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FEASIBILITY STUDY & REMEDIAL ACTION PLAN

INCLUDES RESULTS OF SEMI-ANNUAL GRAB GROUNDWATER AND SOIL VAPOR MONITORING – FIRST HALF 2017

COMMERCIALLY-ZONED WAREHOUSE PROPERTY

SITE:
COMMERCIALLY-ZONED WAREHOUSE PROPERTY

25 E. FIFTH STREET
WATSONVILLE, CA

APN: 018-151-39

GeoTracker I.D.: T10000008129

PROJECT #: 2X404.B

JUNE 21, 2017

For Submittal to:
SANTA CRUZ COUNTY
ENVIRONMENTAL HEALTH SERVICES (SCC-EHS)
SITE MITIGATION
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1.0 EXECUTIVE SUMMARY

The following presents a *Feasibility Study and Remedial Action Plan (FS-RAP)* for the commercially-zoned warehouse property located at 25 East Fifth Street in Watsonville (the "Site", Figure 1). The purpose of the *FS-RAP* is to identify and evaluate several remedial action alternatives for technical feasibility, cost and effectiveness, which are designed to reduce elevated soil contaminant concentrations at the Site.

This document also presents the results of *Semi-Annual Groundwater and Soil Vapor Monitoring* conducted during the first half of 2017.

The following Executive Summary subsections provide a synopsis of previously completed soil, groundwater and soil vapor characterization studies, results of recent semi-annual groundwater and soil vapor sampling, remedial action goals, the feasibility of potential remedial alternatives, and an overview of the selected remedial action.

1.1 PREVIOUSLY COMPLETED ON-SITE SOIL, GROUNDWATER & SOIL VAPOR CHARACTERIZATION

A property transaction screening of Site soil and groundwater[1] completed for the subject Site in 2010 confirmed the presence of former Manufactured Gas Plant (MGP) waste similar to waste contaminants detected at the adjacent parcel to the west (618 Main St., the Jalisco Restaurant site). *Additional Site Assessment*[2] was completed in 2016 to: 1) delineate the extent of contamination in subsurface media; 2) quantify commercial land use risks; and 3) generate the data needed to propose a remedial action plan that is protective of to human health and the environment. **The extensive soil, soil vapor and groundwater data set show that residual contaminants beneath the subject Site have been well characterized and there are no significant data gaps.** Specifically:

- Soil: Soil samples were collected from a relatively dense grid across the Site parking lot where historical MGP infrastructure was located (i.e., ~20 foot-on-center sample frequency), and samples were analyzed from at least 0.5, 1.5 and 4 feet below ground surface (bgs). The laboratory results provide high resolution characterization of shallow soil impacts beneath this Site. When compared against agency-established, risk-based screening thresholds, the lab results indicate that relic contaminant concentrations beneath the Site could potentially pose a direct exposure risk (dermal, inhalation) if commercial receptors were to handle impacted soils beneath the encapsulated subject Site. The impacts of concern include semi-volatile contaminants (poly aromatic hydrocarbons, PAHs), and to a much lesser extent Total Petroleum Hydrocarbons (TPH)

[1]: Weber, Hayes and Associates(WHA) report: *Preliminary Soil and Groundwater Assessment*, 25 East Fifth Street, Watsonville, dated July 29, 2010 (summary figures and tables are included in Appendix A).

[2] WHA report: *Additional Site Assessment*, 25 East Fifth Street, Watsonville, dated November 23, 2016 (summary figures and tables are included in Appendix A).

as diesel/motor oil, and lead. The areal extent of these well-defined soil impacts across the parking lot area is approximately 6,000 square feet.

- Groundwater: Shallow groundwater impacts are limited to the northwestern portion of the Site (i.e., elevated concentrations of PAHs, cyanide and/or TPH-diesel detected in two of the nine on-Site grab groundwater sample borings) and are similar to concentrations observed at the adjacent Jalisco Restaurant property. Nearly twenty-five (25) years of groundwater monitoring at the hydraulically downgradient Jalisco Restaurant property confirm the residual dissolved plume is stable and not migrating.
- Soil Vapor: The very low-level soil vapor concentrations initially detected in dual-depth vapor wells (sampled from 5- and 10-feet bgs) positioned in front of the on-site warehouse building indicate that there is no soil vapor intrusion concern for the building occupants. Notably, two soil vapor sample points (SV-2 and SV-3) positioned in the immediate vicinity of the most significant Site soil impacts (i.e., detected at borings P-2 and B-9) yielded no elevated concentrations of VOCs.

