.	None
Hydrogeology Regional	Norfleet Consultants discussed the regional groundwater basins in its 1998 study titled <i>Groundwater Study and Water Supply History of The East Bay Plain, Alameda and Contra Costa Counties, CA</i> . The Piedmont region is located within the San Francisco Basin and the Oakland sub-area. Piedmont is located within the upland Highlands bedrock region of Cretaceous Franciscan units. The bedrock highland is a source of sediment for the alluvial fan deposits below in the San Francisco Basin. No historical well fields are located within the Highlands area of Piedmont. Traditionally, the Hayward Fault has been used as the eastern boundary of the San Francisco Basin. However, the outcrop area of Franciscan bedrock is believed to be the primary boundary and the Hayward Fault has little effect on the groundwater in the San Franciscan Basin. Therefore, the Site’s location would not be included within a designated groundwater basin.	None
Hydrogeology Local	Two known private water supply wells are located in the neighborhood of the subject property with one of the wells located within the 249-foot minimum plume length from the former UST location in the potential down-gradient direction. A landscape irrigation water well is present at the 125 Guilford Road residence within 249 feet of the former UST location. Beyond the 125 Guilford Road property is another landscape irrigation water well at 120 Hazel Lane. Both wells appear to be completed within the Franciscan formation sandstone and shale,	None

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
	presumably obtaining water from within fracture systems. The well data for the 125 Guilford Road irrigation well indicates water is produced from 77 to 137 fbg and 157 to 197 fbg in Franciscan melange and sandstone-shale. The 120 Hazel Lane well has slotted well casing from 55 to 275 fbg, with 35 gallons per minute from 80 fbg.	
Hydrogeology Site Conditions	Golden Gate Tank Removal, Inc. indicates that perched water occurred in the UST pit during over excavation. Tank removal inspection notes indicate that it was raining heavily during the UST removal and a petroleum sheen was observed on water in the excavation. The water was removed to a 55-gallon drum where a water sample, 9139-PW, was collected for laboratory analysis of petroleum hydrocarbons. The laboratory reported a Total Petroleum Hydrocarbon (TPH) as diesel concentration of 11 mg/L (milligrams per liter) in the perched water sample. Toluene was reported at 1.5 µg/L (micrograms per liter) and Total Xylenes at 4.7 µg/L. Only TPH as diesel at 11 mg/L exceeds the Tier I ESL value for residential land use. Based on the observations during the January-February 2018 subsurface investigation, perched water observed during the UST removal and drainage water observed at Field Point B5 represent irrigation water on top of hard Franciscan bedrock. No free groundwater was encountered in borings B1 through B7 during the January-February 2018 subsurface investigation. Upon sealing, free water was observed in boring B5 that field personnel attributed to drainage water from onsite irrigation activities.	None
Groundwater Flow Direction	There are no groundwater monitor wells at the Site or adjoining properties because no shallow groundwater resource has been identified at the Site. The Site occurs on a bedrock ridge at an elevation of 340 feet above mean sea level. Nearby ravines drop in elevation by up to 180 feet to the west and southwest. Franciscan bedrock is encountered at a shallow depth in this area with dense bedrock at 13 to 14 fbg at the Site. Rain and irrigation water is believed to flow on top of the bedrock in the direction of the topographic slope to the west towards the nearest drainage at Bushy Dell Creek ravine in Piedmont Park about 500 feet west from the former UST location.	None
Nearby Wells	Figure 2 titled Site Vicinity Map shows the surrounding neighborhood and location of two nearby private water supply wells. To the west across Guilford Road from the Site are similar residences at 125 and 129 Guilford Road. A landscape irrigation water well is present at the 125 Guilford Road residence. Beyond the 125 Guilford Road property is another landscape irrigation water well at 120 Hazel Lane. The ravine of Bushy Dell Creek is located beyond both wells and about 500 feet northwest of the former UST location. No municipal water supply wells are reported within the Piedmont area. During January 2018, WGE collected water samples from the well head spigots at both 120 Hazel Lane and 125 Guilford Road for the laboratory analysis of petroleum constituents. TestAmerica Laboratories Inc. reported no detectable heating oil constituents in the two water samples.	None

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
Release Source and Volume	The prior heating oil UST is believed to be the main source of petroleum hydrocarbons detected in soil at the Site. Golden Gate Tank Removal, Inc. (GGTR) summarizes the removal of the subject's underground storage tank (UST) in its Tank Closure Report dated May 18, 2010. Refer to the original report for details and documentation. The following description summarizes information in the GGTR report. Underground product lines formerly connected the oil burner to one 200-gallon UST formerly used to contain heating oil (diesel) located adjacent to the driveway and sidewalk on the Guilford Road frontage of the property. The UST was 4 feet in length and 3 feet in diameter buried approximately 5 feet below grade. The fill port was located on the west end of the tank. Wheeler Group observed a potential UST vent pipe on the exterior of the residence as indicated on Figure 3.	None
UST Removal	On April 21, 2010, GGTR removed the single-wall steel UST from the sand backfill in the tank pit. Photographs indicate that the product and vent piping was cut at the edge of the excavation. The ACDEH Underground Storage Tank Inspection Report dated April 21, 2010, indicates "holes" in the UST and a sheen on water in the tank pit. It was raining heavily at the time of the UST removal. GGTR reported soil discoloration and petroleum odor in the tank overburden soil or soil underlying the tank. GGTR described the subsurface soil as rock/silt. On April 22, 2010, GGTR filed an Underground Storage Tank Unauthorized Release (Leak) Contamination Site Report citing holes in tank. The ACDEH in its letter dated June 29, 2011, state that the elevated concentrations of TPH as Diesel reported by the laboratory in the excavation and stockpile soil samples indicate that an unauthorized release had occurred. Product and return piping for former oil burner are capped in basement below residence and product piping extends beneath basement concrete floor slab.	None
Source Removal	On April 21, 2010, GGTR excavated petroleum contaminated soil to a total depth of 9½ fbg where hard bedrock was encountered. Discrete soil sample 9139-C-9 was collected 4 feet below the bottom of the UST at a total depth of 9 feet. Hard bedrock occurred at the bottom of the excavation and sample 9139-C-9 was collected from the south sidewall of the excavation. Figure 2–Site Drawing of the Tank Closure Report indicates the final excavation dimension was 4.5 feet by 6.5 feet. The laboratory reported that excavation bottom soil sample 9139-C-9 contained a TPH as diesel concentration of 217 mg/kg with no detectable BTEX or fuel oxygenates. The results of the laboratory analyses of soil samples is presented in Table 1. GGTR collected one four-point composite soil sample from the soil stockpile containing overburden soil designated as 9139-SP(A-D)Comp. Overburden soil sample 9139-SP(A-D)Comp contained a TPH as diesel concentration of 5080 mg/kg. On May 11, 2010, Clearwater Environment provided for the transport and offsite recycling of 11.76 tons of soil.	None

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
Petroleum Hydrocarbons in Soil	The results of the laboratory analyses of soil samples are presented in Table 1. One soil sample was analyzed for petroleum hydrocarbons from the former heating oil UST location. TPH as Diesel is the only known contaminant to exceed Tier I ESL values in soil. Discrete soil sample 9139-C-9 was collected 4 feet below the bottom of the UST at a total depth of 9 feet from the south sidewall of the excavation. The laboratory reported that excavation bottom soil sample 9139-C-9 contained a TPH as diesel concentration of 217 mg/kg with no detectable BTEX or fuel oxygenates. As revealed during the January-February 2018 subsurface investigation, residual heating oil contaminated soil remains in the vicinity of the former UST fill port from 2.5 to 4 fbg at concentrations of 231 and 282 mg/kg, slightly above Tier I ESL level for TPH as Diesel of 230 mg/kg. The laboratory analysis indicates that Diesel Range Organics (heating oil) is the only contaminant of concern.	None
Petroleum Hydrocarbons in Water	GGTR indicates that no groundwater was encountered during the UST removal activities. However, free water described by GGTR as “perched water” accumulated in the over excavation pit during heavy rain. Water with a petroleum sheen (according to regulatory agency field notes) accumulated in the excavation, which GGTR removed to a 55-gallon drum prior to soil sampling. Perched water means that GGTR personnel believed the water originated from shallow landscape irrigation water in the loose soil on top of hard bedrock. One water sample was recovered from the 55-gallon drum as sample 9139-PW and submitted for laboratory analysis of petroleum hydrocarbons. The perched water sample contained 11 mg/L of TPH as diesel, 1.5 µg/L of Toluene, and 4.7 µg/L of Total Xylenes. The TPH as Diesel concentration of 11 mg/L exceeds the Tier I ESL value of 0.1 mg/L. As revealed during the February 2018 subsurface investigation, a small volume of drainage water from onsite irrigation was observed at Field Point B5. Water sampling of two nearby water supply irrigation wells at 120 Hazel Lane and 125 Guilford Road revealed no detectable petroleum contamination of the groundwater resource. Water sample Laboratory analysis results of the water samples collected during the April 2010 UST removal and January-February 2018 subsurface investigation are presented in Table 2.	None
LNAPL	There are currently no groundwater monitoring wells at the Site. Light non-aqueous phase liquids (LNAPL) were not observed during the over excavation of the UST cavity to a depth of 9 fbg and the purging of “perched water” from the excavation pit. The laboratory analysis of soil samples from the excavation bottom and overburden stockpile reported TPH as Diesel concentrations of 217 mg/kg , which does not indicate the presence of LNAPL at the UST cavity. As revealed during the January-February 2018 subsurface investigation, no LNAPL was observed on drainage water at Field Point B5. The low concentrations of Diesel Range Organics in 22 soil samples collected at the Site does not indicate LNAPL.	None

TABLE 4
FOCUSED SITE CONCEPTUAL MODEL FOR MULHOLLAND RESIDENCE AT 132 GUILFORD ROAD, PIEDMONT, CA

<i>SCM Element</i>	<i>SCM Element Description</i>	<i>Data Gap</i>
Contaminants of Concern	A total of 24 soil samples have been analyzed for petroleum hydrocarbons from the Site. The laboratory analysis indicates that Diesel Range Organics (heating oil) is the primary contaminant of concern. TPH as Diesel is the only known contaminant to slightly exceed Tier I ESL values in soil and the ACDEH indicates that the elevated concentrations of TPH as diesel are evidence of a heating oil release from the former UST. Table 1 summarizes the laboratory analyses data for soil samples.	None
Plume Length	There are currently no groundwater monitoring wells at the Site and no shallow groundwater aquifer was encountered in seven (7) subsurface borings during the January-February 2018 subsurface investigation. Free water that accumulates in open cavities is attributed to irrigation drainage water on top of bedrock. The groundwater flow direction across the Site cannot be evaluated by measurements. In this case, topographic slope would determine the direction of shallow water flow on top of bedrock, see Figure 5 titled Topographic Map. In its March 8, 2016 letter, the ACDEH indicates that LTCP guidance predicts a minimal plume length of less than 249 feet for a mature TPH plume of petroleum such as heating oil (diesel). Figure 6–Potential TPH Plume Map shows the location of nearby private water supply wells in relation to the former UST location and estimated TPH plume diameter. As revealed during the January-February 2018 subsurface investigation, water samples recovered from the well head spigots at 120 Hazel Lane and 125 Guilford Road irrigation wells did not contain detectable petroleum constituents.	None
Risk Evaluation	The Site is zoned for residential land use and occupied by a single-family residence since the 1930s. Current plans are for the Site to remain in residential land use. Residual heating oil contaminated soil remains in the bottom of the UST cavity at 9 fbg and in the vicinity of the former fill port from 2.5 to 4 fbg at concentrations of 217 to 282 mg/kg, slightly above Tier I ESL level for TPH as Diesel of 230 mg/kg. Based on the low concentration of residual soil contamination and the favorable non-detectable results of nearby irrigation well water sampling, the residual contamination does not appear to pose a risk to potential residential receptors. This residual heating oil contamination is expected to naturally degrade within a reasonable time frame and not pose a significant risk to construction workers by incidental ingestion, dermal contact, dust inhalation, and vapor inhalation.	None
Project ID:	Site Conceptual Model (SCM) as of February 23, 2018 File name: 2017110_Table4_SiteConceptualModel_Feb23_2018.odt Wheeler Group Environmental, LLC Project No. 2017110	

TABLE 5

EVALUATION OF LOW THREAT CLOSURE POLICY CRITERIA FOR DATA GAPS AT MULHOLLAND RESIDENCE, 132 GUILFORD ROAD, PIEDMONT, CA

Criteria	Description of Low Threat Closure Policy Criteria and Explanation	Data Gap	How to Address
Site ID	Mulholland Residence , 132 Guilford Road, Piedmont, California, APN 51-4676-19 Alameda County LOP Case No. RO0003070 and GeoTracker Global ID No. T10000002521		
A.	General Criteria: The unauthorized release is located within the service area of a public water system: Domestic water supply is provided to the Site by the East Bay Municipal Utility District (EBMUD).	No data gap present	No action needed
B.	The unauthorized release consists only of petroleum: Soil and water sampling from the UST removal and over excavation indicate the only contaminant of concern is heating oil (Total Petroleum Hydrocarbons as Diesel Range Organics). As revealed during the January-February 2018 subsurface investigation, no benzene, toluene, ethylbenzene, xylenes, naphthalene or MTBE was reported in the 22 soil samples submitted for laboratory analysis.	No data gap present	No action needed
C.	The unauthorized (“primary”) release from the UST system has been stopped: The source of the heating oil release was a 200-gallon underground storage tank (UST) that was removed for offsite recycling on April 21, 2010, by Golden Gate Tank Removal, Inc.	No data gap present	No action needed
D.	Free product has been removed to the maximum extent practicable: Soil and perched water sampling occurred during the April 21, 2010, UST removal with no obvious indication of petroleum free product in soil or water beneath the former UST location. No free product was observed in the seven (7) exploratory borings drilled during the January-February 2018 subsurface investigation.	No data gap present	No action needed
E.	A conceptual site model that assesses the nature, extent, and mobility of the release has been developed: A site conceptual model is presented in this report as attached Table 4.	No data gap present	No action needed
F.	Secondary Source has been removed to the extent practicable: Golden Gate Tank Removal, Inc. performed limited over excavation activities on April 21, 2010. GGTR removed heating oil contaminated soil to a depth of 9½ fbg beneath the former UST location. Hard bedrock was encountered at a depth of 9½ fbg and a bottom soil sample was collected from the south sidewall of the excavation with a TPH as Diesel concentration of 213 mg/kg. GGTR did not excavate UST pit sidewalls because a concrete sidewalk and driveway prevented lateral excavation and GGTR did not recover lateral sidewall soil samples from the excavation limits due to project budget limitations. The lateral extent of petroleum contamination surrounding the former UST location was adequately defined during the January-February 2018 subsurface investigation. The small volume of residual heating oil contamination soil at the bottom of the former UST cavity at 9 fbg and surrounding the former fill port at 2.5 to 4 fbg, does not present a significant risk to residential use of the property or future construction workers.	No data gap present	No action needed
G.	Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15: The confirmation soil sample beneath the UST at a depth of 9 fbg and the stockpile soil sample did not contain detectable concentrations of MTBE. The laboratory reported no detectable MTBE in the perched water sample from the excavation pit. During the January-February 2018 subsurface investigation, no MTBE was reported in the 22 soil samples, see attached Table 1.	No data gap present	No action needed

TABLE 5

EVALUATION OF LOW THREAT CLOSURE POLICY CRITERIA FOR DATA GAPS AT MULHOLLAND RESIDENCE, 132 GUILFORD ROAD, PIEDMONT, CA

Criteria	Description of Low Threat Closure Policy Criteria and Explanation	Data Gap	How to Address
H.	A nuisance exists, as defined by Water Code section 13050: The results of the January-February 2018 subsurface investigation and water well sampling does not indicate a nuisance exists at the subject property.	No data gap present	No action needed
1.	Media Specific Criteria for Groundwater: In its March 8, 2016 letter, ACDEH determined that the Site fails to meet the LTCP Media-Specific Criteria for Groundwater. During the January-February 2018 subsurface investigation, free water was only observed at one Field Point B5 that was interpreted to be drainage water from onsite irrigation. No petroleum product was observed on the water surface. Water observed during the UST over-excavation is believed to represent rain water infiltrating the excavation.	No data gap present	No action needed
a.	Groundwater Plume Length: No groundwater monitor wells are present at the Site because no shallow groundwater aquifer is known to be present in the weathered Franciscan bedrock at surface. In its March 8, 2016 letter, the ACDEH indicates that LTCP guidance predicts a minimal plume length of less than 249 for a mature plume of heating oil (diesel) and the Site does not meet the Groundwater Criteria due to the lack of delineation of a potential groundwater plume. Two privately owned water supply irrigation wells within 315 feet of the petroleum release (130 and 315 feet), in the presumed down-gradient direction. Figure 6–Potential TPH Plume Map shows the location of nearby private water supply wells in relation to the former UST location and estimated TPH plume diameter. During January-February 2018, WGE provided for the water sampling of well head spigots at both irrigation well locations. The laboratory reported no detectable petroleum hydrocarbons in the two water samples, see attached Table 2.	No data gap present	No action needed
b.	Groundwater Plume is Not Stable: In its March 8, 2016 letter, the ACDEH indicates that the release is considered to be mature and would be expected that any associated plume would have already migrated to the location of nearby privately owned water supply wells, if a plume is present. A mature groundwater plume would be considered stable. During January-February 2018, WGE provided for the water sampling of well head spigots at both locations. The laboratory reported no detectable petroleum hydrocarbons in the two water samples and no petroleum plume.	No data gap present	No action needed
c.	Nearest Water Supply Well: In its March 8, 2016 letter, the ACDEH indicates that the Site does not meet the Groundwater Criteria due to the lack of delineation of a potential groundwater plume, and the presence of two privately owned water supply wells at 120 Hazel Lane and 125 Guilford Road, in the presumed down-gradient direction. In its email dated August 15, 2017, the ACDEH indicates that sampling of the irrigation system piping is acceptable as long as the sample is collected from a metal spigot and not a plastic hose, the water sample is collected after appropriate purging, is collected in appropriate laboratory supplied collection containers, and the sampling uses industry standard handling and documentation procedures. During January 2018, WGE provided for Dysert Environmental to perform water sampling of well head spigots at at 120 Hazel Lane and 125 Guilford Road. The laboratory reported no detectable petroleum hydrocarbons in the two water samples.	No data gap present	No action needed

TABLE 5

EVALUATION OF LOW THREAT CLOSURE POLICY CRITERIA FOR DATA GAPS AT MULHOLLAND RESIDENCE, 132 GUILFORD ROAD, PIEDMONT, CA

Criteria	Description of Low Threat Closure Policy Criteria and Explanation	Data Gap	How to Address
d.	<p>Property Owner Willing to Accept a Land Use Restriction: In its March 8, 2016 letter, the ACDEH indicates that a deed restriction may be appropriate because the extent and magnitude of residual soil contamination has not been defined. In its December 31, 2015 correspondence, the ACDEH indicates that due to residual contamination remaining in the front yard in the vicinity of the former UST pit, it appears appropriate to have a legal mechanism to protect and inform current and future property owners, and construction workers from direct contact with residual contamination in the former tank pit area. Soil sampling indicates the residual heating oil contamination at the bottom of the UST cavity at 9 fbg of 217 mg/kg and surrounding the former fill port location at 2.5 to 4 fbg of 231 to 282 mg/kg, is low in concentration and close to the conservative Tier I ESL value of 230 mg/kg. The residual soil contamination can naturally degrade to below the Tier I ESL value within a reasonable time frame.</p>	No data gap present	No action needed
e.	<p>Sensitive Receptor Survey: In its March 8, 2016 letter, the ACDEH indicates that LTCP guidance predicts a minimal plume length of 249 for a mature plume of heating oil (diesel). The Site does not meet the Groundwater Criteria due to the lack of delineation of a potential groundwater plume, and the presence of two privately owned water supply wells in the down-gradient direction. WGE provided for the water sampling of well head spigots at both 120 Hazel Lane and 125 Guilford Road. The laboratory reported no detectable petroleum hydrocarbons in the two water samples.</p>	No data gap present	No action needed
f.	<p>Naphthalene Contamination: In its March 8, 2016 letter, the ACDEH indicates that laboratory analysis for naphthalene is needed to meet LTCP guidelines. As revealed during the February 2018 subsurface investigation and shown on Table 1, no benzene, toluene, ethylbenzene, xylenes, naphthalene or MTBE was reported in the 22 soil samples submitted for laboratory analysis.</p>	No data gap present	No action needed
2.	<p>Media Specific Criteria for Vapor Intrusion to Indoor Air: In its March 8, 2016 letter, ACDEH determined that the Site fails to meet the LTCP Media-Specific Criteria for Vapor Intrusion to Indoor Air due in part to the lack of lateral delineation of soil contamination at the Site. As revealed during the January-February 2018 subsurface investigation, no benzene, toluene, ethylbenzene, xylenes, naphthalene or MTBE was reported in the 22 soil samples submitted for laboratory analysis or sub-slab vapor sample from the residence basement.</p> <p>Product and return piping for the former oil burner are capped in the basement below residence and the ½ inch diameter supply piping extends beneath basement concrete floor slab as traced with a handheld magnetometer. Condition of product piping buried beneath concrete floor slab of basement is not known. Release of heating oil from product piping beneath residence could result in vapor intrusion risk to occupants. Sub-slab vapor sampling beneath the concrete floor slab was conducted during January-February 2018. The vapor point was located above the underground supply lines adjacent to the former oil burner location in the basement. The laboratory reported that detectable petroleum constituents in the vapor sample consisting of toluene, xylenes and hexane. The toluene and xylene concentrations are below the Tier I ESL values for sub-slab/soil gas concentrations, as shown on attached Table 3 titled Soil Vapor Sampling & Laboratory Analysis Results.</p>	No data gap present	No action needed
	<p>Product and return piping for the former oil burner are capped in the basement below residence and the ½ inch diameter supply piping extends beneath basement concrete floor slab as traced with a handheld magnetometer. Condition of product piping buried beneath concrete floor slab of basement is not known. Release of heating oil from product piping beneath residence could result in vapor intrusion risk to occupants. Sub-slab vapor sampling beneath the concrete floor slab was conducted during January-February 2018. The vapor point was located above the underground supply lines adjacent to the former oil burner location in the basement. The laboratory reported that detectable petroleum constituents in the vapor sample consisting of toluene, xylenes and hexane. The toluene and xylene concentrations are below the Tier I ESL values for sub-slab/soil gas concentrations, as shown on attached Table 3 titled Soil Vapor Sampling & Laboratory Analysis Results.</p>	No data gap present	No action needed

TABLE 5

EVALUATION OF LOW THREAT CLOSURE POLICY CRITERIA FOR DATA GAPS AT MULHOLLAND RESIDENCE, 132 GUILFORD ROAD, PIEDMONT, CA

Criteria	Description of Low Threat Closure Policy Criteria and Explanation	Data Gap	How to Address
3.	<p>LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria: In its March 8, 2016 letter, ACDEH determined that the Site fails to meet the LTCP Media-Specific Criteria for Direct Contact and Outdoor Air in part due to the lack of lateral delineation of soil contamination at the Site. To preclude the need for notifications to the property deed, ACDEH suggested the following: 1) that a minimum of four soil bores is required at the former UST location, 2) to meet LTCP guidelines, soil samples must be collected from both the 0 to 5 and 5 to 10 foot depth intervals or at intervals of staining, odor, PID readings that indicate petroleum soil contamination, 3) the bores should extend to a minimum depth of 9.5 fbg or deeper if feasible to define the vertical extent of soil contamination.</p> <p>The January-February 2018 subsurface investigation involved the drilling of seven (7) exploratory borings to a drilling refusal by rotary hollow stem augur at a maximum depth of 14 fbg. Discrete soil samples were collected from soil intervals with petroleum staining and elevated PID readings. The laboratory reported significant Diesel Range Organics (DRO) concentrations in two soil samples from 2.5 and 4 fbg in boring B3 located at the former UST fill port location. The DRO concentrations were 231 and 282 mg/kg, slightly above the Tier I ESL value of 230 mg/kg. No benzene, toluene, ethylbenzene, xylenes, naphthalene or MTBE was reported in the 22 soil samples submitted for laboratory analysis. The non-detectable results for benzene, ethylbenzene, naphthalene are below the concentrations in Table 1 of the LTCP guidance (page 8) indicating no significant direct contact and outdoor air risk to residential use and construction workers. Note 1 on the table indicates PAH analysis is not needed for heating oil releases.</p>	No data gap present	No action needed
Project ID:	<p>Evaluation of LTCP Criteria for Data Gaps as of February 23, 2018 Wheeler Group Environmental, LLC Project No. 2017110 File name: 2017110_Table5_LTCPEvaluation_Feb23_2018.odt</p>		

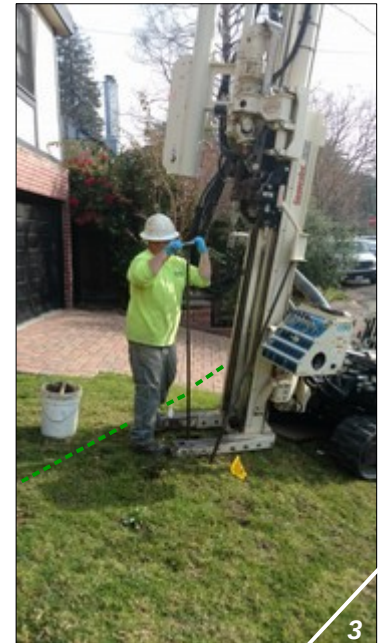


Photograph No. 1 – Northwest view of front yard and garage driveway of residence, showing EnProbe Drilling personnel during initial setup of GeoProbe 7822DT Combo Track Rig at Field Point B1, along north side of former 200-gallon heating oil UST excavation; additional proposed field point boring locations shown as white flagging, placed during WGE's site markout activities on January 10, 2018; (WGE, 1/17/18).

Photograph No. 2 – East view of front yard and sidewalk of subject residence along Guilford Road showing EnProbe personnel during drilling/sampling at at Field Point B1; yellow flagging signifies location of subsurface natural gas service lateral pipe (WGE, 1/17/18).



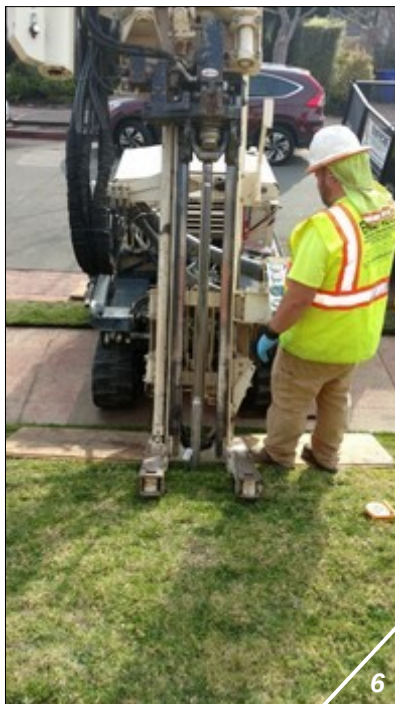
Photograph No. 3 – East view of residence front yard showing EnProbe personnel at Field Point B5, clearing borehole to 4 fbg to clear for unmarked subsurface utilities prior to using GeoProbe drilling equipment; approximate location of existing sanitary sewer service lateral shown as green dashed line (WGE, 1/17/18).



Photograph No. 4 – Northwest view of front yard and garage driveway of residence, showing EnProbe Drilling personnel during rotary hollow stem auger drilling at Field Point B5, located approximately 6 feet north-northwest of former UST excavation; 8.25"-diameter hollow stem augers used following drilling refusal of GeoProbe equipment at 8.5 fbg; borehole drilled to total depth of 13 fbg (WGE, 1/17/18).



Photograph No. 5 – View of soil cuttings generated during rotary auger drilling at Field Point B5 from weathered bedrock zone encountered between 4.5 and 13 feet below grade; grayish orange to light olive gray, fine silt & siltstone fragments (pulverized weathered bedrock) observed (WGE, 1/17/18).



Photograph Nos. 6 & 7 – Respective south and east views of front yard and sidewalk of subject residence along Guilford Road showing EnProbe personnel during drilling/sampling at Field Point B7, located approximately 12 feet west of the former UST excavation; borehole drilled at 30 degree angle form vertical plane (WGE, 1/17/18).

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 Piedmont, California



Photograph Nos. 8 & 9 – Respective northeast and southeast views of front yard and sidewalk of subject residence, showing EnProbe Drilling personnel during rotary hollow stem auger drilling at Field Point B3, located approximately 7 feet south of former UST excavation, and in direct vicinity of former UST remote fill pipe; Photograph No. 9 shows GeoProbe sampler advanced through center of hollow stem augers during collection of discrete soil samples in bedrock zone at 10 and 14 fbg; borehole drilled to total depth of 14 fbg (WGE, 1/18/18).

Photograph Nos. 10 & 11 – Views of EnProbe personnel during borehole backfilling activities; backfilling by tremie grout was requested by Alameda County Public Works Agency inspector at Field Point B5 due to small volume of drainage water observed in borehole on January 18, 2018 (WGE, 1/18/18).





Photograph Nos. 12 & 13 – Interior views of basement of subject residence, showing EnProbe Drilling personnel utilizing handheld magnetometer to locate subsurface product/return line piping (dashed white line) prior to sub-slab vapor point installation; Photograph No. 12 shows location of product/return pipes along north partition wall between existing water heater and central furnace unit; pipes are 0.5"-diameter, steel, capped @ 3" above basement floor surface (WGE, 1/17/18).



Photograph Nos. 14 & 15 – Interior views of basement of subject residence, showing EnProbe Drilling personnel during installation of Sub-Slab Vapor Field Point SSI; Photograph No. 15 shows approximate footprint of former oil burner associated with former UST system (WGE, 1/17/18).

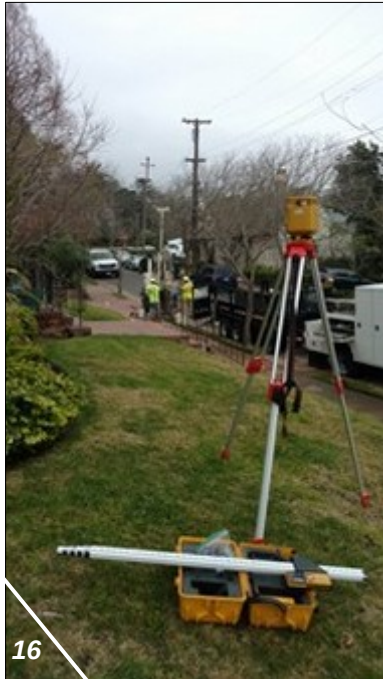
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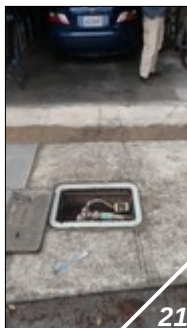
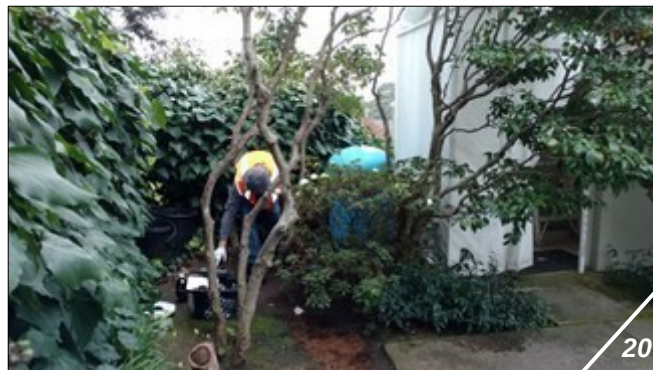
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Photograph No. 16 – Southeast view of front yard at southwest corner of residence showing survey equipment during grade elevation survey performed by WGE; survey also used to acquire approximate grade elevation of private water supply well located at 125 Guilford Road (WGE, 1/18/18).



Photograph Nos. 17 & 18 – Respective southeast and west views of residence at 125 Guilford Road showing Dysert Environmental field technician during purging/monitoring/sampling of private water supply well; sample collected directly from effluent spigot located approximately 13 feet west of wellhead shown in Photograph No. 18; private water supply well installed in February 2016 by Martell Water Systems, Inc. to depth of 200 feet (WGE, 1/18/18).



Photograph Nos. 19-21 – Exterior views of residence at 120 Hazel Lane showing Dysert Environmental field technician during purging/monitoring/sampling of private water supply well; sample collected directly from effluent spigot located approximately 20 feet east of wellhead located in driveway, as shown shown in Photograph No. 21; private water supply well installed in October 1992 to depth of 275 feet (WGE, 11/15/17 & 1/18/18).

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Photograph Nos. 22-27 - Views of sub-slab vapor sampling activities at Field Sampling Point SS1 located within existing furnace room in basement; Field Point SS1 installed next to former oil burner and product lines associated with UST; Photograph Nos. 22 & 24 shows initial sub-slab vacuum (0.000"Hg) and interior shroud VOC measurement (376 ppm) during sampling with Summa canisters; Photograph Nos. 23 & 25 show sub-slab vapor sampling in progress, with typical manifold assembly, shroud enclosure, and measurement of shroud tracer gas (2-Propanol) using calibrated PID; Photograph Nos. 26 & 27 show subsequent sub-slab sampling for TPH-Diesel & Naphthalene (TO-17) using Thermal Desorption Tubes (In series) and sampling pump (WGE, 2/1/18).

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 Piedmont, California



DATA GAP INVESTIGATION REPORT

132 Guilford Road, Piedmont, California

APN 51-4676-19

GeoTracker Global ID No. T10000002521

Alameda County LOP Case No. RO0003070

WGE Project No. 2017110

APPENDIX B

CERTIFIED LABORATORY ANALYTICAL REPORTS

Torrent Laboratory, Inc. Work Order No.: 1801189, January 25, 2018

Torrent Laboratory, Inc. Work Order No.: 1802007, February 06, 2018

Test America Laboratories, Inc. Job ID: 720-84312-1, January 26, 2018

Wheeler Group Environmental, LLC

369-B Third Street, Suite #221, San Rafael, CA 94901

Phone: 415-686-8846



Brent A. Wheeler
Wheeler Group Environmental, LLC
369-B Third Street, Suite #221
San Rafael, California 94901
Tel: P: 415-686-8846
RE: 132 Guilford Rd., Piedmont, CA

Work Order No.: 1801189

Dear Brent Wheeler:

Torrent Laboratory, Inc. received 22 sample(s) on January 19, 2018 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti L Sandroock
QA Officer

January 25, 2018

Date



Date: 1/25/2018

Client: Wheeler Group Environmental, LLC

Project: 132 Guilford Rd., Piedmont, CA

Work Order: 1801189

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

Analytical Comments for method TPHDO_S, 1801189-002A MS/MSD, QC Analytical Preparation ID 1102317 Note: The % recoveries for Diesel are outside of laboratory control limits but % RPD is within limits. The associated LCS/LCSD is within both % Recovery and %RPD limits. No corrective action required.



Sample Result Summary

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date Received: 01/19/18

Date Reported: 01/25/18

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
B1-3						
TPH as Diesel	SW8015B	1	0.85	2.0	2.45	mg/Kg
1801189-001						
B1-5						
All compounds were non-detectable for this sample.						
1801189-003						
B1-6.5						
All compounds were non-detectable for this sample.						
1801189-004						
B2-2.5						
TPH as Diesel	SW8015B	1	0.85	2.0	6.15	mg/Kg
1801189-005						
B2-5						
TPH as Diesel	SW8015B	1	0.85	2.0	7.37	mg/Kg
1801189-006						
B2-6						
TPH as Diesel	SW8015B	1	0.85	2.0	2.00	mg/Kg
1801189-007						
B3-2.5						
TPH as Diesel	SW8015B	10	8.5	20	231	mg/Kg
1801189-008						
B3-4						
TPH as Diesel	SW8015B	10	8.5	20	282	mg/Kg
1801189-009						
B3-5						
TPH as Diesel	SW8015B	1	0.85	2.0	11.7	mg/Kg



Sample Result Summary

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date Received: 01/19/18

Date Reported: 01/25/18

B3-6.5 1801189-010

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	12.7	mg/Kg

B3-10 1801189-011

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	4.83	mg/Kg

B3-14 1801189-012

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	2.19	mg/Kg

B4-2.5 1801189-013

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-detectable for this sample.						

B4-5.5 1801189-014

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	2.76	mg/Kg

B4-7 1801189-015

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	2.02	mg/Kg

B5-2.5 1801189-016

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Diesel	SW8015B	1	0.85	2.0	2.27	mg/Kg

B5-5 1801189-017

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-detectable for this sample.						

B5-7 1801189-018

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-detectable for this sample.						



Sample Result Summary

Report prepared for: Brent Wheeler
 Wheeler Group Environmental, LLC

Date Received: 01/19/18

Date Reported: 01/25/18

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
B5-8.5						
TPH as Diesel	SW8015B	1	0.85	2.0	3.34	mg/Kg
B5-13						
TPH as Diesel	SW8015B	1	0.85	2.0	4.11	mg/Kg
B7-2.5						
TPH as Diesel	SW8015B	1	0.85	2.0	2.66	mg/Kg
B7-5						
TPH as Diesel	SW8015B	1	0.85	2.0	2.36	mg/Kg



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B1-3	Lab Sample ID:	1801189-001A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 10:05		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.45	x	mg/Kg	01/22/18	16:44	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		99.9		%	01/22/18	16:44	mk	429207

NOTE: x-Diesel value the result of overlap of Oil range into Diesel range

Prep Method: 5035	Prep Batch Date/Time: 1/19/18 6:57:00PM
Prep Batch ID: 1102367	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	22:32	NP	429191
(S) Dibromofluoromethane	SW8260B		59.8 - 148		105		%	01/19/18	22:32	NP	429191
(S) Toluene-d8	SW8260B		55.2 - 133		86.6		%	01/19/18	22:32	NP	429191
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		96.9		%	01/19/18	22:32	NP	429191



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B1-5	Lab Sample ID:	1801189-002A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 10:30		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	01/22/18	17:08	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		92.4		%	01/22/18	17:08	mk	429207

Prep Method: 5035	Prep Batch Date/Time: 1/19/18 6:57:00PM
Prep Batch ID: 1102367	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/19/18	23:08	NP	429191
(S) Dibromofluoromethane	SW8260B		59.8 - 148		110		%	01/19/18	23:08	NP	429191
(S) Toluene-d8	SW8260B		55.2 - 133		89.4		%	01/19/18	23:08	NP	429191
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		101		%	01/19/18	23:08	NP	429191



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B1-6.5	Lab Sample ID:	1801189-003A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 10:20		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	01/22/18	17:33	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		87.4		%	01/22/18	17:33	mk	429207

NOTE:

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 1:44:00AM
Prep Batch ID: 1102303	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	11:46	NP	429144
(S) Dibromofluoromethane	SW8260B		59.8 - 148		155	S	%	01/20/18	11:46	NP	429144
(S) Toluene-d8	SW8260B		55.2 - 133		115		%	01/20/18	11:46	NP	429144
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		146	S	%	01/20/18	11:46	NP	429144

NOTE: S-Surrogate recoveries out of limit-high bias due to matrix interference; confirmed by re-analysis.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B2-2.5	Lab Sample ID:	1801189-004A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 13:20		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	6.15	x	mg/Kg	01/22/18	17:58	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		96.3		%	01/22/18	17:58	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 1:44:00AM
Prep Batch ID: 1102303	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:17	NP	429144
(S) Dibromofluoromethane	SW8260B		59.8 - 148		116		%	01/20/18	12:17	NP	429144
(S) Toluene-d8	SW8260B		55.2 - 133		92.3		%	01/20/18	12:17	NP	429144
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		106		%	01/20/18	12:17	NP	429144



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B2-5	Lab Sample ID:	1801189-005A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 13:40		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	7.37	x	mg/Kg	01/22/18	19:54	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		95.4		%	01/22/18	19:54	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 1:44:00AM
Prep Batch ID: 1102303	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	12:48	NP	429144
(S) Dibromofluoromethane	SW8260B		59.8 - 148		116		%	01/20/18	12:48	NP	429144
(S) Toluene-d8	SW8260B		55.2 - 133		93.6		%	01/20/18	12:48	NP	429144
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		102		%	01/20/18	12:48	NP	429144



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B2-6	Lab Sample ID:	1801189-006A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 13:35		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18	10:53:00AM
Prep Batch ID: 1102317	Prep Analyst:	SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.00	x	mg/Kg	01/22/18	20:19	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		105		%	01/22/18	20:19	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18	3:22:00PM
Prep Batch ID: 1102305	Prep Analyst:	NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	17:57	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		128		%	01/20/18	17:57	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		99.6		%	01/20/18	17:57	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		116		%	01/20/18	17:57	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-2.5	Lab Sample ID:	1801189-007A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:25		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	10	8.5	20	231	x	mg/Kg	01/23/18	10:56	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		108		%	01/23/18	10:56	mk	429207

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel.

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:27	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		129		%	01/20/18	18:27	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		82.0		%	01/20/18	18:27	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		134		%	01/20/18	18:27	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-4	Lab Sample ID:	1801189-008A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:35		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	10	8.5	20	282	x	mg/Kg	01/23/18	11:20	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		95.6		%	01/23/18	11:20	mk	429207

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel.

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	18:58	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		120		%	01/20/18	18:58	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		102		%	01/20/18	18:58	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		125		%	01/20/18	18:58	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-5	Lab Sample ID:	1801189-009A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:50		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18	10:53:00AM
Prep Batch ID: 1102317	Prep Analyst:	SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	11.7	x	mg/Kg	01/22/18	21:33	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		107		%	01/22/18	21:33	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18	3:22:00PM
Prep Batch ID: 1102305	Prep Analyst:	NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	19:29	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		130		%	01/20/18	19:29	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		99.7		%	01/20/18	19:29	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		127		%	01/20/18	19:29	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-6.5	Lab Sample ID:	1801189-010A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:40		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	12.7	x	mg/Kg	01/22/18	21:58	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		79.3		%	01/22/18	21:58	mk	429207

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range slightly heavier than diesel quantified as diesel.

Prep Method: 5035	Prep Batch Date/Time: 1/22/18 10:12:00AM
Prep Batch ID: 1102331	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/22/18	21:40	NP	429170
(S) Dibromofluoromethane	SW8260B		59.8 - 148		130		%	01/22/18	21:40	NP	429170
(S) Toluene-d8	SW8260B		55.2 - 133		120		%	01/22/18	21:40	NP	429170
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		136		%	01/22/18	21:40	NP	429170



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-10	Lab Sample ID:	1801189-011A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/18/18 / 9:50		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	4.83	x	mg/Kg	01/22/18	22:22	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		91.8		%	01/22/18	22:22	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	20:30	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		155	S	%	01/20/18	20:30	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		126		%	01/20/18	20:30	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		168	S	%	01/20/18	20:30	NP	429146

NOTE: S-Surrogate recoveries out of limit-high bias. Data deemed acceptable as no target analytes were observed in the sample.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B3-14	Lab Sample ID:	1801189-012A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/18/18 / 10:35		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.19	x	mg/Kg	01/22/18	22:47	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		98.8		%	01/22/18	22:47	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:00	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		203	S	%	01/20/18	21:00	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		129		%	01/20/18	21:00	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		180	S	%	01/20/18	21:00	NP	429146

NOTE: S-Surrogate recovery out of limit-high bias. A duplicate analysis was performed with similar results indicating a matrix effect.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B4-2.5	Lab Sample ID:	1801189-013A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 8:40		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	1.7	4.0	ND		mg/Kg	01/22/18	23:11	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		112		%	01/22/18	23:11	mk	429207

NOTE: x- Diesel result due to over-lapping of oil range organics and presence of discrete peaks within diesel quantified range.