1.2 RESULTS OF SEMI-ANNUAL GROUNDWATER & SOIL VAPOR MONITORING – FIRST HALF 2017

A round of semi-annual groundwater and soil vapor sampling was collected in March 2017 and a second round is scheduled for the third quarter 2017. The testing is designed to provide potential seasonal fluctuation data on chemicals of potential concern (COPC) to confirm that water quality data is stable and defined. Plans for semi-annual sampling and laboratory analysis were presented in our *Proposed Semi-Annual Groundwater and Soil Vapor Monitoring*[3].

1.2.1 *Results of Semi-Annual Groundwater Sampling*

Based on the localized extent of observed groundwater impacts at the Site, grab groundwater samples were obtained on March 22, 2017 from previous sample locations GW-1, GW-2 and GW-3 by installing temporarily cased boreholes ranging in depth from 27 to 29 feet bgs. The sample obtained from GW-2 serves as a "clean" upgradient monitoring point and samples obtained from GW-1 and GW-3 serve as downgradient, property line monitoring points. The grab groundwater samples were submitted to a State-certified laboratory for the following analysis:

- PAHs by EPA Method 8270SIM
- TPH-diesel and TPH-motor oil by EPA Method 8015B
- TPH-gas and BTEX/MTBE and 1,2-dibromoethane by EPA Method 8260B
- Total cyanide by EPA Method 9012
- Ammonia as nitrate by EPA Method 350.2Results are tabulated on Tables 1 & 2, and are presented on Figure 2. In general, results are fairly similar to the May 2016 sample results. There were

[3] WHA: *Proposed Semi-Annual Groundwater and Soil Vapor Monitoring*, dated March 6, 2017

limited exceedances in the groundwater samples, specifically from borings GW-1 and GW-3 obtained from along the western property line adjoining the Jalisco Restaurant property. Contaminant compounds exceeding the conservative *Environmental Screening Levels (ESLs)* included PAHs (including naphthalene), TPH-gas and -diesel, and cyanide (GW-3 only) there were no current exceedances in upgradient boring GW-2. Note: there have been similar order of magnitude groundwater concentrations detected in the Jalisco Restaurant property monitoring well network, indicating a relatively small and stable, low-concentration groundwater plume (see Figure 2).

1.2.2 *Results of Semi-Annual Soil Vapor Sampling*

A second round of soil vapor sampling was attempted on March 30, 2017 at all five (5) Site soil vapor wells (SV-1 through SV-5; see Figure 3); however, "no flow" conditions were encountered at most of the deeper sample ports (10-ft) and one shallow port (5-ft)[4]. Specifically:

- **SV-1 at 10 feet** (water observed in sample tubing during purge)
- **SV-2 at 10 feet** (down hole vacuum > 7.5 inches Hg)
- **SV-3 at 5 and 10 feet** (down hole vacuum > 7.5 inches Hg)
- **SV-4 at 10 feet** (down hole vacuum > 7.5 inches Hg)

To date, sampling of these "no flow" locations has not been conducted since May 2016. We will periodically check these locations for flow conditions during the Summer of 2017 and will collect samples when we are able.

Soil vapor monitoring ports having flow were collected on March 30, 2017, and submitted to a State-certified laboratory for volatile organic compound air analysis (VOC analysis by EPA MethodResults are tabulated in Table 3 and are presented on Figure 3. The VOC sample analytical results from these soil vapor monitoring points continue to confirm no exceedance above applicable commercial screening thresholds, with the exception of benzene detected in sample SV-1 (5-foot depth) at a concentration of 69 µg/m^3, which is slightly above the US EPA Regional Screening Level set at 53 µg/m^3. Benzene was previously not detected at this location (<5.9 µg/m^3), nor was it previously detected in nearby shallow soil samples (B-3 and B-6 positioned ~15-20 feet away). All detected concentrations were several orders of magnitude below the *Risk Based Soil Gas Screening Levels (RBSLs)* developed for the adjacent Jalisco Restaurant property (details presented on Table 3). A previous detection of 1,2-Dibromoethane (aka: EDB) at a concentration of 99 µg/m^3 in sample SV-1 at 10 feet below grade during the May 2016 sampling event has been the only slightly elevated VOC concentration detected at the Site, which was above the California DTSC-Modified Soil Gas Screening level ("near-source") set at 20 µg/m^3. **We note that grab**