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	21:31	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		112		%	01/20/18	21:31	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		93.0		%	01/20/18	21:31	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		107		%	01/20/18	21:31	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B4-5.5	Lab Sample ID:	1801189-014A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:10		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.76	x	mg/Kg	01/22/18	23:36	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		97.3		%	01/22/18	23:36	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:02	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		115		%	01/20/18	22:02	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		91.6		%	01/20/18	22:02	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		105		%	01/20/18	22:02	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B4-7	Lab Sample ID:	1801189-015A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 9:05		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.02	x	mg/Kg	01/23/18	1:14	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		86.7		%	01/23/18	1:14	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	22:32	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		118		%	01/20/18	22:32	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		94.9		%	01/20/18	22:32	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		105		%	01/20/18	22:32	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B5-2.5	Lab Sample ID:	1801189-016A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 14:25		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.27	x	mg/Kg	01/23/18	1:38	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		91.8		%	01/23/18	1:38	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:03	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		113		%	01/20/18	23:03	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		92.8		%	01/20/18	23:03	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		97.6		%	01/20/18	23:03	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B5-5	Lab Sample ID:	1801189-017A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 14:35		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	01/23/18	2:03	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		87.5		%	01/23/18	2:03	mk	429207

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/20/18	23:33	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		116		%	01/20/18	23:33	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		93.0		%	01/20/18	23:33	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		103		%	01/20/18	23:33	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B5-7	Lab Sample ID:	1801189-018A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 14:30		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	ND		mg/Kg	01/23/18	2:27	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		81.9		%	01/23/18	2:27	mk	429207

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:04	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		121		%	01/21/18	0:04	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		96.7		%	01/21/18	0:04	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		111		%	01/21/18	0:04	NP	429146



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B5-8.5	Lab Sample ID:	1801189-019A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/19/18 / 10:05		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	3.34	x	mg/Kg	01/23/18	2:51	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		88.6		%	01/23/18	2:51	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	0:34	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		162	S	%	01/21/18	0:34	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		118		%	01/21/18	0:34	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		158	S	%	01/21/18	0:34	NP	429146

NOTE: S-Surrogate recoveries out of limit-high bias. Data deemed acceptable as no target analytes were observed in the sample.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B5-13	Lab Sample ID:	1801189-020A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 16:55		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18 10:53:00AM
Prep Batch ID: 1102317	Prep Analyst: SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	4.11	x	mg/Kg	01/23/18	3:16	mk	429207
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		80.1		%	01/23/18	3:16	mk	429207

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18 3:22:00PM
Prep Batch ID: 1102305	Prep Analyst: NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:05	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		180	S	%	01/21/18	1:05	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		130		%	01/21/18	1:05	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		182	S	%	01/21/18	1:05	NP	429146

NOTE: S-Surrogate recoveries out of limit-high bias. Data deemed acceptable as no target analytes were observed in the sample.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B7-2.5	Lab Sample ID:	1801189-021A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 14:00		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18	6:55:00PM
Prep Batch ID: 1102345	Prep Analyst:	SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.66	x	mg/Kg	01/22/18	22:05	mk	429210
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		78.4		%	01/22/18	22:05	mk	429210

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18	3:22:00PM
Prep Batch ID: 1102305	Prep Analyst:	NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	1:35	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		142		%	01/21/18	1:35	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		112		%	01/21/18	1:35	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		146	S	%	01/21/18	1:35	NP	429146

NOTE: S-Surrogate recovery out of limit-high bias. A duplicate analysis was performed with similar results indicating a matrix effect.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 01/19/18, 12:18 pm
Date Reported: 01/25/18

Client Sample ID:	B7-5	Lab Sample ID:	1801189-022A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil
Project Number:	WGE 2017110		
Date/Time Sampled:	01/17/18 / 14:10		
SDG:			
Tag Number:	132 Guilford Rd		

Prep Method: 3546_TPH	Prep Batch Date/Time: 1/22/18	6:55:00PM
Prep Batch ID: 1102345	Prep Analyst:	SNARASIMHAN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.85	2.0	2.36	x	mg/Kg	01/22/18	22:28	mk	429210
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		79.9		%	01/22/18	22:28	mk	429210

NOTE: x-presence of discrete peaks not typical of diesel pattern

Prep Method: 5035	Prep Batch Date/Time: 1/20/18	3:22:00PM
Prep Batch ID: 1102305	Prep Analyst:	NPAR

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
MTBE	SW8260B	1	0.0023	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
Benzene	SW8260B	1	0.0022	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
Toluene	SW8260B	1	0.0018	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
Ethyl Benzene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
m,p-Xylene	SW8260B	1	0.0032	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
o-Xylene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
Naphthalene	SW8260B	1	0.0017	0.010	ND		mg/Kg	01/21/18	2:06	NP	429146
(S) Dibromofluoromethane	SW8260B		59.8 - 148		130		%	01/21/18	2:06	NP	429146
(S) Toluene-d8	SW8260B		55.2 - 133		102		%	01/21/18	2:06	NP	429146
(S) 4-Bromofluorobenzene	SW8260B		55.8 - 141		127		%	01/21/18	2:06	NP	429146



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102303
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429144
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	1.2	10	ND	
Chloromethane	1.8	10	ND	
Vinyl Chloride	2.0	10	ND	
Bromomethane	2.7	10	ND	
Chloroethane	3.0	10	ND	
Trichlorofluoromethane	2.1	10	ND	
1,1-Dichloroethene	2.0	10	ND	
Freon 113	1.9	10	ND	
Methylene Chloride	7.1	10	ND	
trans-1,2-Dichloroethene	2.1	10	ND	
MTBE	2.3	10	ND	
tert-Butanol	12	50	ND	
Diisopropyl ether (DIPE)	2.3	10	ND	
1,1-Dichloroethane	2.2	10	ND	
ETBE	2.3	10	ND	
cis-1,2-Dichloroethene	2.2	10	ND	
2,2-Dichloropropane	1.9	10	ND	
Bromochloromethane	2.3	10	ND	
Chloroform	2.4	10	ND	
Carbon Tetrachloride	2.1	10	ND	
1,1,1-Trichloroethane	2.1	10	ND	
1,1-Dichloropropene	2.0	10	ND	
Benzene	2.2	10	ND	
TAME	2.3	10	ND	
1,2-Dichloroethane	2.3	10	ND	
Trichloroethylene	1.8	10	ND	
Dibromomethane	1.8	10	ND	
1,2-Dichloropropane	1.9	10	ND	
Bromodichloromethane	2.0	10	ND	
cis-1,3-Dichloropropene	1.6	10	ND	
Toluene	1.8	10	ND	
Tetrachloroethylene	1.7	10	ND	
trans-1,3-Dichloropropene	1.6	10	ND	
1,1,2-Trichloroethane	1.8	10	ND	
Dibromochloromethane	1.9	10	ND	
1,3-Dichloropropane	1.8	10	ND	
1,2-Dibromoethane	1.8	10	ND	
Chlorobenzene	1.8	10	ND	
Ethyl Benzene	1.7	10	ND	
1,1,1,2-Tetrachloroethane	1.9	10	ND	
m,p-Xylene	3.2	10	ND	
o-Xylene	1.7	10	ND	



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102303
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429144
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Styrene	1.6	10	ND	
Bromoform	1.7	10	ND	
Isopropyl Benzene	1.6	10	ND	
n-Propylbenzene	1.6	10	ND	
Bromobenzene	1.8	10	ND	
1,1,2,2-Tetrachloroethane	1.9	10	ND	
2-Chlorotoluene	1.8	10	ND	
1,3,5-Trimethylbenzene	1.6	10	ND	
1,2,3-Trichloropropane	1.9	10	ND	
4-Chlorotoluene	1.6	10	ND	
tert-Butylbenzene	1.6	10	ND	
1,2,4-Trimethylbenzene	1.4	10	ND	
sec-Butyl Benzene	1.6	10	ND	
p-Isopropyltoluene	1.5	10	ND	
1,3-Dichlorobenzene	1.7	10	ND	
1,4-Dichlorobenzene	1.7	10	ND	
n-Butylbenzene	1.5	10	ND	
1,2-Dichlorobenzene	1.8	10	ND	
1,2-Dibromo-3-Chloropropane	1.8	10	ND	
Hexachlorobutadiene	1.4	10	ND	
1,2,4-Trichlorobenzene	1.5	10	ND	
Naphthalene	1.7	10	ND	
1,2,3-Trichlorobenzene	1.7	10	ND	
2-Butanone	1.7	10	ND	
(S) Dibromofluoromethane			112	
(S) Toluene-d8			88.0	
(S) 4-Bromofluorobenzene			95.7	



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102305
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429146
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	1.2	10	ND		
Chloromethane	1.8	10	ND		
Vinyl Chloride	2.0	10	ND		
Bromomethane	2.7	10	ND		
Chloroethane	3.0	10	ND		
Trichlorofluoromethane	2.1	10	ND		
1,1-Dichloroethene	2.0	10	ND		
Freon 113	1.9	10	ND		
Methylene Chloride	7.1	10	ND		
trans-1,2-Dichloroethene	2.1	10	ND		
MTBE	2.3	10	ND		
tert-Butanol	12	50	ND		
Diisopropyl ether (DIPE)	2.3	10	ND		
1,1-Dichloroethane	2.2	10	ND		
ETBE	2.3	10	ND		
cis-1,2-Dichloroethene	2.2	10	ND		
2,2-Dichloropropane	1.9	10	ND		
Bromochloromethane	2.3	10	ND		
Chloroform	2.4	10	ND		
Carbon Tetrachloride	2.1	10	ND		
1,1,1-Trichloroethane	2.1	10	ND		
1,1-Dichloropropene	2.0	10	ND		
Benzene	2.2	10	ND		
TAME	2.3	10	ND		
1,2-Dichloroethane	2.3	10	ND		
Trichloroethylene	1.8	10	ND		
Dibromomethane	1.8	10	ND		
1,2-Dichloropropane	1.9	10	ND		
Bromodichloromethane	2.0	10	ND		
cis-1,3-Dichloropropene	1.6	10	ND		
Toluene	1.8	10	ND		
Tetrachloroethylene	1.7	10	ND		
trans-1,3-Dichloropropene	1.6	10	ND		
1,1,2-Trichloroethane	1.8	10	ND		
Dibromochloromethane	1.9	10	ND		
1,3-Dichloropropane	1.8	10	ND		
1,2-Dibromoethane	1.8	10	ND		
Chlorobenzene	1.8	10	ND		
Ethyl Benzene	1.7	10	ND		
1,1,1,2-Tetrachloroethane	1.9	10	ND		
m,p-Xylene	3.2	10	ND		
o-Xylene	1.7	10	ND		



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102305
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429146
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	1.6	10	ND		
Bromoform	1.7	10	ND		
Isopropyl Benzene	1.6	10	ND		
n-Propylbenzene	1.6	10	ND		
Bromobenzene	1.8	10	ND		
1,1,2,2-Tetrachloroethane	1.9	10	ND		
2-Chlorotoluene	1.8	10	ND		
1,3,5-Trimethylbenzene	1.6	10	ND		
1,2,3-Trichloropropane	1.9	10	ND		
4-Chlorotoluene	1.6	10	ND		
tert-Butylbenzene	1.6	10	ND		
1,2,4-Trimethylbenzene	1.4	10	ND		
sec-Butyl Benzene	1.6	10	ND		
p-Isopropyltoluene	1.5	10	ND		
1,3-Dichlorobenzene	1.7	10	ND		
1,4-Dichlorobenzene	1.7	10	ND		
n-Butylbenzene	1.5	10	ND		
1,2-Dichlorobenzene	1.8	10	ND		
1,2-Dibromo-3-Chloropropane	1.8	10	ND		
Hexachlorobutadiene	1.4	10	ND		
1,2,4-Trichlorobenzene	1.5	10	ND		
Naphthalene	1.7	10	ND		
1,2,3-Trichlorobenzene	1.7	10	ND		
2-Butanone	1.7	10	ND		
(S) Dibromofluoromethane			107		
(S) Toluene-d8			88.3		
(S) 4-Bromofluorobenzene			94.6		

Work Order:	1801189	Prep Method:	3546_TPH	Prep Date:	01/22/18	Prep Batch:	1102317
Matrix:	Soil	Analytical Method:	SW8015B	Analyzed Date:	1/22/2018	Analytical Batch:	429207
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel	0.85	2.0	ND		
TPH as Motor Oil	3.2	10	ND		
Pentacosane (S)			78.2		



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/22/18	Prep Batch:	1102331
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/22/2018	Analytical Batch:	429170
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	1.2	10	ND		
Chloromethane	1.8	10	ND		
Vinyl Chloride	2.0	10	ND		
Bromomethane	2.7	10	ND		
Chloroethane	3.0	10	ND		
Trichlorofluoromethane	2.1	10	ND		
1,1-Dichloroethene	2.0	10	ND		
Freon 113	1.9	10	ND		
Methylene Chloride	7.1	10	ND		
trans-1,2-Dichloroethene	2.1	10	ND		
MTBE	2.3	10	ND		
tert-Butanol	12	50	ND		
Diisopropyl ether (DIPE)	2.3	10	ND		
1,1-Dichloroethane	2.2	10	ND		
ETBE	2.3	10	ND		
cis-1,2-Dichloroethene	2.2	10	ND		
2,2-Dichloropropane	1.9	10	ND		
Bromochloromethane	2.3	10	ND		
Chloroform	2.4	10	ND		
Carbon Tetrachloride	2.1	10	ND		
1,1,1-Trichloroethane	2.1	10	ND		
1,1-Dichloropropene	2.0	10	ND		
Benzene	2.2	10	ND		
TAME	2.3	10	ND		
1,2-Dichloroethane	2.3	10	ND		
Trichloroethylene	1.8	10	ND		
Dibromomethane	1.8	10	ND		
1,2-Dichloropropane	1.9	10	ND		
Bromodichloromethane	2.0	10	ND		
cis-1,3-Dichloropropene	1.6	10	ND		
Toluene	1.8	10	ND		
Tetrachloroethylene	1.7	10	ND		
trans-1,3-Dichloropropene	1.6	10	ND		
1,1,2-Trichloroethane	1.8	10	ND		
Dibromochloromethane	1.9	10	ND		
1,3-Dichloropropane	1.8	10	ND		
1,2-Dibromoethane	1.8	10	ND		
Chlorobenzene	1.8	10	ND		
Ethyl Benzene	1.7	10	ND		
1,1,1,2-Tetrachloroethane	1.9	10	ND		
m,p-Xylene	3.2	10	ND		
o-Xylene	1.7	10	ND		



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/22/18	Prep Batch:	1102331
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/22/2018	Analytical Batch:	429170
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	1.6	10	ND		
Bromoform	1.7	10	ND		
Isopropyl Benzene	1.6	10	ND		
n-Propylbenzene	1.6	10	ND		
Bromobenzene	1.8	10	ND		
1,1,2,2-Tetrachloroethane	1.9	10	ND		
2-Chlorotoluene	1.8	10	ND		
1,3,5-Trimethylbenzene	1.6	10	ND		
1,2,3-Trichloropropane	1.9	10	ND		
4-Chlorotoluene	1.6	10	ND		
tert-Butylbenzene	1.6	10	ND		
1,2,4-Trimethylbenzene	1.4	10	ND		
sec-Butyl Benzene	1.6	10	ND		
p-Isopropyltoluene	1.5	10	ND		
1,3-Dichlorobenzene	1.7	10	ND		
1,4-Dichlorobenzene	1.7	10	ND		
n-Butylbenzene	1.5	10	ND		
1,2-Dichlorobenzene	1.8	10	ND		
1,2-Dibromo-3-Chloropropane	1.8	10	ND		
Hexachlorobutadiene	1.4	10	ND		
1,2,4-Trichlorobenzene	1.5	10	ND		
Naphthalene	1.7	10	ND		
1,2,3-Trichlorobenzene	1.7	10	ND		
2-Butanone	1.7	10	ND		
(S) Dibromofluoromethane			102		
(S) Toluene-d8			81.3		
(S) 4-Bromofluorobenzene			87.3		

Work Order:	1801189	Prep Method:	3546_TPH	Prep Date:	01/22/18	Prep Batch:	1102345
Matrix:	Soil	Analytical Method:	SW8015B	Analyzed Date:	1/22/2018	Analytical Batch:	429210
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel	0.85	2.0	1.38		
TPH as Motor Oil	3.2	10	ND		
Pentacosane (S)			75.8		



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/19/18	Prep Batch:	1102367
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/19/2018	Analytical Batch:	429191
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	1.2	10	ND		
Chloromethane	1.8	10	ND		
Vinyl Chloride	2.0	10	ND		
Bromomethane	2.7	10	ND		
Chloroethane	3.0	10	ND		
Trichlorofluoromethane	2.1	10	ND		
1,1-Dichloroethene	2.0	10	ND		
Freon 113	1.9	10	ND		
Methylene Chloride	7.1	10	ND		
trans-1,2-Dichloroethene	2.1	10	ND		
MTBE	2.3	10	ND		
tert-Butanol	12	50	ND		
Diisopropyl ether (DIPE)	2.3	10	ND		
1,1-Dichloroethane	2.2	10	ND		
ETBE	2.3	10	ND		
cis-1,2-Dichloroethene	2.2	10	ND		
2,2-Dichloropropane	1.9	10	ND		
Bromochloromethane	2.3	10	ND		
Chloroform	2.4	10	ND		
Carbon Tetrachloride	2.1	10	ND		
1,1,1-Trichloroethane	2.1	10	ND		
1,1-Dichloropropene	2.0	10	ND		
Benzene	2.2	10	ND		
TAME	2.3	10	ND		
1,2-Dichloroethane	2.3	10	ND		
Trichloroethylene	1.8	10	ND		
Dibromomethane	1.8	10	ND		
1,2-Dichloropropane	1.9	10	ND		
Bromodichloromethane	2.0	10	ND		
cis-1,3-Dichloropropene	1.6	10	ND		
Toluene	1.8	10	ND		
Tetrachloroethylene	1.7	10	ND		
trans-1,3-Dichloropropene	1.6	10	ND		
1,1,2-Trichloroethane	1.8	10	ND		
Dibromochloromethane	1.9	10	ND		
1,3-Dichloropropane	1.8	10	ND		
1,2-Dibromoethane	1.8	10	ND		
Chlorobenzene	1.8	10	ND		
Ethyl Benzene	1.7	10	ND		
1,1,1,2-Tetrachloroethane	1.9	10	ND		
m,p-Xylene	3.2	10	ND		
o-Xylene	1.7	10	ND		



MB Summary Report

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/19/18	Prep Batch:	1102367
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/19/2018	Analytical Batch:	429191
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	1.6	10	ND		
Bromoform	1.7	10	ND		
Isopropyl Benzene	1.6	10	ND		
n-Propylbenzene	1.6	10	ND		
Bromobenzene	1.8	10	ND		
1,1,2,2-Tetrachloroethane	1.9	10	ND		
2-Chlorotoluene	1.8	10	ND		
1,3,5-Trimethylbenzene	1.6	10	ND		
1,2,3-Trichloropropane	1.9	10	ND		
4-Chlorotoluene	1.6	10	ND		
tert-Butylbenzene	1.6	10	ND		
1,2,4-Trimethylbenzene	1.4	10	ND		
sec-Butyl Benzene	1.6	10	ND		
p-Isopropyltoluene	1.5	10	ND		
1,3-Dichlorobenzene	1.7	10	ND		
1,4-Dichlorobenzene	1.7	10	ND		
n-Butylbenzene	1.5	10	ND		
1,2-Dichlorobenzene	1.8	10	ND		
1,2-Dibromo-3-Chloropropane	1.8	10	ND		
Hexachlorobutadiene	1.4	10	ND		
1,2,4-Trichlorobenzene	1.5	10	ND		
Naphthalene	1.7	10	ND		
1,2,3-Trichlorobenzene	1.7	10	ND		
2-Butanone	1.7	10	ND		
(S) Dibromofluoromethane			100		
(S) Toluene-d8			86.3		
(S) 4-Bromofluorobenzene			91.8		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102303
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429144
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	2.0	10	ND	50.0	86.4	81.7	5.71	53.7 - 139	30	
Benzene	2.2	10	ND	50.0	112	109	2.53	66.5 - 135	30	
Trichloroethylene	1.8	10	ND	50.0	86.4	83.2	3.77	57.5 - 150	30	
Toluene	1.8	10	ND	50.0	85.0	82.7	2.86	56.8 - 134	30	
Chlorobenzene	1.8	10	ND	50.0	94.3	93.5	0.851	57.4 - 134	30	
(S) Dibromofluoromethane				50.0	141	137		59.8 - 148		
(S) Toluene-d8				50.0	110	110		55.2 - 133		
(S) 4-Bromofluorobenzene				50.0	118	117		55.8 - 141		

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/20/18	Prep Batch:	1102305
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/20/2018	Analytical Batch:	429146
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	2.0	10	ND	50.0	77.2	76.2	1.30	53.7 - 139	30	
Benzene	2.2	10	ND	50.0	104	104	0.576	66.5 - 135	30	
Trichloroethylene	1.8	10	ND	50.0	81.4	83.2	2.19	57.5 - 150	30	
Toluene	1.8	10	ND	50.0	82.7	80.3	2.95	56.8 - 134	30	
Chlorobenzene	1.8	10	ND	50.0	91.5	90.2	1.54	57.4 - 134	30	
(S) Dibromofluoromethane				50.0	132	129		59.8 - 148		
(S) Toluene-d8				50.0	109	106		55.2 - 133		
(S) 4-Bromofluorobenzene				50.0	116	113		55.8 - 141		

Work Order:	1801189	Prep Method:	3546_TPH	Prep Date:	01/22/18	Prep Batch:	1102317
Matrix:	Soil	Analytical Method:	SW8015B	Analyzed Date:	1/22/2018	Analytical Batch:	429207
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.85	2.0	ND	25.0	100	92.7	7.47	52 - 115	30	
Pentacosane (S)				200	123	113		59 - 129		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/22/18	Prep Batch:	1102331
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/22/2018	Analytical Batch:	429170
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	2.0	10	ND	50.0	90.9	92.7	2.18	53.7 - 139	30	
Benzene	2.2	10	ND	50.0	93.9	95.6	1.69	66.5 - 135	30	
Trichloroethylene	1.8	10	ND	50.0	90.2	91.8	1.76	57.5 - 150	30	
Toluene	1.8	10	ND	50.0	89.6	91.3	1.77	56.8 - 134	30	
Chlorobenzene	1.8	10	ND	50.0	91.8	93.5	1.94	57.4 - 134	30	
(S) Dibromofluoromethane				50.0	105	108		59.8 - 148		
(S) Toluene-d8				50.0	91.8	94.5		55.2 - 133		
(S) 4-Bromofluorobenzene				50.0	85.4	88.2		55.8 - 141		

Work Order:	1801189	Prep Method:	3546_TPH	Prep Date:	01/22/18	Prep Batch:	1102345
Matrix:	Soil	Analytical Method:	SW8015B	Analyzed Date:	1/22/2018	Analytical Batch:	429210
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.85	2.0	1.38	25.0	68.9	63.8	7.86	52 - 115	30	
Pentacosane (S)				200	69.2	70.7		59 - 129		

Work Order:	1801189	Prep Method:	5035	Prep Date:	01/19/18	Prep Batch:	1102367
Matrix:	Soil	Analytical Method:	SW8260B	Analyzed Date:	1/19/2018	Analytical Batch:	429191
Units:	ug/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	2.0	10	ND	50.0	110	109	1.28	53.7 - 139	30	
Benzene	2.2	10	ND	50.0	110	109	0.547	66.5 - 135	30	
Trichloroethylene	1.8	10	ND	50.0	104	99.2	4.53	57.5 - 150	30	
Toluene	1.8	10	ND	50.0	98.1	95.6	2.68	56.8 - 134	30	
Chlorobenzene	1.8	10	ND	50.0	99.1	98.0	1.22	57.4 - 134	30	
(S) Dibromofluoromethane				50.0	119	120		59.8 - 148		
(S) Toluene-d8				50.0	102	98.9		55.2 - 133		
(S) 4-Bromofluorobenzene				50.0	93.5	90.3		55.8 - 141		



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1801189	Prep Method:	3546_TPH	Prep Date:	01/22/18	Prep Batch:	1102317
Matrix:	Soil	Analytical Method:	SW8015B	Analyzed Date:	1/23/2018	Analytical Batch:	429207
Spiked Sample:	1801189-002A						
Units:	mg/Kg						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.850	2.00	10.7	25.0	31.3	17.1	20.9	52 - 115	30	S
Pentacosane (S)				200	87.2	81.3		59 - 129		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.</p> <p>NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p>X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>



Sample Receipt Checklist

Client Name: Wheeler Group Environmental, LLC

Date and Time Received: 1/19/2018 12:18:00PM

Project Name: 132 Guilford Rd., Piedmont, CA

Received By: Evan Dorr

Work Order No.: 1801189

Physically Logged By: Evan Dorr

Checklist Completed By: Evan Dorr

Carrier Name: First Courier

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? Yes Temperature: 2.0 °C
Water-VOA vials have zero headspace? No VOA vials submitted
Water-pH acceptable upon receipt? N/A
pH Checked by: NA pH Adjusted by: NA

Comments:



Login Summary Report

Client ID: TL6291 Wheeler Group Environmental, LLC
Project Name: 132 Guilford Rd., Piedmont, CA
Project # : WGE 2017110
Report Due Date: 1/25/2018

QC Level: II
TAT Requested: 3 Day Std:3
Date Received: 1/19/2018
Time Received: 12:18 pm

Comments:

Work Order # : 1801189

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1801189-001A	B1-3	01/17/18 10:05	Soil	07/16/18			EDF TPHDO_S_8015(Mod) VOC_S_PetE/PCE+	
Sample Note: TPHd, MBTEX, Naphthalene								
1801189-002A	B1-5	01/17/18 10:30	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-003A	B1-6.5	01/17/18 10:20	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-004A	B2-2.5	01/17/18 13:20	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-005A	B2-5	01/17/18 13:40	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-006A	B2-6	01/17/18 13:35	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-007A	B3-2.5	01/17/18 9:25	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-008A	B3-4	01/17/18 9:35	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-009A	B3-5	01/17/18 9:50	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-010A	B3-6.5	01/17/18 9:40	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	



Login Summary Report

Client ID: TL6291 Wheeler Group Environmental, LLC
Project Name: 132 Guilford Rd., Piedmont, CA
Project # : WGE 2017110
Report Due Date: 1/25/2018

QC Level: II
TAT Requested: 3 Day Std:3
Date Received: 1/19/2018
Time Received: 12:18 pm

Comments:

Work Order # : 1801189

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1801189-011A	B3-10	01/18/18 9:50	Soil	07/17/18			TPHDO_S_8015(Mod) VOC_S_PetE/PCE+	
1801189-012A	B3-14	01/18/18 10:35	Soil	07/17/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-013A	B4-2.5	01/17/18 8:40	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-014A	B4-5.5	01/17/18 9:10	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-015A	B4-7	01/17/18 9:05	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-016A	B5-2.5	01/17/18 14:25	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-017A	B5-5	01/17/18 14:35	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-018A	B5-7	01/17/18 14:30	Soil	07/16/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	
1801189-019A	B5-8.5	01/19/18 10:05	Soil	07/18/18			VOC_S_PetE/PCE+ TPHDO_S_8015(Mod)	



Login Summary Report

Client ID: TL6291 Wheeler Group Environmental, LLC
Project Name: 132 Guilford Rd., Piedmont, CA
Project # : WGE 2017110
Report Due Date: 1/25/2018

QC Level: II
TAT Requested: 3 Day Std:3
Date Received: 1/19/2018
Time Received: 12:18 pm

Comments:

Work Order # : 1801189

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1801189-020A	B5-13	01/17/18 16:55	Soil	07/16/18			VOC_S_PetE/PCE+TPHDO_S_8015(Mod)	
1801189-021A	B7-2.5	01/17/18 14:00	Soil	07/16/18			VOC_S_PetE/PCE+TPHDO_S_8015(Mod)	
1801189-022A	B7-5	01/17/18 14:10	Soil	07/16/18			VOC_S_PetE/PCE+TPHDO_S_8015(Mod)	



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com



CHAIN OF CUSTODY

LAB WORK ORDER NO
 1801189

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Wheeler Group Environmental, LLC			Location of Sampling: 132 Guilford Rd., Piedmont, CA		
Address: 369-B Third Street, Suite #221			Purpose: Data Gap Investigation Sampling		
City: San Rafael	State: CA	Zip Code: 94901	Special Instructions / Comments: Global ID# T10000002521; See Remarks Section for Field		
Telephone: 415-686-8846		FAX:	Point Names (FPNs); PT = Plastic Tube		
REPORT TO: Brent Wheeler		SAMPLER: B. Wheeler	P.O. #: WGE 2017110	EMAIL: bwheeler@wheelergroupenvironmental.com	

TURNAROUND TIME:

- 10 Work Days
 3 Work Days
 Noon - Nxt Day
 7 Work Days
 2 Work Days
 2 - 8 Hours
 5 Work Days
 1 Work Day
 Other

SAMPLE TYPE:

- Storm Water
 Air
 Waste Water
 Other
 Ground Water
 Soil

REPORT FORMAT:

- QC Level IV
 EDF
 Excel / EDD

TPH-D (8015)
 BTEX/MTBE (8260)
 Naphthalene (8260)

ANALYSIS REQUESTED

001A
002A
003A
004A
005A
006A
007A
008A
009A
010A

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH-D (8015)	BTEX/MTBE (8260)	Naphthalene (8260)	REMARKS
001A EP CHA	B1-3	1-17-18 / 1005	Soil	1	PT	✓	✓	✓	FPN: B1
002A EP CHA	B1-5	1-17-18 / 1030	Soil	1	PT	✓	✓	✓	FPN: B1
003A EP CHA	B1-6.5	1-17-18 / 1020	Soil	1	PT	✓	✓	✓	FPN: B1
004A EP CHA	B2-2.5	1-17-18 / 1320	Soil	1	PT	✓	✓	✓	FPN: B2
005A EP CHA	B2-5	1-17-18 / 1340	Soil	1	PT	✓	✓	✓	FPN: B2
006A EP CHA	B2-6	1-17-18 / 1335	Soil	1	PT	✓	✓	✓	FPN: B2
007A EP CHA	B3-2.5	1-17-18 / 0925	Soil	1	PT	✓	✓	✓	FPN: B3
008A EP CHA	B3-4	1-17-18 / 0935	Soil	1	PT	✓	✓	✓	FPN: B3
009A EP CHA	B3-5	1-17-18 / 0950	Soil	1	PT	✓	✓	✓	FPN: B3
010A EP CHA	B3-6.5	1-17-18 / 0940	Soil	1	PT	✓	✓	✓	FPN: B3

1	Relinquished By: <u>Brent Wheeler</u> Print: <u>BRENT WHEELER</u>	Date: 1-19-2018	Time: 10:35	Received By: <u>D. Baker</u> Print: <u>D. BAKER</u>	Date: 1/19/18	Time: 10:35
2	Relinquished By: <u>D. Baker</u> Print: <u>D. BAKER</u>	Date: 1/19/18	Time: 12:18	Received By: <u>Kevin Dell</u> Print: <u>Kevin Dell</u>	Date: 1/19/18	Time: 12:18

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment FCS Sample seals intact? Yes NO N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Page 1 of 3

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

20#2



483 Sinclair Frontage Road
 Milpitas, CA 95035
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 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

1901189

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Wheeler Group Environmental, LLC			Location of Sampling: 132 Guilford Rd., Piedmont, CA		
Address: 369-B Third Street, Suite #221			Purpose: Data Gap Investigation Sampling		
City: San Rafael	State: CA	Zip Code: 94901	Special Instructions / Comments: Global ID# T1000002521; See Remarks Section for Field		
Telephone: 415-686-8846		FAX:	Point Names (FPNs); PT = Plastic Tube		
REPORT TO: Brent Wheeler		SAMPLER: B. Wheeler	P.O. #: WGE 2017110	EMAIL: bwheeler@wheelergroupenvironmental.com	

TURNAROUND TIME:

- 10 Work Days
 3 Work Days
 Noon - Nxt Day
 7 Work Days
 2 Work Days
 2 - 8 Hours
 5 Work Days
 1 Work Day
 Other

SAMPLE TYPE:

- Storm Water
 Waste Water
 Ground Water
 Soil
 Air
 Other

REPORT FORMAT:

- QC Level IV
 EDF
 Excel / EDD

TPH-D (8015)

BTEX/MTBE (8260)

Naphthalene (8260)

ANALYSIS REQUESTED

011A
012A
013A
014A
015A
016A
017A
018A
019A
020A

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH-D (8015)	BTEX/MTBE (8260)	Naphthalene (8260)	REMARKS
011A	B3-10	1-18-18 / 0950	Soil	1	PT	✓	✓	✓	FPN: B3
012A	B3-14	1-18-18 / 1035	Soil	1	PT	✓	✓	✓	FPN: B3
013A	B4-2.5	1-17-18 / 0840	Soil	1	PT	✓	✓	✓	FPN: B4
014A	B4-5.5	1-17-18 / 0910	Soil	1	PT	✓	✓	✓	FPN: B4
015A	B4-7	1-17-18 / 0905	Soil	1	PT	✓	✓	✓	FPN: B4
016A	B5-2.5	1-17-18 / 1425	Soil	1	PT	✓	✓	✓	FPN: B5
017A	B5-5	1-17-18 / 1435	Soil	1	PT	✓	✓	✓	FPN: B5
018A	B5-7	1-17-18 / 1430	Soil	1	PT	✓	✓	✓	FPN: B5
019A	B5-8.5	1-17-18 / 1450	Soil	1	PT	✓	✓	✓	FPN: B5
020A	B5-13	1-17-18 / 1655	Soil	1	PT	✓	✓	✓	FPN: B5

1	Relinquished By: <i>Brent Wheeler</i>	Print: <i>Brent Wheeler</i>	Date: 1-19-2018	Time: 10:35	Received By: <i>D. Baker</i>	Print: <i>D. Baker</i>	Date: 1/19/18	Time: 10:35
2	Relinquished By: <i>D. Baker</i>	Print: <i>D. Baker</i>	Date: 1/19/18	Time: 12:18	Received By: <i>Evan Dell</i>	Print: <i>Evan Dell</i>	Date: 1/19/18	Time: 12:18

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment FCS Sample seals intact? Yes NO N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Page 2 of 3

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

201/2



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 FAX: 408.263.8293
 www.torrentlab.com



CHAIN OF CUSTODY

LAB WORK ORDER NO
 1801189

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Wheeler Group Environmental, LLC			Location of Sampling: 132 Guilford Rd., Piedmont, CA		
Address: 369-B Third Street, Suite #221			Purpose: Data Gap Investigation Sampling		
City: San Rafael	State: CA	Zip Code: 94901	Special Instructions / Comments: Global ID# T10000002521; See Remarks Section for Field		
Telephone: 415-686-8846		FAX:	Point Names (FPNs); PT = Plastic Tube		
REPORT TO: Brent Wheeler		SAMPLER: B. Wheeler	P.O. #: WGE 2017110	EMAIL: bwheeler@wheelergroupenvironmental.com	

TURNAROUND TIME:		SAMPLE TYPE:		REPORT FORMAT:		ANALYSIS REQUESTED
<input type="checkbox"/> 10 Work Days	<input checked="" type="checkbox"/> 3 Work Days	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Air	<input type="checkbox"/> QC Level IV	<input type="checkbox"/> TPH-D (8015)	
<input type="checkbox"/> 7 Work Days	<input type="checkbox"/> 2 Work Days	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> EDF	<input type="checkbox"/> BTEX/MTBE (8260)	
<input type="checkbox"/> 5 Work Days	<input type="checkbox"/> 1 Work Day	<input type="checkbox"/> Ground Water	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Excel / EDD	<input type="checkbox"/> Naphthalene (8260)	

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH-D (8015)	BTEX/MTBE (8260)	Naphthalene (8260)	REMARKS
021A	B7-2.5	1-17-18 / 1400	Soil	1	PT	✓	✓	✓	FPN: B7
021A	B7-5	1-17-18 / 1410	Soil	1	PT	✓	✓	✓	FPN: B7

1	Relinquished By: <i>B. Wheeler</i> Print: <i>BRENT A. WHEELER</i>	Date: 1-19-2018	Time: 10:35	Received By: <i>D. Baker</i> Print: <i>D. BAKER</i>	Date: 1/19/18	Time: 10:35
2	Relinquished By: <i>D. Baker</i> Print: <i>D. BAKER</i>	Date: 1/19/18	Time: 12:18	Received By: <i>Yuan Dyer</i> Print: <i>Yuan Dyer</i>	Date: 1/19/18	Time: 12:18

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment FCS Sample seals intact? Yes NO N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

20 #2



Brent A. Wheeler
Wheeler Group Environmental, LLC
369-B Third Street, Suite #221
San Rafael, California 94901
Tel: P: 415-686-8846
RE: 132 Guilford Rd., Piedmont, CA

Work Order No.: 1802007

Dear Brent Wheeler:

Torrent Laboratory, Inc. received 4 sample(s) on February 01, 2018 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti L Sandroock
QA Officer

February 06, 2018

Date



Date: 2/6/2018

Client: Wheeler Group Environmental, LLC

Project: 132 Guilford Rd., Piedmont, CA

Work Order: 1802007

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

Analytical comments for Method TO17: Although the Method Blank associated with QC Batch ID 1102633 had a reportable level of DRO, no batch associated samples had detectable levels of DRO. No corrective action is required.

TO-17 results and reporting limits have been corrected for volume of air collected.

REVISIONS

Samples for TO15 analysis were originally run at a high dilution due the concentrations of IPA and the presence of non-target hydrocarbons. Per client request, report revised to report TO15 data (except for IPA) as analyzed at lower dilutions.

Rev. 1 (2/8/18)



Sample Result Summary

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date Received: 02/01/18

Date Reported: 02/06/18

SS1

1802007-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Carbon Dioxide	D1946	36	0.36	1.8	7.3%
Oxygen	D1946	36	0.38	1.8	3.7%
Hexane	ETO15	1	0.46	1.8	17
Toluene	ETO15	1	0.75	1.9	8.4
m,p-Xylene	ETO15	1	0.98	2.2	2.4
o-Xylene	ETO15	1	0.30	2.2	2.2
2-Propanol (Isopropyl Alcohol)	ETO15	180	230	2200	9800

SS1

1802007-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
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All compounds were non-detectable for this sample.

SS1 DUP

1802007-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
2-Propanol (Isopropyl Alcohol)	ETO15	180	230	2200	8900

SS1 SHROUD

1802007-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
2-Propanol (Isopropyl Alcohol)	ETO15	8000	10000	98000	230000



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID:	SS1	Lab Sample ID:	1802007-001A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Soil Vapor
Project Number:	Data Gap Investigation Sampling		
Date/Time Sampled:	02/01/18 / 11:00	Certified Clean WO # :	
Canister/Tube ID:	457	Received PSI :	12.9
Collection Volume (L):		Corrected PSI :	
SDG:			
Tag Number:	132 Guilford Rd.		

Prep Method: FG-P	Prep Batch Date/Time: 2/2/18	9:00:00AM
Prep Batch ID: 1102604	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL %	PQL %	Results %	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Carbon Dioxide	D1946	36.00	0.36	1.8	7.3			02/02/18	16:29	BA	429429
Oxygen	D1946	36.00	0.38	1.8	3.7			02/02/18	16:29	BA	429429
Methane	D1946	36.00	0.084	0.18	ND			02/02/18	16:29	BA	429429

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1.00	1.6	2.5	ND	ND		02/02/18	12:00	BA	429388
1,1-Difluoroethane	ETO15	1.00	0.35	14	ND	ND		02/02/18	12:00	BA	429388
1,2-Dichlorotetrafluoroethane	ETO15	1.00	28	56	ND	ND		02/02/18	12:00	BA	429388
Chloromethane	ETO15	1.00	2.0	4.1	ND	ND		02/02/18	12:00	BA	429388
Vinyl Chloride	ETO15	1.00	0.23	1.3	ND	ND		02/02/18	12:00	BA	429388
1,3-Butadiene	ETO15	1.00	0.34	1.1	ND	ND		02/02/18	12:00	BA	429388
Bromomethane	ETO15	1.00	0.66	1.9	ND	ND		02/02/18	12:00	BA	429388
Chloroethane	ETO15	1.00	0.81	1.3	ND	ND		02/02/18	12:00	BA	429388
Trichlorofluoromethane	ETO15	1.00	0.56	2.8	ND	ND		02/02/18	12:00	BA	429388
1,1-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		02/02/18	12:00	BA	429388
Freon 113	ETO15	1.00	1.0	3.8	ND	ND		02/02/18	12:00	BA	429388
Carbon Disulfide	ETO15	1.00	0.37	1.6	ND	ND		02/02/18	12:00	BA	429388
Methylene Chloride	ETO15	1.00	0.70	10	ND	ND		02/02/18	12:00	BA	429388
Acetone	ETO15	1.00	0.40	12	ND	ND		02/02/18	12:00	BA	429388
trans-1,2-Dichloroethene	ETO15	1.00	0.48	2.0	ND	ND		02/02/18	12:00	BA	429388
Hexane	ETO15	1.00	0.46	1.8	17	4.83		02/02/18	12:00	BA	429388
MTBE	ETO15	1.00	0.44	1.8	ND	ND		02/02/18	12:00	BA	429388
tert-Butanol	ETO15	1.00	0.62	1.5	ND	ND		02/02/18	12:00	BA	429388
Diisopropyl ether (DIPE)	ETO15	1.00	0.74	2.1	ND	ND		02/02/18	12:00	BA	429388
1,1-Dichloroethane	ETO15	1.00	0.54	2.0	ND	ND		02/02/18	12:00	BA	429388
ETBE	ETO15	1.00	0.33	2.1	ND	ND		02/02/18	12:00	BA	429388
cis-1,2-Dichloroethene	ETO15	1.00	0.83	2.0	ND	ND		02/02/18	12:00	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID: SS1	Lab Sample ID: 1802007-001A
Project Name/Location: 132 Guilford Rd., Piedmont, CA	Sample Matrix: Soil Vapor
Project Number: Data Gap Investigation Sampling	
Date/Time Sampled: 02/01/18 / 11:00	Certified Clean WO # :
Canister/Tube ID: 457	Received PSI : 12.9
Collection Volume (L):	Corrected PSI :
SDG:	
Tag Number: 132 Guilford Rd.	

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Chloroform	ETO15	1.00	0.97	2.4	ND	ND		02/02/18	12:00	BA	429388
Vinyl Acetate	ETO15	1.00	0.76	1.8	ND	ND		02/02/18	12:00	BA	429388
Carbon Tetrachloride	ETO15	1.00	1.1	3.1	ND	ND		02/02/18	12:00	BA	429388
1,1,1-Trichloroethane	ETO15	1.00	0.79	2.7	ND	ND		02/02/18	12:00	BA	429388
2-Butanone (MEK)	ETO15	1.00	0.39	1.5	ND	ND		02/02/18	12:00	BA	429388
Ethyl Acetate	ETO15	1.00	0.48	1.8	ND	ND		02/02/18	12:00	BA	429388
Tetrahydrofuran	ETO15	1.00	0.45	1.5	ND	ND		02/02/18	12:00	BA	429388
Benzene	ETO15	1.00	0.44	1.6	ND	ND		02/02/18	12:00	BA	429388
TAME	ETO15	1.00	0.67	2.1	ND	ND		02/02/18	12:00	BA	429388
1,2-Dichloroethane (EDC)	ETO15	1.00	0.42	2.0	ND	ND		02/02/18	12:00	BA	429388
Trichloroethylene	ETO15	1.00	0.81	2.7	ND	ND		02/02/18	12:00	BA	429388
1,2-Dichloropropane	ETO15	1.00	0.76	2.3	ND	ND		02/02/18	12:00	BA	429388
Bromodichloromethane	ETO15	1.00	0.74	3.4	ND	ND		02/02/18	12:00	BA	429388
1,4-Dioxane	ETO15	1.00	1.8	3.6	ND	ND		02/02/18	12:00	BA	429388
trans-1,3-Dichloropropene	ETO15	1.00	1.1	2.3	ND	ND		02/02/18	12:00	BA	429388
Toluene	ETO15	1.00	0.75	1.9	8.4	2.23		02/02/18	12:00	BA	429388
4-Methyl-2-Pentanone (MIBK)	ETO15	1.00	0.75	2.1	ND	ND		02/02/18	12:00	BA	429388
cis-1,3-Dichloropropene	ETO15	1.00	0.42	2.3	ND	ND		02/02/18	12:00	BA	429388
Tetrachloroethylene	ETO15	1.00	1.5	3.4	ND	ND		02/02/18	12:00	BA	429388
1,1,2-Trichloroethane	ETO15	1.00	0.58	2.7	ND	ND		02/02/18	12:00	BA	429388
Dibromochloromethane	ETO15	1.00	1.1	4.3	ND	ND		02/02/18	12:00	BA	429388
1,2-Dibromoethane (EDB)	ETO15	1.00	0.74	3.8	ND	ND		02/02/18	12:00	BA	429388
2-Hexanone	ETO15	1.00	0.65	2.1	ND	ND		02/02/18	12:00	BA	429388
Ethyl Benzene	ETO15	1.00	0.63	2.2	ND	ND		02/02/18	12:00	BA	429388
Chlorobenzene	ETO15	1.00	0.60	2.3	ND	ND		02/02/18	12:00	BA	429388
1,1,1,2-Tetrachloroethane	ETO15	1.00	0.84	3.4	ND	ND		02/02/18	12:00	BA	429388
m,p-Xylene	ETO15	1.00	0.98	2.2	2.4	0.55		02/02/18	12:00	BA	429388
o-Xylene	ETO15	1.00	0.30	2.2	2.2	0.51		02/02/18	12:00	BA	429388
Styrene	ETO15	1.00	0.46	2.1	ND	ND		02/02/18	12:00	BA	429388
Bromoform	ETO15	1.00	1.3	5.2	ND	ND		02/02/18	12:00	BA	429388
1,1,2,2-Tetrachloroethane	ETO15	1.00	0.82	3.4	ND	ND		02/02/18	12:00	BA	429388
4-Ethyl Toluene	ETO15	1.00	0.55	2.5	ND	ND		02/02/18	12:00	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID: SS1	Lab Sample ID: 1802007-001A
Project Name/Location: 132 Guilford Rd., Piedmont, CA	Sample Matrix: Soil Vapor
Project Number: Data Gap Investigation Sampling	
Date/Time Sampled: 02/01/18 / 11:00	Certified Clean WO # :
Canister/Tube ID: 457	Received PSI : 12.9
Collection Volume (L):	Corrected PSI :
SDG:	
Tag Number: 132 Guilford Rd.	

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
1,3,5-Trimethylbenzene	ETO15	1.00	0.30	2.5	ND	ND		02/02/18	12:00	BA	429388
1,2,4-Trimethylbenzene	ETO15	1.00	0.60	2.5	ND	ND		02/02/18	12:00	BA	429388
1,4-Dichlorobenzene	ETO15	1.00	0.75	3.0	ND	ND		02/02/18	12:00	BA	429388
1,3-Dichlorobenzene	ETO15	1.00	1.3	3.0	ND	ND		02/02/18	12:00	BA	429388
1,2-Dichlorobenzene	ETO15	1.00	1.1	3.0	ND	ND		02/02/18	12:00	BA	429388
Hexachlorobutadiene	ETO15	1.00	1.9	5.3	ND	ND		02/02/18	12:00	BA	429388
1,2,4-Trichlorobenzene	ETO15	1.00	2.2	3.7	ND	ND		02/02/18	12:00	BA	429388
Naphthalene	ETO15	1.00	1.3	2.6	ND	ND		02/02/18	12:00	BA	429388
(S) 4-Bromofluorobenzene	ETO15	1.00	50	150	110 %			02/02/18	12:00	BA	429388

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
2-Propanol (Isopropyl Alcohol)	ETO15	180.0	230	2200	9800	3,983.74		02/02/18	19:28	BA	429388
(S) 4-Bromofluorobenzene	ETO15	180.0	50	150	110 %			02/02/18	19:28	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID: SS1	Lab Sample ID: 1802007-002A
Project Name/Location: 132 Guilford Rd., Piedmont, CA	Sample Matrix: Air
Project Number: Data Gap Investigation Sampling	Certified Clean WO # :
Date/Time Sampled: 02/01/18 / 11:28	Received PSI :
Canister/Tube ID:	Corrected PSI :
Collection Volume (L):	
SDG:	
Tag Number: 132 Guilford Rd.	