[4] These sample locations were checked again for flow conditions on May 17, 2017. A peristaltic pump was connected to the sample tubing at each location to gauge flow and check for the potential presence of water and it was confirmed that each sample point contained small volumes of water (~100 +/- mL).

groundwater samples collected and analyzed for 1,2-Dibromoethane during the current monitoring period revealed no detections of this compound indicating there is no significant source of this compound present at the Site.

While were unable to obtain samples from the 10-foot sample depths at 4 of the 5 locations due to no flow or water-in-tubing conditions, the results of the shallow 5-foot deep samples obtained from sample points situated adjacent to the warehouse building (i.e., SV-1, SV-2 and SV-4) continue to indicate that there is not a soil vapor intrusion risk for the Site. We anticipate that future seasonal sampling will confirm this.

1.3 REMEDIAL ACTION GOALS

The results of extensive Site characterization analysis indicate that corrective actions completed at the adjacent Jalisco Restaurant property, which included focused shallow soil removal/capping and institutional controls (i.e., deed restriction) would similarly be appropriate for reducing risk at the subject commercial Site.

It has been more than 100 years since the MGP ceased operations and ongoing groundwater and soil gas monitoring at the Jalisco Restaurant property indicates that residual contaminants in these media generally appear to be in equilibrium. Based on the extensive data collected to date, it is very unlikely that residual soil or groundwater impacts will create a soil vapor intrusion issue, and conversely, residual soil impacts are not a leachable source that will impact shallow groundwater in any significant way. **Because residual contaminants in groundwater and soil vapor media do not pose a threat to human health or the environment, they are not being considered for remedial action.**

Residual contaminant concentrations in shallow soils could potentially pose a threat to human health during construction/maintenance (i.e., future utility trench installations or planter area maintenance) where workers could be directly exposed to the impacted soils. **Therefore, the overall goal of any proposed remedial action will be to reduce potential future exposure of humans (workers/visitors) to prevent potential ingestion or dermal contact to underlying soils impacted by elevated concentrations of MGP contaminants.**

1.4 FEASIBILITY STUDY – REMEDIAL ACTION ALTERNATIVES

We screened three (3) remedial action options/remedial alternatives for reducing soil concentrations at the Site, which include:

1. **No Action (with institutional control)**

   The *No Action Alternative* serves as a baseline in which other remedial action alternatives can be evaluated. There would be no remedial action under this alternative and no associated cost, aside from future monitoring of the existing cap of parking lot asphalt and the building's concrete slab foundation.

2. **Focused excavation with offsite disposal and capping with institutional control**

   Remedial Alternative No. 2 would include removal of the accessible and well-defined soil impacts to a depth of 1.5 feet bgs within the parking lot area, capping these areas with compacted, clean fill/base rock and asphalt pavement, and recording a deed restriction that would restrict property use to commercial only and include annual cap inspections (see Figure 4). The estimated cost for implementing this alternative is $117,960 (see Table 4).

3. **Removal of all accessible soil impacts with institutional control**

   Remedial Alternative No. 3 would include removal of the accessible and well-defined soil impacts to depths up to 20 feet bgs within the parking lot area, parking lot restoration with clean replacement fill and asphalt, and recording a deed restriction documenting residual soil impacts beneath the existing warehouse building (i.e., slightly elevated lead detected at DG-2 & D-3 – see Figure 5). The estimated cost for this alternative is $841,185 (see Table 5)

1.5 SELECTED REMEDIAL ACTION

The most cost effective and practical remedial action for the Site is *Remedial Alternative No. 2* - focused excavation of shallow soil impacts with capping and institutional control (i.e., deed restriction). This alternative removes the majority of the most significant, well defined soil impacts from the subsurface while effectively reducing potential future exposure to on-site workers and visitors (see Figure 4). The cap (i.e. imported clean fill/base rock and asphalt pavement) would prevent direct contact with contaminants by property users. Because of the relatively immobile nature of the Site contaminants of concern, it is our opinion that there would be no increased overall benefit to removing deeper soil impacts as it would pose an incredible fiscal hardship on the property owners who innocently purchased the subject Site in 1987 with assurances the property was not impacted (Appendix F).