Prep Method: TO17-P	Prep Batch Date/Time: 2/5/18	9:38:00AM
Prep Batch ID: 1102632	Prep Analyst: BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Naphthalene	TO-17	1.00	0.21	5.0	ND			02/06/18	9:34	BP	429459
(S) Dibromofluoromethane	TO-17	1.00	65	135	110 %			02/06/18	9:34	BP	429459
(S) Toluene-d8	TO-17	1.00	65	135	110 %			02/06/18	9:34	BP	429459
(S) 4-Bromofluorobenzene	TO-17	1.00	65	135	130 %			02/06/18	9:34	BP	429459

Prep Method: TO17-GRO	Prep Batch Date/Time: 2/5/18	9:38:00AM
Prep Batch ID: 1102633	Prep Analyst: BPATEL	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
TPH-DRO	TO-17	1.00	4.1	25	ND			02/06/18	9:34	BP	429459



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID: SS1 DUP	Lab Sample ID: 1802007-003A
Project Name/Location: 132 Guilford Rd., Piedmont, CA	Sample Matrix: Air
Project Number: Data Gap Investigation Sampling	
Date/Time Sampled: 02/01/18 / 11:05	Certified Clean WO # :
Canister/Tube ID: 480	Received PSI : 13.9
Collection Volume (L):	Corrected PSI :
SDG:	
Tag Number: 132 Guilford Rd.	

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	25.00	39	62	ND	ND		02/02/18	14:12	BA	429388
1,1-Difluoroethane	ETO15	25.00	8.6	340	ND	ND		02/02/18	14:12	BA	429388
1,2-Dichlorotetrafluoroethane	ETO15	25.00	700	1400	ND	ND		02/02/18	14:12	BA	429388
Chloromethane	ETO15	25.00	51	100	ND	ND		02/02/18	14:12	BA	429388
Vinyl Chloride	ETO15	25.00	5.6	32	ND	ND		02/02/18	14:12	BA	429388
1,3-Butadiene	ETO15	25.00	8.5	28	ND	ND		02/02/18	14:12	BA	429388
Bromomethane	ETO15	25.00	16	49	ND	ND		02/02/18	14:12	BA	429388
Chloroethane	ETO15	25.00	20	33	ND	ND		02/02/18	14:12	BA	429388
Trichlorofluoromethane	ETO15	25.00	14	70	ND	ND		02/02/18	14:12	BA	429388
1,1-Dichloroethene	ETO15	25.00	21	50	ND	ND		02/02/18	14:12	BA	429388
Freon 113	ETO15	25.00	25	96	ND	ND		02/02/18	14:12	BA	429388
Carbon Disulfide	ETO15	25.00	9.3	39	ND	ND		02/02/18	14:12	BA	429388
Methylene Chloride	ETO15	25.00	18	260	ND	ND		02/02/18	14:12	BA	429388
Acetone	ETO15	25.00	9.9	300	ND	ND		02/02/18	14:12	BA	429388
trans-1,2-Dichloroethene	ETO15	25.00	12	50	ND	ND		02/02/18	14:12	BA	429388
Hexane	ETO15	25.00	12	44	ND	ND		02/02/18	14:12	BA	429388
MTBE	ETO15	25.00	11	45	ND	ND		02/02/18	14:12	BA	429388
tert-Butanol	ETO15	25.00	15	38	ND	ND		02/02/18	14:12	BA	429388
Diisopropyl ether (DIPE)	ETO15	25.00	18	52	ND	ND		02/02/18	14:12	BA	429388
1,1-Dichloroethane	ETO15	25.00	14	51	ND	ND		02/02/18	14:12	BA	429388
ETBE	ETO15	25.00	8.2	52	ND	ND		02/02/18	14:12	BA	429388
cis-1,2-Dichloroethene	ETO15	25.00	21	50	ND	ND		02/02/18	14:12	BA	429388
Chloroform	ETO15	25.00	24	61	ND	ND		02/02/18	14:12	BA	429388
Vinyl Acetate	ETO15	25.00	19	44	ND	ND		02/02/18	14:12	BA	429388
Carbon Tetrachloride	ETO15	25.00	28	79	ND	ND		02/02/18	14:12	BA	429388
1,1,1-Trichloroethane	ETO15	25.00	20	68	ND	ND		02/02/18	14:12	BA	429388
2-Butanone (MEK)	ETO15	25.00	9.7	37	ND	ND		02/02/18	14:12	BA	429388
Ethyl Acetate	ETO15	25.00	12	45	ND	ND		02/02/18	14:12	BA	429388
Tetrahydrofuran	ETO15	25.00	11	37	ND	ND		02/02/18	14:12	BA	429388
Benzene	ETO15	25.00	11	40	ND	ND		02/02/18	14:12	BA	429388
TAME	ETO15	25.00	17	52	ND	ND		02/02/18	14:12	BA	429388
1,2-Dichloroethane (EDC)	ETO15	25.00	11	51	ND	ND		02/02/18	14:12	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID: SS1 DUP	Lab Sample ID: 1802007-003A
Project Name/Location: 132 Guilford Rd., Piedmont, CA	Sample Matrix: Air
Project Number: Data Gap Investigation Sampling	Certified Clean WO # :
Date/Time Sampled: 02/01/18 / 11:05	Received PSI : 13.9
Canister/Tube ID: 480	Corrected PSI :
Collection Volume (L):	
SDG:	
Tag Number: 132 Guilford Rd.	

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst: BALI	

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Trichloroethylene	ETO15	25.00	20	67	ND	ND		02/02/18	14:12	BA	429388
1,2-Dichloropropane	ETO15	25.00	19	58	ND	ND		02/02/18	14:12	BA	429388
Bromodichloromethane	ETO15	25.00	19	84	ND	ND		02/02/18	14:12	BA	429388
1,4-Dioxane	ETO15	25.00	45	90	ND	ND		02/02/18	14:12	BA	429388
trans-1,3-Dichloropropene	ETO15	25.00	27	57	ND	ND		02/02/18	14:12	BA	429388
Toluene	ETO15	25.00	19	47	ND	ND		02/02/18	14:12	BA	429388
4-Methyl-2-Pentanone (MIBK)	ETO15	25.00	19	51	ND	ND		02/02/18	14:12	BA	429388
cis-1,3-Dichloropropene	ETO15	25.00	11	57	ND	ND		02/02/18	14:12	BA	429388
Tetrachloroethylene	ETO15	25.00	36	85	ND	ND		02/02/18	14:12	BA	429388
1,1,2-Trichloroethane	ETO15	25.00	15	68	ND	ND		02/02/18	14:12	BA	429388
Dibromochloromethane	ETO15	25.00	28	110	ND	ND		02/02/18	14:12	BA	429388
1,2-Dibromoethane (EDB)	ETO15	25.00	18	96	ND	ND		02/02/18	14:12	BA	429388
2-Hexanone	ETO15	25.00	16	51	ND	ND		02/02/18	14:12	BA	429388
Ethyl Benzene	ETO15	25.00	16	54	ND	ND		02/02/18	14:12	BA	429388
Chlorobenzene	ETO15	25.00	15	58	ND	ND		02/02/18	14:12	BA	429388
1,1,1,2-Tetrachloroethane	ETO15	25.00	21	86	ND	ND		02/02/18	14:12	BA	429388
m,p-Xylene	ETO15	25.00	24	54	ND	ND		02/02/18	14:12	BA	429388
o-Xylene	ETO15	25.00	7.6	54	ND	ND		02/02/18	14:12	BA	429388
Styrene	ETO15	25.00	12	53	ND	ND		02/02/18	14:12	BA	429388
Bromoform	ETO15	25.00	33	130	ND	ND		02/02/18	14:12	BA	429388
1,1,2,2-Tetrachloroethane	ETO15	25.00	20	86	ND	ND		02/02/18	14:12	BA	429388
4-Ethyl Toluene	ETO15	25.00	14	62	ND	ND		02/02/18	14:12	BA	429388
1,3,5-Trimethylbenzene	ETO15	25.00	7.5	62	ND	ND		02/02/18	14:12	BA	429388
1,2,4-Trimethylbenzene	ETO15	25.00	15	62	ND	ND		02/02/18	14:12	BA	429388
1,4-Dichlorobenzene	ETO15	25.00	19	75	ND	ND		02/02/18	14:12	BA	429388
1,3-Dichlorobenzene	ETO15	25.00	33	75	ND	ND		02/02/18	14:12	BA	429388
1,2-Dichlorobenzene	ETO15	25.00	27	75	ND	ND		02/02/18	14:12	BA	429388
Hexachlorobutadiene	ETO15	25.00	46	130	ND	ND		02/02/18	14:12	BA	429388
1,2,4-Trichlorobenzene	ETO15	25.00	54	93	ND	ND		02/02/18	14:12	BA	429388
Naphthalene	ETO15	25.00	32	66	ND	ND		02/02/18	14:12	BA	429388
(S) 4-Bromofluorobenzene	ETO15	25.00	50	150	81 %			02/02/18	14:12	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID:	SS1 DUP	Lab Sample ID:	1802007-003A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Air
Project Number:	Data Gap Investigation Sampling	Certified Clean WO # :	
Date/Time Sampled:	02/01/18 / 11:05	Received PSI :	13.9
Canister/Tube ID:	480	Corrected PSI :	
Collection Volume (L):			
SDG:			
Tag Number:	132 Guilford Rd.		

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst:	BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
2-Propanol (Isopropyl Alcohol)	ETO15	180.0	230	2200	8900	3,617.89		02/02/18	18:35	BA	429388
(S) 4-Bromofluorobenzene	ETO15	180.0	50	150	90 %			02/02/18	18:35	BA	429388



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Wheeler Group Environmental, LLC

Date/Time Received: 02/01/18, 12:27 pm
Date Reported: 02/06/18

Client Sample ID:	SS1 SHROUD	Lab Sample ID:	1802007-004A
Project Name/Location:	132 Guilford Rd., Piedmont, CA	Sample Matrix:	Air
Project Number:	Data Gap Investigation Sampling	Certified Clean WO # :	
Date/Time Sampled:	02/01/18 / 10:08	Received PSI :	12.8
Canister/Tube ID:	453	Corrected PSI :	
Collection Volume (L):			
SDG:			
Tag Number:	132 Guilford Rd.		

Prep Method: TO15-P	Prep Batch Date/Time: 2/2/18	NA
Prep Batch ID: 1102567	Prep Analyst:	BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
2-Propanol (Isopropyl Alcohol)	ETO15	8,000	10000	98000	230000	93,495.93		02/02/18	17:01	BA	429388
(S) 4-Bromofluorobenzene	ETO15	8,000	50	150	78 %			02/02/18	17:01	BA	429388



MB Summary Report

Work Order:	1802007	Prep Method:	TO15-P	Prep Date:	02/02/18	Prep Batch:	1102567
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	2/2/2018	Analytical Batch:	429388
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.32	0.50	ND		
1,1-Difluoroethane	0.13	5.0	ND		
1,2-Dichlorotetrafluoroethane	4.0	8.0	ND		
Chloromethane	0.99	2.0	ND		
Vinyl Chloride	0.088	0.50	ND		
1,3-Butadiene	0.15	0.50	ND		
Bromomethane	0.17	0.50	0.18		
Chloroethane	0.31	0.50	ND		
Trichlorofluoromethane	0.099	0.50	ND		
1,1-Dichloroethene	0.21	0.50	ND		
Freon 113	0.13	0.50	ND		
Carbon Disulfide	0.12	0.50	ND		
2-Propanol (Isopropyl Alcohol)	0.52	5.0	ND		
Methylene Chloride	0.20	3.0	ND		
Acetone	0.17	5.0	ND		
trans-1,2-Dichloroethene	0.12	0.50	ND		
Hexane	0.13	0.50	ND		
MTBE	0.12	0.50	ND		
tert-Butanol	0.20	0.50	ND		
Diisopropyl ether (DIPE)	0.18	0.50	ND		
1,1-Dichloroethane	0.13	0.50	ND		
ETBE	0.078	0.50	ND		
cis-1,2-Dichloroethene	0.21	0.50	ND		
Chloroform	0.20	0.50	ND		
Vinyl Acetate	0.22	0.50	ND		
Carbon Tetrachloride	0.18	0.50	ND		
1,1,1-Trichloroethane	0.15	0.50	ND		
2-Butanone (MEK)	0.13	0.50	ND		
Ethyl Acetate	0.13	0.50	ND		
Tetrahydrofuran	0.15	0.50	ND		
Benzene	0.14	0.50	ND		
TAME	0.16	0.50	ND		
1,2-Dichloroethane (EDC)	0.10	0.50	ND		
Trichloroethylene	0.15	0.50	ND		
1,2-Dichloropropane	0.17	0.50	ND		
Bromodichloromethane	0.11	0.50	ND		
1,4-Dioxane	0.50	1.0	ND		
trans-1,3-Dichloropropene	0.23	0.50	ND		
Toluene	0.20	0.50	ND		
4-Methyl-2-Pentanone (MIBK)	0.18	0.50	ND		
cis-1,3-Dichloropropene	0.093	0.50	ND		
Tetrachloroethylene	0.22	0.50	ND		



MB Summary Report

Work Order:	1802007	Prep Method:	TO15-P	Prep Date:	02/02/18	Prep Batch:	1102567
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	2/2/2018	Analytical Batch:	429388
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
1,1,2-Trichloroethane	0.11	0.50	ND		
Dibromochloromethane	0.13	0.50	ND		
1,2-Dibromoethane (EDB)	0.096	0.50	ND		
2-Hexanone	0.16	0.50	ND		
Ethyl Benzene	0.15	0.50	ND		
Chlorobenzene	0.13	0.50	ND		
1,1,1,2-Tetrachloroethane	0.12	0.50	ND		
m,p-Xylene	0.23	0.50	ND		
o-Xylene	0.070	0.50	ND		
Styrene	0.11	0.50	ND		
Bromoform	0.13	0.50	ND		
1,1,2,2-Tetrachloroethane	0.12	0.50	ND		
4-Ethyl Toluene	0.11	0.50	ND		
1,3,5-Trimethylbenzene	0.061	0.50	ND		
1,2,4-Trimethylbenzene	0.12	0.50	ND		
1,4-Dichlorobenzene	0.12	0.50	ND		
1,3-Dichlorobenzene	0.22	0.50	ND		
1,2-Dichlorobenzene	0.18	0.50	ND		
Hexachlorobutadiene	0.17	0.50	ND		
1,2,4-Trichlorobenzene	0.29	0.50	ND		
Naphthalene	0.24	0.50	ND		
(S) 4-Bromofluorobenzene			86		

Work Order:	1802007	Prep Method:	FG-P	Prep Date:	02/02/18	Prep Batch:	1102604
Matrix:	Air	Analytical Method:	D1946	Analyzed Date:	2/2/2018	Analytical Batch:	429429
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Carbon Dioxide	100	500	ND		
Oxygen	110	500	ND		
Methane	23	50	ND		



MB Summary Report

Work Order:	1802007	Prep Method:	TO17-P	Prep Date:	02/05/18	Prep Batch:	1102632
Matrix:	Air	Analytical Method:	TO-17	Analyzed Date:	2/5/2018	Analytical Batch:	429459
Units:	ug/m3						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
1,1-Dichloroethene	0.79	10	ND	
Methylene Chloride	3.5	10	ND	
tert-Butanol	4.3	25	ND	
Freon 113	3.6	10	ND	
trans-1,2-Dichloroethene	2.9	10	ND	
1,1-Dichloroethane	0.69	10	0.97	
MTBE	0.54	10	ND	
cis-1,2-Dichloroethene	0.66	10	ND	
Bromochloromethane	1.2	10	ND	
Diisopropyl ether (DIPE)	0.64	10	ND	
Chloroform	2.3	10	ND	
2,2-Dichloropropane	0.80	10	ND	
ETBE	0.49	10	ND	
1,2-Dichloroethane	2.9	10	ND	
1,1,1-Trichloroethane	0.97	10	ND	
1,1-Dichloropropene	2.5	10	ND	
Benzene	1.7	10	ND	
Butane	0.89	10	ND	
TAME	0.37	10	ND	
Dibromomethane	0.72	10	0.95	
1,2-Dichloropropane	0.35	10	ND	
Bromodichloromethane	0.60	10	ND	
Trichloroethylene	0.58	10	ND	
cis-1,3-Dichloropropene	0.34	10	0.48	
trans-1,3-Dichloropropene	0.39	10	0.54	
1,1,2-Trichloroethane	0.57	10	ND	
Toluene	0.54	10	ND	
1,3-Dichloropropane	0.41	10	ND	
Dibromochloromethane	0.83	10	0.84	
1,2-Dibromoethane	0.77	10	ND	
Tetrachloroethylene	0.67	10	ND	
1,1,1,2-Tetrachloroethane	0.64	10	ND	
Chlorobenzene	0.55	10	0.67	
Ethyl Benzene	0.58	10	ND	
m,p-Xylene	1.1	10	1.6	
Bromoform	0.36	10	1.8	
Styrene	0.53	10	1.2	
1,1,2,2-Tetrachloroethane	0.47	10	0.89	
o-Xylene	0.49	10	0.72	
1,2,3-Trichloropropane	0.49	10	ND	
Isopropyl Benzene	0.63	10	ND	
Bromobenzene	0.96	10	ND	



MB Summary Report

Work Order:	1802007	Prep Method:	TO17-P	Prep Date:	02/05/18	Prep Batch:	1102632
Matrix:	Air	Analytical Method:	TO-17	Analyzed Date:	2/5/2018	Analytical Batch:	429459
Units:	ug/m3						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
2-Chlorotoluene	0.73	10	ND		
n-Propylbenzene	0.75	10	ND		
4-Chlorotoluene	0.75	10	ND		
1,3,5-Trimethylbenzene	0.69	10	ND		
tert-Butylbenzene	0.57	10	ND		
1,2,4-Trimethylbenzene	0.68	10	ND		
1,3-Dichlorobenzene	0.60	10	ND		
1,4-Dichlorobenzene	0.69	10	ND		
sec-Butylbenzene	0.64	10	ND		
p-Isopropyltoluene	0.48	10	ND		
1,2-Dichlorobenzene	0.48	10	ND		
n-Butylbenzene	0.66	10	ND		
1,2-Dibromo-3-Chloropropane	0.84	10	ND		
1,2,4-Trichlorobenzene	0.28	10	0.52		
Naphthalene	0.43	10	0.48		
1,2,3-Trichlorobenzene	0.22	10	ND		
Hexachlorobutadiene	0.68	10	ND		
(S) Dibromofluoromethane			106		
(S) Toluene-d8			108		
(S) 4-Bromofluorobenzene			135		

Work Order:	1802007	Prep Method:	TO17-GRO	Prep Date:	02/05/18	Prep Batch:	1102633
Matrix:	Air	Analytical Method:	TO-17	Analyzed Date:	2/5/2018	Analytical Batch:	429459
Units:	ug/m3						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH-GRO	8.1	50	ND		
TPH-DRO	8.1	50	121		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1802007	Prep Method:	TO15-P	Prep Date:	02/02/18	Prep Batch:	1102567
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	2/2/2018	Analytical Batch:	429388
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.21	0.50	ND	8.00	111	103	7.13	65 - 135	30	
Benzene	0.14	0.50	ND	8.00	102	99.2	3.35	65 - 135	30	
Trichloroethylene	0.15	0.50	ND	8.00	90.3	92.0	1.92	65 - 135	30	
Toluene	0.20	0.50	ND	8.00	94.1	95.2	1.19	65 - 135	30	
Chlorobenzene	0.13	0.50	ND	8.00	101	104	2.32	65 - 135	30	
(S) 4-Bromofluorobenzene				20.0	96.4	95.8		50 - 150		

Work Order:	1802007	Prep Method:	FG-P	Prep Date:	02/02/18	Prep Batch:	1102604
Matrix:	Air	Analytical Method:	D1946	Analyzed Date:	2/2/2018	Analytical Batch:	429429
Units:	ppmv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Carbon Dioxide	100	500	ND	2500	97.8	87.7	11.2	65 - 135	30	
Oxygen	110	500	ND	2500	92.8	84.9	9.01	65 - 135	30	
Methane	230	500	ND	2500	91.8	93.8	2.15	65 - 135	30	

Work Order:	1802007	Prep Method:	TO17-P	Prep Date:	02/05/18	Prep Batch:	1102632
Matrix:	Air	Analytical Method:	TO-17	Analyzed Date:	2/5/2018	Analytical Batch:	429459
Units:	ug/m3						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.69	10	ND	40.0	64.9	65.3	0.384	50 - 110	30	
Benzene	1.7	10	ND	40.0	76.9	97.3	23.2	65 - 135	30	
Trichloroethylene	0.58	10	ND	40.0	103	97.4	5.49	65 - 135	30	
Toluene	0.54	10	ND	40.0	100	111	10.7	65 - 135	30	
Chlorobenzene	0.55	10	ND	40.0	104	104	0.481	65 - 135	30	
(S) Dibromofluoromethane				40.0	88.9	89.3		65 - 135		
(S) Toluene-d8				40.0	104	103		65 - 135		
(S) 4-Bromofluorobenzene				40.0	90.9	89.1		65 - 135		
Butane			ND					-		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1802007	Prep Method:	TO17-GRO	Prep Date:	02/05/18	Prep Batch:	1102633
Matrix:	Air	Analytical Method:	TO-17	Analyzed Date:	2/5/2018	Analytical Batch:	429459
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-DRO	8.1	100	121	5000	79.7	68.1	15.4	65 - 135	30	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.</p> <p>NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p>X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>



Sample Receipt Checklist

Client Name: Wheeler Group Environmental, LLC
Project Name: 132 Guilford Rd., Piedmont, CA
Work Order No.: 1802007

Date and Time Received: 2/1/2018 12:27:00PM
Received By: Helena Ueng
Physically Logged By: Helena Ueng
Checklist Completed By: Helena Ueng
Carrier Name: First Courier

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? Temperature: 16.0 °C
Water-VOA vials have zero headspace? No VOA vials submitted
Water-pH acceptable upon receipt? N/A
pH Checked by: N/A pH Adjusted by: N/A

Comments:

Summas canisters received at ambient temperature.



Login Summary Report

Client ID: TL6291 Wheeler Group Environmental, LLC
Project Name: 132 Guilford Rd., Piedmont, CA
Project # : Data Gap Investigation Sampling
Report Due Date: 2/6/2018

QC Level: II
TAT Requested: 3 Day Std:3
Date Received: 2/1/2018
Time Received: 12:27 pm

Comments:

Work Order # : 1802007

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1802007-001A	SS1	02/01/18 11:00	Air				EDF VOC_A_TO15 VOC_A_FG D1946	
<u>Sample Note:</u>	TO15- VOCs; FG- O2, CO2, CH4							
1802007-002A	SS1	02/01/18 11:28	Air				VOC_A_TO17 VOC_A_TO17GRO DRO	
<u>Sample Note:</u>	TO17- TPH-D & Naphthalene; Sampling time: 1108-1128 (=2L)							
1802007-003A	SS1 DUP	02/01/18 11:05	Air				VOC_A_TO15 VOC_A_TO15	
1802007-004A	SS1 SHROUD	02/01/18 10:08	Air				VOC_A_TO15	
<u>Sample Note:</u>	TO15- Report 2-Propanol only							



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

1802007

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Wheeler Group Environmental, LLC			Location of Sampling: 132 Guilford Rd., Piedmont, CA		
Address: 369-B Third Street, Suite #221			Purpose: Data Gap Investigation Sampling		
City: San Rafael	State: CA	Zip Code: 94901	Special Instructions / Comments: Global ID# T10000002521; See Remarks Section for Field		
Telephone: 415-686-8846 FAX:			Point Names (FPNs); SG = Soil Gas; TDT = Thermal Desorption Tube		
REPORT TO: Brent Wheeler		SAMPLER: B. Wheeler	P.O. #: WGE 2017110		EMAIL: bwheeler@wheelergroupenvironmental.com

TURNAROUND TIME: <input type="checkbox"/> 10 Work Days <input checked="" type="checkbox"/> 3 Work Days <input type="checkbox"/> Noon - Nxt Day <input type="checkbox"/> 7 Work Days <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 2 - 8 Hours <input type="checkbox"/> 5 Work Days <input type="checkbox"/> 1 Work Day <input type="checkbox"/> Other		SAMPLE TYPE: <input type="checkbox"/> Storm Water <input checked="" type="checkbox"/> Air <input type="checkbox"/> Waste Water <input type="checkbox"/> Other <input type="checkbox"/> Ground Water <input type="checkbox"/> Soil		REPORT FORMAT: <input type="checkbox"/> QC Level IV <input checked="" type="checkbox"/> EDF <input type="checkbox"/> Excel / EDD		ANALYSIS REQUESTED
				VOCs (TO15) TPH-D (TO17) Naphthalene-TO17 O2, CO2, CH4 2-Propanol (TO15)		

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	VOCs (TO15)	TPH-D (TO17)	Naphthalene-TO17	O2, CO2, CH4	2-Propanol (TO15)	REMARKS
001A	SS1	2-1-18 / 1100	SG	1	Summa	✓			✓		#457 FPN: SS1
002A	SS1	2-1-18 / 1103-1123	SG	2	TDT		✓	✓			FPN: SS1
003A	SS1 DUP	2-1-18 / 1105	SG	1	Summa	✓					#480 FPN: SS1
004A	SS1 SHROUD	2-1-18 / 1008	Air	1	Summa				✓		#453

1	Relinquished By: <i>Brent Wheeler</i> Print: <i>BRENT WHEELER</i> Date: 2-1-2018 Time: 11:35	Received By: <i>Marty Corwa</i> Print: <i>MARTY CORWA</i> Date: 2/1/18 Time: 12:27
2	Relinquished By: <i>Marty Corwa</i> Print: <i>MARTY CORWA</i> Date: 2/1/18 Time: 12:27	Received By: <i>Helena Kelly</i> Print: <i>HELENA KELLY</i> Date: 2/1/18 Time: 12:27

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment: FCS Sample seals intact? Yes NO N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Page 1 of 1

Log In By: _____ Date: _____ Log In Reviewed By: FCS Date: _____ Temp: 16°C #2 (Summa's read at ambient temp)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-84312-1
Client Project/Site: Wheeler Group

For:
Dysert Environmental, Inc
PO BOX 5608
San Mateo, California 94402

Attn: Mark Dysert



Authorized for release by:
1/26/2018 5:26:50 PM

Afsaneh Salimpour, Senior Project Manager
(925)484-1919
afsaneh.salimpour@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Job ID: 720-84312-1

Laboratory: TestAmerica Pleasanton

Narrative

**Job Narrative
720-84312-1**

Comments

No additional comments.

Receipt

The samples were received on 1/19/2018 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Client Sample ID: 125 GUILFORD

Lab Sample ID: 720-84312-1

No Detections.

Client Sample ID: 120 HAZEL

Lab Sample ID: 720-84312-2

No Detections.

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This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Client Sample ID: 125 GUILFORD

Lab Sample ID: 720-84312-1

Date Collected: 01/18/18 10:40

Matrix: Water

Date Received: 01/19/18 16:15

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			01/25/18 16:02	1
Benzene	ND		0.50	0.25	ug/L			01/25/18 16:02	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/25/18 16:02	1
Naphthalene	ND		1.0	0.22	ug/L			01/25/18 16:02	1
Toluene	ND		0.50	0.17	ug/L			01/25/18 16:02	1
Xylenes, Total	ND		1.0	0.40	ug/L			01/25/18 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		67 - 130		01/25/18 16:02	1
1,2-Dichloroethane-d4 (Surr)	104		72 - 130		01/25/18 16:02	1
Toluene-d8 (Surr)	99		70 - 130		01/25/18 16:02	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		47	28	ug/L		01/23/18 16:00	01/24/18 01:19	1
Motor Oil Range Organics [C24-C36]	ND		94	67	ug/L		01/23/18 16:00	01/24/18 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	83		23 - 156	01/23/18 16:00	01/24/18 01:19	1

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Client Sample ID: 120 HAZEL

Lab Sample ID: 720-84312-2

Date Collected: 01/18/18 12:20

Matrix: Water

Date Received: 01/19/18 16:15

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			01/25/18 17:27	1
Benzene	ND		0.50	0.25	ug/L			01/25/18 17:27	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/25/18 17:27	1
Naphthalene	ND		1.0	0.22	ug/L			01/26/18 15:28	1
Toluene	ND		0.50	0.17	ug/L			01/25/18 17:27	1
Xylenes, Total	ND		1.0	0.40	ug/L			01/25/18 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		67 - 130		01/25/18 17:27	1
4-Bromofluorobenzene	80		67 - 130		01/26/18 15:28	1
1,2-Dichloroethane-d4 (Surr)	87		72 - 130		01/25/18 17:27	1
1,2-Dichloroethane-d4 (Surr)	92		72 - 130		01/26/18 15:28	1
Toluene-d8 (Surr)	96		70 - 130		01/25/18 17:27	1
Toluene-d8 (Surr)	82		70 - 130		01/26/18 15:28	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		47	28	ug/L		01/23/18 16:00	01/24/18 01:44	1
Motor Oil Range Organics [C24-C36]	ND		94	68	ug/L		01/23/18 16:00	01/24/18 01:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	80		23 - 156	01/23/18 16:00	01/24/18 01:44	1

Surrogate Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (67-130)	DCA (72-130)	TOL (70-130)
720-84312-1	125 GUILFORD	92	104	99
720-84312-1 MS	125 GUILFORD	98	103	100
720-84312-1 MSD	125 GUILFORD	96	101	100
720-84312-2	120 HAZEL	87	87	96
720-84312-2	120 HAZEL	80	92	82
LCS 720-237974/6	Lab Control Sample	97	98	101
LCS 720-238023/5	Lab Control Sample	95	81	93
LCSD 720-237974/7	Lab Control Sample Dup	92	89	99
LCSD 720-238023/6	Lab Control Sample Dup	94	83	95
MB 720-237974/13	Method Blank	93	103	100
MB 720-238023/4	Method Blank	78	91	84

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TPH1 (23-156)
720-84312-1	125 GUILFORD	83
720-84312-2	120 HAZEL	80
LCS 720-237848/2-A	Lab Control Sample	97
LCSD 720-237848/3-A	Lab Control Sample Dup	95
MB 720-237848/1-A	Method Blank	84

Surrogate Legend

TPH = p-Terphenyl

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-237974/13
Matrix: Water
Analysis Batch: 237974

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			01/25/18 14:37	1
Benzene	ND		0.50	0.25	ug/L			01/25/18 14:37	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/25/18 14:37	1
Naphthalene	ND		1.0	0.22	ug/L			01/25/18 14:37	1
Toluene	ND		0.50	0.17	ug/L			01/25/18 14:37	1
Xylenes, Total	ND		1.0	0.40	ug/L			01/25/18 14:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		67 - 130		01/25/18 14:37	1
1,2-Dichloroethane-d4 (Surr)	103		72 - 130		01/25/18 14:37	1
Toluene-d8 (Surr)	100		70 - 130		01/25/18 14:37	1

Lab Sample ID: LCS 720-237974/6
Matrix: Water
Analysis Batch: 237974

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	27.4		ug/L		110	70 - 130
Benzene	25.0	28.7		ug/L		115	84 - 130
Ethylbenzene	25.0	27.5		ug/L		110	87 - 127
Naphthalene	25.0	25.7		ug/L		103	81 - 130
Toluene	25.0	26.2		ug/L		105	85 - 120
m-Xylene & p-Xylene	25.0	27.2		ug/L		109	86 - 126
o-Xylene	25.0	26.9		ug/L		108	86 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		72 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 720-237974/7
Matrix: Water
Analysis Batch: 237974

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	23.5		ug/L		94	70 - 130	15	20
Benzene	25.0	28.9		ug/L		116	84 - 130	1	20
Ethylbenzene	25.0	29.1		ug/L		116	87 - 127	6	20
Naphthalene	25.0	24.7		ug/L		99	81 - 130	4	20
Toluene	25.0	27.7		ug/L		111	85 - 120	6	20
m-Xylene & p-Xylene	25.0	28.4		ug/L		114	86 - 126	4	20
o-Xylene	25.0	27.0		ug/L		108	86 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	92		67 - 130
1,2-Dichloroethane-d4 (Surr)	89		72 - 130
Toluene-d8 (Surr)	99		70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Lab Sample ID: 720-84312-1 MS
Matrix: Water
Analysis Batch: 237974

Client Sample ID: 125 GUILFORD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		25.0	29.1		ug/L		116	60 - 138
Benzene	ND		25.0	28.7		ug/L		115	60 - 140
Ethylbenzene	ND		25.0	26.8		ug/L		107	60 - 140
Naphthalene	ND		25.0	26.3		ug/L		105	56 - 140
Toluene	ND		25.0	25.7		ug/L		103	60 - 140
m-Xylene & p-Xylene	ND		25.0	26.3		ug/L		105	60 - 140
o-Xylene	ND		25.0	26.7		ug/L		107	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		72 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: 720-84312-1 MSD
Matrix: Water
Analysis Batch: 237974

Client Sample ID: 125 GUILFORD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	27.5		ug/L		110	60 - 138	6	20
Benzene	ND		25.0	28.5		ug/L		114	60 - 140	1	20
Ethylbenzene	ND		25.0	26.6		ug/L		106	60 - 140	1	20
Naphthalene	ND		25.0	25.2		ug/L		101	56 - 140	4	20
Toluene	ND		25.0	25.4		ug/L		102	60 - 140	1	20
m-Xylene & p-Xylene	ND		25.0	26.4		ug/L		106	60 - 140	0	20
o-Xylene	ND		25.0	26.6		ug/L		106	60 - 140	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: MB 720-238023/4
Matrix: Water
Analysis Batch: 238023

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			01/26/18 11:06	1
Benzene	ND		0.50	0.25	ug/L			01/26/18 11:06	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/26/18 11:06	1
Naphthalene	ND		1.0	0.22	ug/L			01/26/18 11:06	1
Toluene	ND		0.50	0.17	ug/L			01/26/18 11:06	1
Xylenes, Total	ND		1.0	0.40	ug/L			01/26/18 11:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	78		67 - 130		01/26/18 11:06	1
1,2-Dichloroethane-d4 (Surr)	91		72 - 130		01/26/18 11:06	1
Toluene-d8 (Surr)	84		70 - 130		01/26/18 11:06	1

TestAmerica Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-238023/5

Matrix: Water

Analysis Batch: 238023

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	21.2		ug/L		85	70 - 130
Benzene	25.0	25.3		ug/L		101	84 - 130
Ethylbenzene	25.0	27.5		ug/L		110	87 - 127
Naphthalene	25.0	29.0		ug/L		116	81 - 130
Toluene	25.0	25.7		ug/L		103	85 - 120
m-Xylene & p-Xylene	25.0	26.3		ug/L		105	86 - 126
o-Xylene	25.0	28.3		ug/L		113	86 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	81		72 - 130
Toluene-d8 (Surr)	93		70 - 130

Lab Sample ID: LCSD 720-238023/6

Matrix: Water

Analysis Batch: 238023

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	21.6		ug/L		86	70 - 130	2	20
Benzene	25.0	25.0		ug/L		100	84 - 130	1	20
Ethylbenzene	25.0	26.6		ug/L		106	87 - 127	3	20
Naphthalene	25.0	29.1		ug/L		116	81 - 130	0	20
Toluene	25.0	25.3		ug/L		101	85 - 120	1	20
m-Xylene & p-Xylene	25.0	25.5		ug/L		102	86 - 126	3	20
o-Xylene	25.0	27.0		ug/L		108	86 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	83		72 - 130
Toluene-d8 (Surr)	95		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-237848/1-A

Matrix: Water

Analysis Batch: 237788

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 237848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		01/23/18 16:00	01/24/18 05:23	1
Motor Oil Range Organics [C24-C36]	ND		99	71	ug/L		01/23/18 16:00	01/24/18 05:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	84		23 - 156	01/23/18 16:00	01/24/18 05:23	1

TestAmerica Pleasanton

QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

GC/MS VOA

Analysis Batch: 237974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-84312-1	125 GUILFORD	Total/NA	Water	8260B/CA_LUFT MS	
720-84312-2	120 HAZEL	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-237974/13	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-237974/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-237974/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
720-84312-1 MS	125 GUILFORD	Total/NA	Water	8260B/CA_LUFT MS	
720-84312-1 MSD	125 GUILFORD	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 238023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-84312-2	120 HAZEL	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-238023/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-238023/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-238023/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Analysis Batch: 237788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-84312-1	125 GUILFORD	Total/NA	Water	8015B	237848
720-84312-2	120 HAZEL	Total/NA	Water	8015B	237848
MB 720-237848/1-A	Method Blank	Total/NA	Water	8015B	237848
LCS 720-237848/2-A	Lab Control Sample	Total/NA	Water	8015B	237848
LCSD 720-237848/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	237848

Prep Batch: 237848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-84312-1	125 GUILFORD	Total/NA	Water	3510C	
720-84312-2	120 HAZEL	Total/NA	Water	3510C	
MB 720-237848/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-237848/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-237848/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

TestAmerica Pleasanton

Lab Chronicle

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Client Sample ID: 125 GUILFORD

Date Collected: 01/18/18 10:40

Date Received: 01/19/18 16:15

Lab Sample ID: 720-84312-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	237974	01/25/18 16:02	A1C	TAL PLS
Total/NA	Prep	3510C			237848	01/23/18 16:00	BRR	TAL PLS
Total/NA	Analysis	8015B		1	237788	01/24/18 01:19	JXL	TAL PLS

Client Sample ID: 120 HAZEL

Date Collected: 01/18/18 12:20

Date Received: 01/19/18 16:15

Lab Sample ID: 720-84312-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	237974	01/25/18 17:27	A1C	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	238023	01/26/18 15:28	MJK	TAL PLS
Total/NA	Prep	3510C			237848	01/23/18 16:00	BRR	TAL PLS
Total/NA	Analysis	8015B		1	237788	01/24/18 01:44	JXL	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Analysis Method	Prep Method	Matrix	Analyte
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- 3
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Method Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: Dysert Environmental, Inc
Project/Site: Wheeler Group

TestAmerica Job ID: 720-84312-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-84312-1	125 GUILFORD	Water	01/18/18 10:40	01/19/18 16:15
720-84312-2	120 HAZEL	Water	01/18/18 12:20	01/19/18 16:15

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720-84312

CHAIN OF CUSTODY / ANALYSIS REQUEST

180823

Attention	Mark Dysett	Phone	650-799-9204	Billing (if different)	Dysett Environmental, Inc.
Company Name	Dysett Environmental	Email	environmental.data@gmail.com	Attn: Accounts Payable	
Mailing Address	P.O. Box 5608	Fax		P.O. Box 5608	
City, State & Zip	San Mateo, CA 94402	P.O. No.	139939	P.O. Box 5608	
Laboratory	TASF	Samplers	RICHARD VASQUEZ	San Mateo, CA 94402	
Project Name	WHEELER GRAB ENVIRONMENTAL	Project Location	133 GUILFORD ROAD PIEDMONT LACEDAL FUEL LEAK CASE NO. 200803078	Sampling Code =	WHEELER GRAB
Sample Matrix = Ground Water		Sample Type	TPH-D/MO VOCs 8000 BTEX/MTBE/ NAPHTHALENE		
Turn Around Time = 5 Day					
Sample ID:	Date:	Time:	No. of Containers		
135 GUILFORD	1-18-18	1040	3x15 GWP 3x15 GWA	X	GLOBAL ID: TI00000000531
130 HAZEL	1-18-18	1220	" "	X	FPN: 130HAZEL
Relinquished by	Received by	Time	Date	Additional Mailing Instructions:	
Relinquished by RICHARD VASQUEZ	Received by EMILY	Time 500	Date 1-18-18		
Relinquished by RICHARD VASQUEZ (RH01)	Received by EMILY	Time 1135	Date 1-19-18		
Relinquished by RICHARD VASQUEZ	Received by EMILY	Time 1015	Date 1-19-18		
Relinquished by	Received by	Time	Date		
Lab Notes:					
Sample Temperature Upon Receipt in Lab = 1.2°C					
Dysett Environmental, Inc. Tel: (650) 799-9204					
ELAP #2764 Web: DysettEnvironmental.com					
Notes for Analysis: REPORT EDIT REPORT USING FPNs					
16F 1					



Login Sample Receipt Checklist

Client: Dysert Environmental, Inc

Job Number: 720-84312-1

Login Number: 84312

List Number: 1

Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



DATA GAP INVESTIGATION REPORT

132 Guilford Road, Piedmont, California

APN 51-4676-19

GeoTracker Global ID No. T10000002521

Alameda County LOP Case No. RO0003070

WGE Project No. 2017110

APPENDIX C

BORING LOGS

Soil Boring Log B1

Soil Boring Log B2

Soil Boring Log B3

Soil Boring Log B4

Soil Boring Log B5

Soil Boring Log B6

Soil Boring Log B7

Wheeler Group Environmental, LLC

369-B Third Street, Suite #221, San Rafael, CA 94901

Phone: 415-686-8846

SOIL BORING LOG B1

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1				CL	(0'-2') CLAY (CL) . Damp, Dark Yellowish Brown (10YR 4/2), Soft w/ Trace Coarse-Grained Sand and Root Material; No Odor / No Staining.	← Topsoil (0'-0.5')
	B1-3	NA	0.0	ML	(2'-3.5') SILT (ML) . Damp to Moist, Grayish Orange (10YR 7/4) and Dark Yellowish Orange (10YR 6/6), Clayey, Soft w/ Trace Sandstone Fragments; No Odor, No Staining.	← Neat Portland Cement (0.5'-6.5')
5	B1-5	NA	0.0	ML	(3.5'-6.5') SILT (ML) . Damp, Pale Yellowish Brown (10YR 6/2), fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining.	
	B1-6.5	NA	0.1			↔ 2.25"
10					Total Borehole Depth = 6.5 fbg (Refusal w/ GeoProbe Equipment)	
15						
20						
25						

BORING NUMBER / FIELD POINT NAME: B1
LOCATION: 132 Guilford Road, Piedmont, CA
PROJECT No: 2017110
DRILLING CONTRACTOR: EnProbe
DRILLING METHOD: GeoProbe
DRILLING DATE: January 17, 2017
Logged By: B. Wheeler **Checked By:** M.Youngkin

Legend/Notes:

fbg = feet below grade
 ppm = parts per million
 = Lithologic Sample Interval
 = Sample Retained for Laboratory Analysis
 Grade Elevation at B1 @ 339.01'
 (Not Mean Sea Level) NA = Not applicable

SOIL BORING LOG B2

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1			0.0	ML	(0'-2.5') SILT (ML) . Damp to Moist, Dark Yellowish Brown (10YR 4/2), Soft w/ Coarse-Grained Sand & Root Material; No Odor, No Staining. @ 2'; Change in Color to Grayish Orange (10YR 7/4 and Dark Yellowish Orange (10YR 6/6) (2.5'-6') SILT (ML) . Dry, Grayish Yellow (5Y8/4), to Pale Greenish Yellow (10Y 8/2) fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining. @ 5'; Change in Color to Pale Yellowish Brown (10YR 6/2)	← Topsoil (0'-0.5') ← Neat Portland Cement (0.5'-6')
	B2-2.5	NA	0.0			
5	B2-5	NA	0.0			
	B2-6	NA	0.0			
10					Total Borehole Depth = 6 fbg (Refusal w/ GeoProbe Equipment)	↔ 2.25"
15					<i>Note: B2 Drilled at 25 Degree Angle from Vertical Plane (Y Axis)</i>	
20						
25						

<p>BORING NUMBER / FIELD POINT NAME: B2 LOCATION: 132 Guilford Road, Piedmont, CA PROJECT No: 2017110 DRILLING CONTRACTOR: EnProbe DRILLING METHOD: GeoProbe DRILLING DATE: January 17, 2017 Logged By: B. Wheeler Checked By: M.Youngkin</p>	<p>Legend/Notes: fbg = feet below grade ppm = parts per million <input checked="" type="checkbox"/> = Lithologic Sample Interval <input type="checkbox"/> = Sample Retained for Laboratory Analysis Grade Elevation at B2 @ 338.10' (Not Mean Sea Level) NA = Not applicable</p> <p style="text-align: center;">Wheeler Group Environmental, LLC</p>
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SOIL BORING LOG B3

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1			0.0	SM	(0'-2.5') SAND (SM) . Moist, Dark Yellowish Brown (10YR 4/2), Fine-Grained, Clayey; No Odor, No Staining.	Grass / Topsoil (0'-0.5')
	B3-2.5	NA	0.9			
	B3-4	NA	4.4		(2.5'-6.5') SILT (ML) . Dry to Damp, Pale Yellowish Brown (10YR 6/2) and Dark Yellowish Orange (10YR 6/6), fine/pulverized, w/ Siltstone and Rock Fragments (Weathered Bedrock); No Odor, No Staining .	Neat Portland Cement (0.5'-14')
5	B3-5	NA	0.1		Refusal @ 6.5' with GeoProbe (1/17/18)	2.25"
	B3-6.5	NA	0.0			8.25"
				ML	(6.5'-9.5') SILT (ML) . Dry to Damp, Dark Yellowish Brown (10YR 4/2) and Light Olive Gray (5Y 5/2), fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining. <i>Described from Auger Cuttings</i>	
10	B3-10	NA	0.0		(9.5'-11') SILT (ML) . Dry to Damp, Pale Yellowish Brown to Dark Yellowish Brown (10YR 6/2, 4/2), Fine/Pulverized, w/ Siltstone and Rock Fragments (Weathered Bedrock); No Odor, No Staining. <i>Described from Auger Cuttings</i>	
	B3-14	NA	0.0		11'-13' (Not Logged – No Samples Collected)	
15					(13'-14') SILT (ML) . Dry to Damp, Pale Yellowish Brown (10YR 6/2), Fine/Pulverized, w/ Siltstone and Rock Fragments (Weathered Bedrock); No Odor, No Staining. <i>Described from Auger Cuttings</i>	
20					Total Borehole Depth = 14 fbg (Refusal w/ Rotary HSA Rig on 1/18/18)	
25						

BORING NUMBER / FIELD POINT NAME: B3
LOCATION: 132 Guilford Road, Piedmont, CA
PROJECT No: 2017110
DRILLING CONTRACTOR: EnProbe
DRILLING METHOD: GeoProbe/Rotary HSA
DRILLING DATE: January 17 & 18, 2018
Logged By: B. Wheeler **Checked By:** M.Youngkin