1.6 REMEDIAL EXCAVATION OF SHALLOW IMPACTED SOILS & INSTALLATION OF A CAP

Extensive soil characterization completed at the Site has defined the areal extent of soil impacts within the parking lot to be approximately 6,000 square feet (see Figure 4). The impacted areas proposed for removal include: 1) a smaller, approximate 895 ft^2 area at the northwestern corner of the property, and 2) a larger, approximate 5,160 ft^2 area within the central portion of the parking lot. Remedial excavation of these well-defined soil impacts to a depth of 1.5 feet bgs will result in approximately 358 yds^3 of soil that will be disposed of at appropriate landfills. Additional details of remedial excavation activities are described in Section 6.1 through 6.3.

Following completion of the prescribed remedial excavation, a licensed grading and paving company will restore the parking lot as follows:

- Emplace and compact 15-inches of clean base rock into the excavation areas and topped with 3-inches of asphaltic concrete;

- Two existing planter areas will be removed as part of remedial excavation activities and will not be replaced, but will be paved over to match existing grade in order to eliminate future contact with impacted soils beneath these locations.

Additional details of Site restoration activities are described in Section 6.4

1.7 SCHEDULE & REMEDIAL ACTION COMPLETION REPORTING

Following the approval of this *FS-RAP*, a detailed schedule for implementation and completion will be provided to Environmental Health. We anticipate completing the proposed remedial action activities in mid-to-late summer 2017.

Within four (4) to six (6) weeks following completion of remedial excavation and Site restoration/capping, we will provide a report summarizing field activities. We will also prepare an *Environmental Site Management Plan* (under separate cover) that will provide a description of the capped area, residual soil impacts and notification procedures should potential future subsurface utility work at the Site penetrate into the residual impacts.

Following the completion and documentation of remedial actions, preparation and submittal of an *Environmental Site Management Plan*, and recording of an environmental deed restriction documenting the residual soil impacts and restricting the property for commercial use only, we will request that Environmental Health issue a *No Further Action* letter for the completed remediation.

2.0 SITE BACKGROUND & SUMMARY OF PREVIOUSLY COMPLETED ENVIRONMENTAL ASSESSMENTS

The following subsections provide a brief overview of previously completed soil, groundwater and soil vapor sampling that has been conducted at the property. A more comprehensive overview along with Tables and Figures of previously collected data and analytical results is presented as Appendix A.

2.1 SITE BACKGROUND

Historic land use maps document that a manufactured gas plant (MGP) operated on the adjacent parcel to the west (618 Main St) from the late 1800's to the early 1900's, and gasification infrastructure extended onto the subject Site. Since 1986, PG&E has conducted detailed subsurface assessment investigations and remedial actions on the adjoining 618 Main St. property but has stated it is not responsible for relic

gasification wastes that extend across the property line based on their review of successor corporations and property sales[5]. A description of MGP operators and successors is described in Appendix A.

PG&E issued a letter on June 20, 1986 offering to test soils on the 25 East Fifth Street property *"to determine if gas plant residues are present"*[6]. The current property owners took PG&E up on the offer and subsequently purchased the property in 1986 after obtaining notification that *"there were no contaminant detections that were greater than anything found in any city street"*[7]. We have not been able to locate results of PG&E's sampling of the subject Site. Approximately six months later (January 1987) the owner of the adjoining 618 Main St. property was provided this letter showing elevated levels of gas plant type wastes in surface soils (PNAs = 11 mg/kg)[8]. A *Preliminary Soil and Groundwater Assessment*[9] completed for the subject Site in 2010 confirmed the presence of MGP waste similar to that detected at the adjacent parcel to the west (618 Main St). For reference, a summary of characterization and corrective actions completed at this adjacent property is included in included in Appendix B and historical documentation and land use maps are included as Appendix F.