Legend/Notes:

fbg = feet below grade
 ppm = parts per million
 = Lithologic Sample Interval
 = Sample Retained for Laboratory Analysis
 Grade Elevation at B3 @ 336.31'
 (Not Mean Sea Level) NA = Not applicable

Wheeler Group Environmental, LLC

SOIL BORING LOG B4

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail			
1	B4-2.5	NA	0.0	ML	(0'-3.5') SILT (ML) . Moist, Dark Yellowish Brown (10YR 4/2), Soft, Sandy (Fine-Grained), Clayey; No Odor, No Staining.	← Topsoil (0'-0.5')			
					@ 2.5'; Change in Color to Greenish Black (5GY 2/1) w/ Increased Clay Content	← Neat Portland Cement (0.5'-7')			
5					B4-5.5	NA	0.0	(3.5'-5.5') SILT (ML) . Moist to Wet, Olive Gray (5Y 4/1), Soft, Sandy (Fine-to-Coarse Grained), Gravelly; No Odor, No Staining.	
								(5.5'-7') SILT (ML) . Dry, Grayish Orange (10YR 7/4), to Pale Greenish Yellow (10Y 8/2) fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining.	↔ 2.25"
7	B4-7	NA	0.0						
10					Total Borehole Depth = 7 fbg (Refusal w/ GeoProbe Equipment)				
15									
20									
25									

BORING NUMBER / FIELD POINT NAME: B4
LOCATION: 132 Guilford Road, Piedmont, CA
PROJECT No: 2017110
DRILLING CONTRACTOR: EnProbe
DRILLING METHOD: GeoProbe
DRILLING DATE: January 17, 2017
Logged By: B. Wheeler **Checked By:** M.Youngkin

Legend/Notes:

fbg = feet below grade
 ppm = parts per million
 = Lithologic Sample Interval
 = Sample Retained for Laboratory Analysis
 Grade Elevation at B4 @ 337.96'
 (Not Mean Sea Level) NA = Not applicable

SOIL BORING LOG B5

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	Hand Auger		0.0	ML	(0'-2') SILT (ML) . Damp, Dusky Yellowish Brown (10YR 2/2) to Dark Yellowish Brown (10YR 4/2), Sandy (Fine-Grained) Clayey, Soft w/ Root Material; No Odor, No Staining.	Grass / Topsoil (0'-0.5')
	B5-2.5	NA	0.0	ML	@ 2'; 4" Lense of Rock Fragments Present.	
5	GeoProbe		0.0	ML	(2'-4.5') SILT (ML) . Damp, Grayish Orange (10YR 7/4) and Dark Yellowish Orange (10YR 6/6), Slightly Clayey, w/ Fine-Grained Sand; No Odor / No Staining.	Neat Portland Cement (0.5'-13')
	B5-5	NA	0.0	ML		
	B5-7	NA	0.0	ML	(4.5'-8.5') SILT (ML) . Damp, Grayish Orange (10YR 7/4) to Very Pale Orange (10YR 8/2), fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining.	2.25"
	B5-8.5	NA	0.0	ML	@ 7.5'-8.5'; Change in Color to Light Olive Gray (5Y 5/2)	8.25"
10	Rotary HSA		0.0	ML	@ 8.5 fbg (Refusal w/ GeoProbe Equipment)	
	B5-13	NA	0.0	ML	(8.5'-13') SILT (ML) . Dry to Damp, Light Olive Gray (5Y 5/2), fine/pulverized, w/ Siltstone Fragments (Weathered Bedrock); No Odor, No Staining. <i>Described from Auger Cuttings</i>	
15					Total Borehole Depth = 13 fbg (Refusal w/ Rotary HSA Rig on 1/17/18)	
20						
25						

<p>BORING NUMBER / FIELD POINT NAME: B5 LOCATION: 132 Guilford Road, Piedmont, CA PROJECT No: 2017110 DRILLING CONTRACTOR: EnProbe DRILLING METHOD: GeoProbe/Rotary Auger DRILLING DATE: January 17, 2018 Logged By: B. Wheeler Checked By: M.Youngkin</p>	<p style="text-align: right;">Page 1 of 1</p> <p>Legend/Notes: fbg = feet below grade ppm = parts per million ☒ = Lithologic Sample Interval ☐ = Sample Retained for Laboratory Analysis Grade Elevation at B5 @ 339.90' (Not Mean Sea Level) NA = Not applicable</p> <p style="text-align: center;">Wheeler Group Environmental, LLC</p>
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SOIL BORING LOG B6

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	Hand Auger No Samples		0.0	ML	(0'-1.5') SILT (ML) . Damp, Dark Yellowish Brown (10YR 4/2), Clayey, Soft w/ Root Material; No Odor, No Staining. @ 1.0'; Change in Color to Grayish Orange (10YR 7/4); Rock Fragments Present. Total Borehole Depth = 1.5 fbg (Refusal w/ Hand Auger Equipment on Dense Rock)	<p style="font-size: small;"> Grass / Topsoil (0'-0.5') Neat Portland Cement (0.5'-1.5') 2.25" </p>
5						
10						
15						
20						
25						

<p>BORING NUMBER / FIELD POINT NAME: B6 LOCATION: 132 Guilford Road, Piedmont, CA PROJECT No: 2017110 DRILLING CONTRACTOR: EnProbe DRILLING METHOD: Hand Auger DRILLING DATE: January 18, 2018 Logged By: B. Wheeler Checked By: M.Youngkin</p>	<p>Legend/Notes: fbg = feet below grade ppm = parts per million <input checked="" type="checkbox"/> = Lithologic Sample Interval <input type="checkbox"/> = Sample Retained for Laboratory Analysis Grade Elevation at B6 @ 340.53' (Not Mean Sea Level) NA = Not applicable</p> <p style="text-align: center;">Wheeler Group Environmental, LLC</p>
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SOIL BORING LOG B7

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	B7-2.5	NA	0.0	ML	(0'-2.5') SILT (ML) . Damp to Moist, Dark Yellowish Brown (10YR 4/2), Soft w/ Coarse-Grained Sand & Root Material; No Odor, No Staining.	← Topsoil (0'-0.5')
5					B7-5	NA
					Total Borehole Depth = 5 fbg (Refusal w/ GeoProbe Equipment)	↔ 2.25"
					<i>Note: B7 Drilled at 30 Degree Angle from Vertical Plane (Y Axis)</i>	
10						
15						
20						
25						

<p>BORING NUMBER / FIELD POINT NAME: B7 LOCATION: 132 Guilford Road, Piedmont, CA PROJECT No: 2017110 DRILLING CONTRACTOR: EnProbe DRILLING METHOD: GeoProbe DRILLING DATE: January 17, 2017 Logged By: B. Wheeler Checked By: M.Youngkin</p>	<p>Legend/Notes: fbg = feet below grade ppm = parts per million ☒ = Lithologic Sample Interval ☐ = Sample Retained for Laboratory Analysis Grade Elevation at B7 @ 337.68' (Not Mean Sea Level) NA = Not applicable</p> <p style="text-align: right;">Wheeler Group Environmental, LLC</p>
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DATA GAP INVESTIGATION REPORT

132 Guilford Road, Piedmont, California

APN 51-4676-19

GeoTracker Global ID No. T10000002521

Alameda County LOP Case No. RO0003070

WGE Project No. 2017110

APPENDIX D

ADDITIONAL DOCUMENTATION

Authorized RP Agent Authorization Form dated August 2, 2017
October 25, 2017, Letter, Alameda County, Approval for Work Plan dated Aug. 25, 2017
December 29, 2017, Permit W2017-0983, Borehole(s) for Investigation
January 9, 2018 City of Piedmont Application for Permit for Street Excavation
Water Sampling Data Form
Sub-Slab Vapor Sampling Data Form
Grade Elevation Survey Data Sheet (1/18/18)
Non-Hazardous Waste Manifest
Documentation on Water Supply Irrigation Well at 125 Guilford Road
Documentation on Water Supply Irrigation Well at 120 Hazel Lane

Wheeler Group Environmental, LLC

369-B Third Street, Suite #221, San Rafael, CA 94901

Phone: 415-686-8846

AUTHORIZED RP AGENT AUTHORIZATION FORM

FOR ELECTRONIC SUBMITTAL OF DATA BY CONSULTANTS ACTING AS "AUTHORIZED RP AGENTS"

Using "Request Additional Facilities," find & select the site, click on "Request Checked Facilities" to make it a "Pending Facility," then upload the completed Authorization Form by clicking on "Upload Auth RP Form" and selecting the facility, etc.

FACILITY GLOBAL ID #:

T10000002521

SITE OWNER, OPERATOR, OR RESPONSIBLE PERSON (RP) AND ADDRESS:

Leslie Mulholland, 132 Guilford Road, Piedmont, CA 94611

FACILITY/ LEAK SITE ADDRESS:

CITY

STATE

ZIP CODE

Mulholland Residence, 132 Guilford Road, Piedmont, CA 94611

The above identified person does hereby appoint:

DESIGNATED AUTHORIZED REPRESENTATIVE NAME:

Brent A. Wheeler

COMPANY NAME:

Wheeler Group Environmental, LLC

COMPANY ADDRESS

CITY

STATE

ZIP CODE

369-B Third Street, Suite #221, San Rafael, CA 94901

To obtain on-line access to a facility for the electronic submittal of analytical and survey information pertaining to the site identified above.

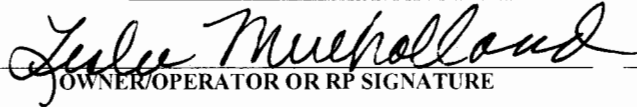
I hereby agree and further authorize the above-named designated authorized representative to certify that the applicable state regulatory requirements pursuant to Title 23, Division 3, Chapter 30 of the California Code of Regulations, have and will be complied with.

I hereby agree and further authorize the above-named designated authorized representative to allow to other persons who have collected for the above-identified site to use the password to electronically submit data to the SWRCB GeoTracker database.

This Authorized Representative Designation shall become effective on the date of execution and shall remain in effect until terminated, in writing, by the above-named responsible person.

EXECUTED THIS 2nd DAY OF August, 20 17

AT 132 Guilford Road, Piedmont, CA

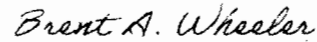

OWNER/OPERATOR OR RP SIGNATURE

Leslie Mulholland

OWNER/OPERATOR OR RP NAME

510-658-3460

PHONE NUMBER


AUTHORIZED REPRESENTATIVE SIGNATURE

Brent A. Wheeler

AUTHORIZED REPRESENTATIVE NAME

415-686-8846

PHONE NUMBER

Upload your completed form by clicking on "Upload Auth RP Form" under "Facility Management." If you don't have a Geotracker account, go to the ESI login page <https://geotracker.waterboards.ca.gov/esi> and click on "Password Request."

For assistance, contact
Hamid Foolad at (916) 341-5791
(FAX (916) 341-5808)
or
GeoTracker Help Desk at
(866) 480-1028

ALAMEDA COUNTY
**HEALTH CARE SERVICES
AGENCY**

REBECCA GEBHART, Interim Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

October 25, 2017

Ms. Leslie Mulholland
Leslie Mulholland Trust
132 Guilford Road
Piedmont, CA 94611
(Sent via electronic mail to: airleslie@hotmail.com)

Subject: Conditional Work Plan Approval; Fuel Leak Case No. RO0003070 and GeoTracker Global ID T1000002521, Mulholland Residence, 132 Guilford Road, Piedmont, CA 94611

Dear Ms. Mulholland:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the *Data Gap Investigation Work Plan*, dated August 25, 2017. The work plan was prepared and submitted on your behalf by Wheeler Group Environmental LLC (WGE). Thank you for submitting it. The work plan proposes the installation of seven soil bores, one soil vapor pin, and the collection of soil, grab groundwater, and one subslab vapor sample in an effort to fill remaining data gaps at the site.

Based on ACDEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The referenced work plan proposes a series of actions with which ACDEH is in general agreement of undertaking; however, ACDEH requests several modifications to the approach. Please submit an excavation report by the date specified below.
 - a. **Soil Bore Installation** – The referenced work plan proposed to install seven soil bores by Direct Push Technology (DPT). Due to the potential to encounter bedrock beneath the site, please arrange to contract a drilling rig with dual capability DPT and Hollow Stem Auger (HAS) technology. This is requested to minimize the need for additional drill rig mobilizations, and is anticipated to increase the likelihood of achieving the stated data goals.
 - b. **Soil Bore Depths** - Please recall that the Low Threat Closure Policy (LTCP) continues to require the vertical delineation of soil contamination. Please base the decision to terminate the bores at 15 feet, as planned, on the lack of signs of contamination at that depth (odor, discoloration, etc.), rather than on achieving the depth of 15 feet.
 - c. **Subslab Vapor Pin Location** – To ensure that the vapor pin is installed proximal to potential worst-case leak locations, ACDEH requests that the vapor pin be installed roughly centered in the basement and in close proximity to the location of the former furnace boiler and the likely supply line location.
 - d. **Shroud Tracer Concentrations** – In the event of a leak in the vapor seal and tracer is detected in the subsurface vapor sample, please ensure that the shroud vapor concentration has been determined by the submittal of a shroud vapor sample to the analytical laboratory.

The Department of Toxic Substances Control (DTSC) has guidance on the acceptability of the sample provided the percentage of leak is less than 5 percent.

- e. **Vapor Intrusion Sampling Tubing** – Please ensure that Nylaflow tubing is not used during the collection of the subslab vapor sample due to the preferential adsorption of naphthalene to Nylaflow plastics. Please verify that Nylaflow is not being used by the vapor sampling contractor, if any is used.

TECHNICAL REPORT REQUEST

Please return the requested item to ACDEH (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the schedule:

- **January 19, 2018** – Site Investigation Report
File to be named: RO3070_SWI_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,



Mark Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations and Electronic Report Upload (ftp) Instructions

cc: Megan Walsh, Esq., 5335 Broadway Terrace #301, Oakland, CA 94616
(Sent via electronic mail to: meganwalshesq@gmail.com)

Brent Wheeler, Wheeler Group Environmental, LLC, 369-B Third Street, Suite 221, San Rafael, CA 94519 (Sent via electronic mail: bwheeler@wheelergroupenvironmental.com)

Mark Youngkin, Wheeler Group Environmental, LLC, 369-B Third Street, Suite 221, San Rafael, CA 94519 (Sent via electronic mail: mark.youngkin@gmail.com)

Dilan Roe, ACDEH; (Sent via electronic mail to: dilan.roe@acgov.org)
Paresh Khatri, ACDEH; (Sent via electronic mail to: paresh.khatri@acgov.org)
Mark Detterman, ACDEH; (Sent via electronic mail to: mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Alameda County Department of Environmental Health's (ACDEH) Environmental Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program File Transfer Protocol (FTP) site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to SCP sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/) for more information on these requirements.

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional. For your submittal to be considered a valid technical report, you are to present site-specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this case meet this requirement. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: <http://www.bpelsg.ca.gov/laws/index.shtml>.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: December 1, 2016
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010; May 15, 2014, November 29, 2016
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions


The Alameda County Environmental Cleanup Oversight Programs (LOP and SCP) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

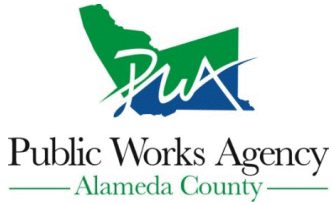
- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org.
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Open File Explorer using the Windows  key + E keyboard shortcut.
 - i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) On the address bar, type in `ftp://alcoftp1.acgov.org`.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive)
 - d) Click Log On.
 - e) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - f) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., `firstname.lastname@acgov.org`)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) *If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.*

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/29/2017 By jamesy

Permit Numbers: W2017-0983
Permits Valid from 01/17/2018 to 01/19/2018

Application Id: 1514584292247
Site Location: 132 Guilford Rd, Piedmont, CA 94611, USA
Project Start Date: 01/17/2018
Assigned Inspector: Contact Eneyew Amberber at (510) 670-5759 or eneyew@acpwa.org

City of Project Site:Piedmont

Completion Date:01/19/2018

Applicant: Wheeler Group Environmental, LLC - Brent
Wheeler
369-B Third Street, Suite #221, San Rafael, CA 94901
Phone: 415-686-8846

Property Owner: Leslie Mulholland
132 Guilford Road, Piedmont, CA 94611
Phone: 510-653-3460

Client: ** same as Property Owner **
Contact: Brent Wheeler
Phone: 415-686-8846
Cell: 415-686-8846

Total Due: \$265.00
Total Amount Paid: \$265.00
Receipt Number: WR2017-0626 Payer Name : Wheeler Group Environmental LLC Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitoring Study - 7 Boreholes
Driller: EnProbe Environmental Direct Push Drilling Services - Lic #: 1012248 -
Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2017-0983	12/29/2017	04/17/2018	7	2.25 in.	15.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit



City of Piedmont

How to Apply for an Excavation Permit **(Utility Companies)**

1. Fill out an "Application for Permit for Excavation in the Streets" form. Please include the contact person's name, phone number and email address. There is no fee for utility companies.
2. Attach a copy of plans.
3. Email items to vregalado@ci.piedmont.ca.us

Once the permit has been approved, we will email back to the applicant the approved permit and plans.

If you have questions, contact:

Viba Regalado-Silva
Public Works Assistant
City of Piedmont
120 Vista Ave
Piedmont, CA 94611-4031

510-420-3052

FOR STAFF USE ONLY

Date Received: _____ Received by: _____ Application No. _____
Bldg Official _____ Date _____ PWD Director _____ Date _____

**APPLICATION FOR PERMIT FOR
EXCAVATION IN THE STREETS
CITY OF PIEDMONT, DEPARTMENT OF PUBLIC WORKS
120 Vista Avenue, Piedmont, CA 94611
Tel: 510-420-3050 Fax: 510-658-3167**

SITUS ADDRESS: 132 Guilford Road, Piedmont, CA 94611

UTILITY COMPANY INFORMATION:

UTILITY COMPANY REFERENCE NO. NA

Company Name: Wheeler Group Environmental, LLC

Contact Name: Brent Wheeler **E-Mail:** bwheeler@wheelergroupenvironmental.com

Address: 369-B Third Street, Suite #221 **City:** San Rafael **Zip:** 94901

Phone: 415-686-8846 **Fax:** _____

Cell: 415-686-8846 **Pager:** _____

SITUS ADDRESS OWNER INFORMATION:

Name(s): Ms. Leslie Mulholland

Address: 132 Guilford Road **City:** Piedmont **Zip:** 94611

Home Phone: _____ **Work Phone:** _____

Fax: _____ **Cell:** _____

Pager: _____ **E-Mail:** airleslie@hotmail.com

Application is hereby made for a permit to trench, remove curb or excavate on the
North **side of** Guilford Road **(street), between house number**
132 Guilford Road **(street) and house number** 781 Highland Avenue.

For the purpose of Drilling one (1) vertical GeoProbe or Rotary Auger Soil Boring (B3) to
approximately 15 feet below grade (fbg) for collection of discrete soil samples and grab
groundwater sample to assess extent of contamination in vicinity of former heating oil
underground storage tank (UST); following completion of sampling, borehole will be backfilled
with neat mixture of Portland cement to approximately 0.5 fbg; the balance of the borehole
will be restored to original site conditions (grass strip); See attached Site Plan (Figure 3).

Scheduled Drilling Date: 1-17-2018
Drilling Contractor: EnProbe Drilling Services (Lic. # C-57 1012248)

SIGNATURE OF APPLICANT: Brent A. Wheeler
PRINT NAME & TITLE: Brent A. Wheeler, Manager

ATTENTION EXCAVATION PERMIT APPLICANT

1. No Tunneling or Drifting is permitted.
2. All resurfacing of trenches to be done by the APPLICANT within 7 days. (See City of Piedmont Standard Details)
3. All concrete work shall be done by APPLICANT.
4. 24 hours notice shall be given prior to excavation.
5. Reasonable access for residents and fire equipment shall be maintained.

Alameda County Public Works Agency - Water Resources Well Permit

application on site shall result in a fine of \$500.00.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

WELL NUMBER / FIELD POINT ID: 120 HAZEL RESIDENTIAL WELL

DATE: 1/18/2018

PROJECT / GLOBAL ID: ACDEH Fuel Leak Case No. RO0003070

SITE LOCATION: 120 HAZEL

CITY: Piedmont

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer UNKNOWN

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer NA

casing diameter (inches) circle one 0.75 1 1.5 2 4 6

casing volumes (gallons) circle one 0.02 0.05 0.15 0.2 0.7 1.52

WELL DATA

SAMPLER/S: RICHARD VASQUEZ 1-18-18

WELL NUMBER / FIELD POINT ID: 120 HAZEL

SCREEN INTERVAL (if known): UNKNOWN

A. TOTAL WELL DEPTH:

B. DEPTH TO WATER:

C. WATER HEIGHT (A-B):

D. WELL CASING DIAMETER:

E. CASING VOLUME:

F. SINGLE CASE VOLUME (Cx E):

G. 80% RECHARGE LEVEL (F+B):

PURGE DATA

50 GALLON TANK

START TIME: 1140

PUMP DEPTH: N/A

FINISH TIME: 1213

PUMP DEPTH: N/A

SAMPLE TIME

1220

DEPTH TO WATER: UNKNOWN

TIME MEASURED:

SULFUR

SAMPLE APPEARANCE / ODOR: CLEAR

SULFUR SMELL STRONG

TOTAL GALLONS PURGED: 64 GALLONS

WELL FLUID PARAMETERS

Time (interval 3 to 5 min.)	0	4	8	12	16	20	24	28	32
~Total Volume Purged (Gal)	0	8	16	24	32	40	48	56	64
pH (su)	8.87	8.72	8.87	8.88	8.80	8.78	8.74	8.72	8.72
Temperature (Celsius)	16.1	16.5	17.0	17.3	18.4	17.0	17.5	17.4	17.4
COND/SC (us/cm)	359.6	771	12.7	8.5	362.0	352.8	357.6	353.8	353.7
DO (mg/L) (%)	11.18	5.29	4.53	4.57	1.97	2.54	4.13	3.14	3.09
ORP (mv) (%)	122.9	58.4	49.1	47.5	22.1	27.7	42.4	32.4	31.1
ORP (mv)	70	133	180	186	196	190	183	196	179
DTW (ft.)	70	133	180	186	196	190	183	196	179
~Pump Depth (ft)	N/A								
~Pump Rate (Gal/min.)	2 GALLON								
	1.2 MIN								

PAGE 1 OF 1

SAMPLE COLLECTED FROM HASEBIB

WELL NUMBER / FIELD POINT ID: 125 Guilford

RESIDENTIAL WELL

DATE: 1/18/2018

PROJECT / GLOBAL ID: ACDEH Fuel Leak Case No. RO0003070

SITE LOCATION: 125 Guilford Rd.

CITY: Piedmont

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer UNKNOWN

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer N/A
casing diameter (inches) circle one 0.75 1 1.5 2 4 6
casing volumes (gallons) circle one 0.02 0.05 0.15 0.2 0.7 1.52

WELL DATA

SAMPLER/S: RICHARD VASQUEZ 1-18-18
WELL NUMBER / FIELD POINT ID: 125 GUILFORD

SCREEN INTERVAL (if known):

A. TOTAL WELL DEPTH:

B. DEPTH TO WATER:

C. WATER HEIGHT (A-B):

D. WELL CASING DIAMETER:

E. CASING VOLUME:

F. SINGLE CASE VOLUME (Cx E):

G. 80% RECHARGE LEVEL (F+B):

PURGE DATA

START TIME: 1020 PURGE DATA 20 GALLON TANK
PUMP DEPTH: N/A
FINISH TIME: 1036
PUMP DEPTH: N/A

SAMPLE TIME

DEPTH TO WATER: UNKNOWN SAMPLE TIME 1040
TIME MEASURED:
SAMPLE APPEARANCE / ODOR: CLEAR NO ODOR
~TOTAL GALLONS PURGED: 32 GALLON

WELL FLUID PARAMETERS

Table with 10 columns (Time intervals 0-16 min) and 14 rows (pH, Temperature, COND/SC, DO, ORP, BTW, Pump Depth, Pump Rate).

SAMPLE COLLECTED FROM HOSE BIB

Wheeler Group Environmental, LLC
Sub-Slab Vapor Sampling Data Form

Project #: 2017110 **Date:** 2/1/2018
Soil Gas Sample ID/FPN: SS1 / SS1 DUP **Weather Conditions/Temp:** Clear Skies
SS1 SHROUD 48-60F
Project/Site Address: Private Residence, 132 Guilford, San Mateo
Technician/Sampler: B. Wheeler (WGE)

Building/Site Survey:

Vacant: _____ Occupied: Yes Occupant: Leslie Mulholland
 Business: Residence
 Foundation Type: Slab on Grade
 Floor/Pavement Description: Concrete Throughout Basement Area
 Floor Penetrations: Sub-Slab Vapor Probe Installation (SSV-1); Subsurface Gas Line
 HVAC System: Central Furnace (Bryant Model #915SA42100S21A) Adjacent to SS1 Location in Basement

Chemical Inventory:

Product Description:	<u>Zinsser Cover Stain Prier (Sealer/Stain-Killer)</u>	Quantity:	<u>1 Gallon Can</u>	PID Reading:	<u>0</u>
Product Description:	<u>Spar Varnish</u>	Quantity:	<u>1 Qt. Can</u>	PID Reading:	<u>0</u>
Product Description:	<u>Pure Shellac</u>	Quantity:	<u>16 Oz. Can</u>	PID Reading:	<u>0</u>
Product Description:	<u>Mason's Select Concrete Sealer</u>	Quantity:	<u>1 Gallon Can</u>	PID Reading:	<u>0</u>
Product Description:	_____	Quantity:	_____	PID Reading:	_____
Product Description:	_____	Quantity:	_____	PID Reading:	_____
Product Description:	_____	Quantity:	_____	PID Reading:	_____

Probe Construction:

Slab Thickness (Inches):	<u>Concrete (5")</u>	Sub-Slab Conditions:	<u>Baserock</u>
Borehole Dia. (Inches):	<u>1.5"/0.62"</u>	Borehole Depth Below Slab (Inches):	<u>3"</u>
Borehole Prelim. PID Reading (PPM):	<u>≤9.4</u>	Borehole Prelim. Vacuum Reading ("Hg):	<u>0</u>
Total Length of 0.25"-Dia. Teflon Tubing (Ft):	<u>0</u>	Vapor Pin:	<u>Yes x No</u> <u>Brass Stainless x</u>

Soil Vapor Sampling Equipment Record:

Sample Canister Serial#:	<u>457</u>	Summa Canister:	<u>1 Liter (S/P) NA</u>	<u>6 Liter (S/P) S & P</u>
Dup. Sample Canister Serial#:	<u>480</u>	Glass Syringe:	_____	_____
Purge Canister Serial#:	<u>462</u>	Sample Canister Initial Vacuum ("Hg):	<u>30</u>	_____
Leak Check Canister Serial#:	<u>453</u>	Dup. Sample Canister Initial Vacuum ("Hg):	<u>30</u>	_____
Flow Regulator Serial#:	<u>7339442</u>	Purge Canister Initial Vacuum ("Hg):	<u>30</u>	_____
		Leak Check Canister Initial Vacuum ("Hg):	<u>30</u>	_____
		Filter Micron Size (μ):	<u>2</u>	_____

Vacuum Testing (10 Minutes):

Purge Canister Initial Vacuum ("Hg):	<u>30</u>	Start:	<u>8:45</u>
Purge Canister Final Vacuum ("Hg):	<u>30</u>	Finish:	<u>8:55</u>

Purge Record (Tubing & Borehole Filter Pack):

Purge Volume: Not Applicable
 235 ml (borehole) + 5.4 ml per linear foot x _____ feet tubing = _____ ml Volume
 x 3 volumes = _____ ml Volume
 Purge Time: 2000 ml Volume / 100 ml/min. = 20 min.
 Canister Purge Drop: 2000 ml Volume x 1"Hg/ 200 ml = 10 "Hg
 Purge Canister Initial Vacuum ("Hg): 30 minus Canister Purge Drop 10 "Hg =
 Final Purge Vacuum ("Hg): 20 "Hg
 Purge Time: Start 8:55 Finish 9:15 Total (Min.) 20

Vapor Sampling Record:

Sample Canister Initial Vacuum ("Hg):	<u>30</u>	Sample Canister Final Vacuum ("Hg):	<u>5</u>	(5" Hg Target)
Dup. Sample Canister Initial Vacuum ("Hg):	<u>30</u>	Dup. Sample Canister Final Vacuum ("Hg):	<u>5</u>	(5" Hg Target)
Shroud Canister Initial Vacuum ("Hg):	<u>30</u>	Shroud Canister Final Vacuum ("Hg):	<u>5</u>	(5" Hg Target)
Sample Time: Start <u>9:15</u> Finish <u>11:00</u> Total (Min.) <u>105</u>				
Dup Time: Start <u>9:15</u> Finish <u>11:05</u> Total (Min.) <u>110</u>				
Shroud Time: Start <u>9:15</u> Finish <u>10:09</u> Total (Min.) <u>54</u>				

**Wheeler Group Environmental, LLC
Sub-Slab Vapor Sampling Data Form**

Project #: 2017110

Date: 2/1/2018

Soil Gas Sample ID/FPN:

SS1 / SS1 DUP
SS1 SHROUD

Shroud Enclosure VOC Monitoring:

Time:	9:15	PID Reading (PPM):	51	
Time:	9:17	PID Reading (PPM):	166	
Time:	9:19	PID Reading (PPM):	253	
Time:	9:21	PID Reading (PPM):	294	
Time:	9:23	PID Reading (PPM):	315	
Time:	9:25	PID Reading (PPM):	320	
Time:	9:27	PID Reading (PPM):	329	
Time:	9:29	PID Reading (PPM):	338	
Time:	9:31	PID Reading (PPM):	343	
Time:	9:33	PID Reading (PPM):	323	
Time:	9:35	PID Reading (PPM):	304	
Time:	9:37	PID Reading (PPM):	279	
Time:	9:39	PID Reading (PPM):	246	
Time:	9:41	PID Reading (PPM):	241	
Time:	9:43	PID Reading (PPM):	240	
Time:	9:45	PID Reading (PPM):	234	
Time:	9:47	PID Reading (PPM):	257	
Time:	9:49	PID Reading (PPM):	264	
Time:	9:51	PID Reading (PPM):	252	
Time:	9:53	PID Reading (PPM):	254	
Time:	9:55	PID Reading (PPM):	254	
Time:	9:57	PID Reading (PPM):	265	
Time:	9:59	PID Reading (PPM):	277	
Time:	10:01	PID Reading (PPM):	273	
Time:	10:03	PID Reading (PPM):	285	
Time:	10:05	PID Reading (PPM):	298	
Time:	10:07	PID Reading (PPM):	306	
Time:	10:09	PID Reading (PPM):	320	SS1 SHROUD Stop (10:08)
Time:	10:11	PID Reading (PPM):	330	
Time:	10:13	PID Reading (PPM):	342	
Time:	10:15	PID Reading (PPM):	349	
Time:	10:17	PID Reading (PPM):	351	
Time:	10:19	PID Reading (PPM):	366	
Time:	10:21	PID Reading (PPM):	369	
Time:	10:23	PID Reading (PPM):	377	
Time:	10:25	PID Reading (PPM):	381	
Time:	10:27	PID Reading (PPM):	383	
Time:	10:29	PID Reading (PPM):	379	
Time:	10:31	PID Reading (PPM):	379	
Time:	10:33	PID Reading (PPM):	377	
Time:	10:35	PID Reading (PPM):	365	
Time:	10:37	PID Reading (PPM):	369	
Time:	10:39	PID Reading (PPM):	366	
Time:	10:41	PID Reading (PPM):	364	
Time:	10:43	PID Reading (PPM):	361	
Time:	10:45	PID Reading (PPM):	351	
Time:	10:47	PID Reading (PPM):	349	
Time:	10:49	PID Reading (PPM):	339	
Time:	10:51	PID Reading (PPM):	337	
Time:	10:53	PID Reading (PPM):	322	
Time:	10:55	PID Reading (PPM):	313	
Time:	10:57	PID Reading (PPM):	308	
Time:	10:59	PID Reading (PPM):	299	
Time:	11:01	PID Reading (PPM):	298	SS1 Stop (11:00)

Wheeler Group Environmental, LLC
Sub-Slab Vapor Sampling Data Form

Project #: 2017110

Date: 2/1/2018

Soil Gas Sample ID/FPN: SS1 / SS1 DUP
SS1 SHROUD

Shroud Enclosure VOC Monitoring:

Time:	<u>11:03</u>	PID Reading (PPM):	<u>299</u>	
Time:	<u>11:05</u>	PID Reading (PPM):	<u>300</u>	SS1 DUP Stop (11:05)
Time:	<u> </u>	PID Reading (PPM):	<u> </u>	

Notes: Max. PID Reading of Interior Shroud During Sampling @ 383 ppm; Leak Check Compound = IPA
Post Sampling PID Reading of Vapor Pin Inlet @ ≤ 30.2 ppm

TD Tube Sampling:

Sample Time: Start	<u> </u>	Finish	<u>11:28</u>	Total (Min.)	<u>20</u>
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WHEELER GROUP ENVIRONMENTAL, LLC
 369-B Third Street, Suite #221, San Rafael, California 94901
 Ph 415-686-8846

SURVEY DATA SHEET

Project No: 2017110 Date: 1-18-18

Client: MULHOLLAND

Site Location: 132 GUILFORD RD, REDWOOD

Surveyor: B. WHEELER Instrument: TOPCON EL20

STATION/ WELL	+ B.S. (feet)	H.I. (feet)	- F.S. (feet)	ELEV. (feet)	Comments
A	11 1/2" (0.96)	345.96		345	
B1 CR			6.95	339.01	
B2 CR			7.86	338.10	
B3 CR			9.65	336.31	
B4 CR			8.09	337.96	
B5 CR			6.06'	339.90	
B6 CR			5.43'	340.53	
B7 CR			8.28'	337.68	
132NWC			4.34'	341.62	NORTHWEST CORNER RESIDENCE PL
132SEC			8.39'	337.57	SOUTHEAST CORNER RESIDENCE PL
COPSTAMP			10.57'	335.39	CITY OF REDWOOD STAMP AT STORM CATCH BASIN CURB
125WELL				348.06	WELL HEAD ELEVATION AT 125 GUILFORD

Source and Description of Bench Mark/Arbitrary Datum: TOP OF CONCRETE AT CORNER OF NORTH CURB RETURN OF DRAINAGE AT RESIDENCE AT 125 GUILFORD ROAD w/ ASSUMED ELEVATION OF 345' (NOT MSL)

Measurements Referenced To: TOC GRADE OTHER Page of

TP1 A 11 1/2" v, 352.75 4' 10 3/8" (4.89)
 A2 7.95

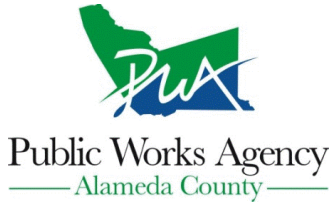
NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE GENERATOR	NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No. 020518001	2. Page 1 of 1	
	3. Generator's Name and Mailing Address 132 Guilford Rd Piedmont, CA 94611						
	4. Generator's Phone ()						
	5. Transporter 1 Company Name Big Sky Environmental Solutions		6. US EPA ID Number CAL 000396 010		A. State Transporter's ID		
	7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone 800-479-1993		
					C. State Transporter's ID		
TRANSPORTER	9. Designated Facility Name and Site Address Big Sky Enterprises 401 W. Channel Rd Benicia, CA 94510					D. Transporter 2 Phone	
	10. US EPA ID Number CAL 000301 639					E. State Facility's ID	
						F. Facility's Phone 800-479-7993	
	11. WASTE DESCRIPTION			12. Containers	13. Total Quantity	14. Unit Wt./Vol.	
	a.			No.	Type		
	Non Hazardous Waste Solid (Drill Cuttings)			002	DM	1,100 P	
b.							
Non Hazardous Waste Liquid (Wash Water)			001	DM	10 G		
c.							
d.							
G. Additional Descriptions for Materials Listed Above				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information Wear PPE Emergency Contact : Jeff Rhodes							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
In Lieu of:					Date		
Printed/Typed Name JOE RILEY		Signature <i>Joe Riley</i>		Month Day Year 02 07 18			
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name JOE RILEY		Signature <i>Joe Riley</i>		Date Month Day Year 02 07 18			
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Date Month Day Year			
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name Jeff Rhodes					Signature <i>JR</i>		
					Date Month Day Year 02 08 18		

NON-HAZARDOUS WASTE

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/28/2015 By jamesy

Permit Numbers: W2015-0921
Permits Valid from 10/01/2015 to 10/10/2015

Application Id: 1440783971254
Site Location: 125 Guilford Rd. Piedmont, CA 94611
Project Start Date: 10/01/2015
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site:Piedmont

Completion Date:10/10/2015

Applicant: Martell Water Systems, Inc. - Chancellor
Amanda
1818 Loveridge Rd., Pittsburg, CA 94565

Phone: 925-432-4282

Property Owner: Roger Strauch
125 Guilford Rd., Piedmont, CA 94611

Phone: --

Client: ** same as Property Owner **
Contact: Chancellor Amanda

Phone: --
Cell: --

	Total Due:	\$397.00
Receipt Number: WR2015-0481	Total Amount Paid:	\$397.00
Payer Name : Amanda Chancellor	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Well Construction-Water Supply-Irrigation - 1 Wells
Driller: Martell Water Systems, Inc. - Lic #: 510952 - Method: mud

Work Total: \$397.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0921	09/28/2015	12/30/2015	IRR-1	10.00 in.	5.00 in.	50.00 ft	300.00 ft

Specific Work Permit Conditions

1. All domestic and irrigation wells must be 100 feet away from any septic or leach field and not up gradient of any well (See Ordinance 15.16.230 Table K-1).
2. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
3. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Alameda County Public Works Agency - Water Resources Well Permit

5. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.
 6. All domestic and irrigation wells shall be installed with a crossflow or backflow valve as mandated by State law. Property owner shall contact East Bay Municipal Utility District within 30 days of the installation of a well to: Backflow Prevention Unit, East Bay Municipal Utility District, Contact: Tim Collins Ph: (510) 287-0815 Fax: (510) 287-0915 P.O. Box 24055, MS 47 Oakland, CA 94623-1055.
 7. Cement grout shall be placed by Tremie pipe. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
 8. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
 9. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
 10. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 11. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurement.
 12. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
 13. A sample port is required on the discharge pipe near the wellhead.
-

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet
No. e0301784

Page 1 of 1

Owner's Well Number 1

Date Work Began 02/10/2016 Date Work Ended 2/18/2016

Local Permit Agency Alameda County Public Works

Permit Number W2015-0921 Permit Date 2/10/16

DWR Use Only – Do Not Fill In

State Well Number/Site Number	
Latitude	Longitude
APN/TRS/Other	

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <u>Direct Rotary</u> Drilling Fluid _____ Bentonite mud _____		
Depth from Surface		Description
Feet	to Feet	Describe material, grain size, color, etc
0	2	top soil
2	38	dark brown and black rock
38	160	grey rock with some white and green rock
160	200	grey rock with black silty layers
Total Depth of Boring <u>200</u> Feet		
Total Depth of Completed Well <u>200</u> Feet		

Well Owner		
Name	<u>Roger Strauch</u>	
Mailing Address	<u>125 Guilford Rd</u>	
City	<u>Piedmont</u>	State <u>CA</u> Zip <u>94611</u>

Well Location		
Address	<u>125 Guilford Rd</u>	
City	<u>Piedmont</u>	County <u>Alameda</u>
Latitude	_____ N	Longitude _____ W
Datum	_____ Dec. Lat. _____	Dec. Long. _____
APN Book	<u>51</u>	Page <u>4676</u> Parcel <u>23</u>
Township	_____ Range _____	Section _____

Location Sketch	Activity
(Sketch must be drawn by hand after form is printed.) North	<input checked="" type="radio"/> New Well <input type="radio"/> Modification/Repair <input type="radio"/> Deepen <input type="radio"/> Other _____ <input type="radio"/> Destroy <small>Describe procedures and materials under "GEOLOGIC LOG"</small>
	Planned Uses <input checked="" type="radio"/> Water Supply <input type="checkbox"/> Domestic <input type="checkbox"/> Public <input checked="" type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="radio"/> Cathodic Protection <input type="radio"/> Dewatering <input type="radio"/> Heat Exchange <input type="radio"/> Injection <input type="radio"/> Monitoring <input type="radio"/> Remediation <input type="radio"/> Sparging <input type="radio"/> Test Well <input type="radio"/> Vapor Extraction <input type="radio"/> Other _____
<small>Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.</small>	

Water Level and Yield of Completed Well		
Depth to first water	_____	(Feet below surface)
Depth to Static	_____	
Water Level	<u>15</u>	(Feet) Date Measured <u>02/16/2016</u>
Estimated Yield *	<u>60</u>	(GPM) Test Type <u>Air Lift</u>
Test Length	<u>1.0</u>	(Hours) Total Drawdown <u>140</u> (Feet)
*May not be representative of a well's long term yield.		

Casings								Annular Material			
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size if Any	Depth from Surface	Fill	Description	
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)	Feet to Feet			
0	22	10	SDR-17	PVC	0.327	5.563	BLANK	0	52	CEMENT	NEAT
22	77	8	SDR-17	PVC	0.327	5.563	BLANK	52	200	SAND	#8
77	137	8	SDR-17	PVC	0.327	5.563	SLOTTED				
137	157	8	SDR-17	PVC	0.327	5.563	BLANK				
157	197	8	SDR-17	PVC	0.327	5.563	SLOTTED				
197	200	8	SDR-17	PVC	0.327	5.563	BLANK				

Attachments
<input type="checkbox"/> Geologic Log <input type="checkbox"/> Well Construction Diagram <input type="checkbox"/> Geophysical Log(s) <input type="checkbox"/> Soil/Water Chemical Analyses <input type="checkbox"/> Other _____
<small>Attach additional information, if it exists</small>

Certification Statement			
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief			
Name <u>Martell Water Systems, Inc.</u>			
<small>Person, Firm or Corporation</small>			
<u>1818 Loveridge Rd</u>	<u>Pittsburg</u>	<u>CA</u>	<u>94565</u>
<small>Address</small>	<small>City</small>	<small>State</small>	<small>Zip</small>
Signed <u>[Signature]</u>	<u>02/24/2016</u>	<u>510952</u>	<u>C-57 License Number</u>
<small>C-57 Licensed Water Well Contractor</small>	<small>Date Signed</small>	<small>State License Number</small>	<small>C-57 License Number</small>



1100 Willow Pass Court, Suite A
 Concord, CA 94520-1006

925 462 2771 Fax. 925 462 2775

www.cercoanalytical.com

Ms. Amanda Chancellor
 Martell Water Systems
 1818 Loveridge Road
 Pittsburg, CA 94565

Sample Source:
 125 Guilford Rd., Piedmont
 Date Received: 04/05/2016
 Date Sampled: 04/05/2016
 Matrix: Drinking Water

April 8, 2016
 Job No.: 1604027
 LabNo.: 001
 Cust. No.: 179
 Schedule: Upon Request

Analyte	Results	Detection Limit	Method	Date Analyzed
---------	---------	-----------------	--------	---------------

LabNo.: 001
 Sample I.D.: Hosebib at Well

Total Coliform Bacteria*	Absent	--	Colilert™	04/05-06/16
<i>E. coli</i> *	Absent	--	Colilert™	04/05-06/16

* 40 CFR Part 141 ; Chromogenic/Fluorogenic Substrate - Coliforms per 100 mL

Cheryl McMillen
 Laboratory Director

Quality Control Summary - All laboratory quality control parameters were found to be within established limits.



WELL ID
TRD-1



W 2015-0921

PERMIT #

REGISTERED WELL

DUPLICATE
Driller's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page 1 of 1
Owner's Well No. _____
Date Work Began 10/19/92, Ended 11/03/92
Local Permit Agency ZONE "7"
Permit No. 92466 Permit Date 9/17/92

No. **413184**

DEPTH FROM SURFACE		DESCRIPTION
Ft.	to Ft.	
0	60	Yellow brown shale & clay w/streaks of brown sandstone
60	125	Fractured grey sandstone & shale w/streaks of grey clay
125	137	Shaley clay w/fractured grey sandstone
137	145	Grey clay w/streaks of grey sandstone
145	300	Grey & blue sandstone w/streaks of white & grey clay
51' Static		

WELL OWNER

Name Jon Evans
Mailing Address P.O. Box 20609
Piedmont, Ca. 94620
CITY STATE ZIP

WELL LOCATION

Address 120 Hazel Lane Piedmont
City Alameda, Ca.
County Zone "7"
APN Book _____ Page _____ Parcel _____
Township _____ Range _____ Section _____
Latitude _____ North Longitude _____ West
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

NORTH

WEST EAST SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

NEW WELL
 MODIFICATION/REPAIR
 ___ Deepen
 ___ Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)

MONITORING
 WATER SUPPLY
 ___ Domestic
 ___ Public
 Irrigation
 ___ Industrial
 ___ "TEST WELL"
 ___ CATHODIC PROTECTION
 ___ OTHER (Specify)

DRILLING METHOD _____ FLUID _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 51 (Ft.) & DATE MEASURED 11/4/92
ESTIMATED YIELD 100+ (GPM) & TEST TYPE Air lift
TEST LENGTH 1 (Hrs.) TOTAL DRAWDOWN 225 (Ft.)
* May not be representative of a well's long-term yield. **35 GPM @80'**

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING(S)						DEPTH FROM SURFACE	ANNULAR MATERIAL				
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE		CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)	
0	55	g	x	pvc	4.5	Sch 40	.040	0	20	x			Aqua.
55	275	g	x	pvc	4.5	Sch 40	.040	20	275				sand

ATTACHMENTS (✓)

Geologic Log
 Well Construction Diagram
 Geophysical Log(s)
 Soil/Water Chemical Analyses
 Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Glenn Martell & Son, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

1818 Loveridge Road/Pittsburg, Ca. 94565
ADDRESS CITY STATE ZIP

Signed Glenn Martell 11/23/92 510952
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