2.2 PRELIMINARY SOIL AND GROUNDWATER ASSESSMENT

The results of a previously completed *Preliminary Soil and Groundwater Assessment* revealed the following:

2.2.1 *Soil*

Laboratory results of two (2) 4-point composite samples collected across the parking lot area confirmed that shallow soils / fill material consistently contained elevated levels of Polynuclear Aromatic Hydrocarbon (PAHs) compounds at sampling depths of 1 and 4 feet below the ground surface (bgs). In addition to the detection of PAHs, there were also some low-level detections of motor oil range total petroleum hydrocarbons. No elevated concentrations of metals were detected in shallow soils / fill material during this preliminary assessment.

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[5]: Sedgwick, Detert, Moran & Arnold (PG&E's legal counsel): Opinion on why PG&E believes it is only responsible for the property where it formerly had a customer service center is not responsible for the entire area formerly occupied by the MGP.
- http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/2907193839/Sedgwick%20Letter%207_16_2007.PDF

[6]: PG&E Co. letter (Gayle Hamilton) to the owner of the 25 E. Fifth Street property: *Summary of PG&E's Gas Plant Identification and Evaluation Program,* June 20, 1986. Copy included in Appendix F.

[7]: Personal communication from PG&E staff (Loren Ingols) to current property owner (Martha Oneto) prior to the purchase of the property.

[8] PG&E Co. letter (Genemarie Gawthorp) to the owner of the 618 Main Street property: Summary of PG&E's Gas Plant surface soil sampling results, January 19, 1987. Copy included in Appendix F.

[9]: WHA report: *Preliminary Soil and Groundwater Assessment*, 25 East Fifth Street, Watsonville, dated July 29, 2010.

Deeper soils (to 30 feet bgs) were examined at four (4) exploratory boring locations on the Site (DP-3, -4, -6 & -8). Soil discoloration and chemical odors were observed only in the soil core collected at DP-7, positioned just south of the former MGP's infrastructure. "Black oily gobs" and strong hydrocarbon odor were observed to be limited to a relatively thin lens at 22 to 23 feet bgs, just above first encountered groundwater at 24 feet bgs. No other obvious soil impacts were observed in any of the other seven shallow or deeper borings. The results show that PAH and motor oil range total petroleum hydrocarbons was limited to the visually impacted lens, at concentrations exceeding regulatory threshold limits.

Laboratory results of shallow soil testing from: 1) within the fill soils, and 2) in native soils immediately below the fill materials, confirmed both zones are impacted with concentrations of "aged" petroleum hydrocarbons and PAHs in soil that exceed regulatory screening levels.

2.2.2 *Grab Groundwater*

Grab groundwater samples were collected and analyzed from the 4 deeper exploratory borings (DP-3, -4, -6 & -8). None of the tested groundwater contained elevated concentrations of chemicals of potential concern that exceeded Water Quality Goals (including TPH, VOCs, and PAHs). The laboratory results did note, however, a low-level detection of TPH in the range of gasoline (TPH-gasoline) in the groundwater sample collected from the aforementioned soil-impacted boring (DP-7). Specifically, the State-certified laboratory detected 150 µg/L of weathered TPH-gasoline.

2.3 ADDITIONAL SITE ASSESSMENT - 2016

A recently completed *Additional Site Assessment* was designed to provide sufficient characterization of subsurface conditions with the goal of quantifying potential human health risks for commercial land use, and ultimately to propose a plan that effectively separates any residual soil/soil vapor impacts from current and future tenants leasing the property.

The scope of work completed for the *ASA* included:

- ***Soil Characterization:*** Installation of fifteen (15) shallow (i.e., 4-feet deep) soil borings throughout the Site to provide sufficient vertical and lateral definition of shallow soil chemical impacts previously detected beneath the Site (B-1 through B-15). Five (5) of these borings extended to depths of 20 to 30 feet below the ground surface (bgs) to collect data on deeper soil chemical impacts (B-3, B-5, B-8, B-11, and B-14). Five (5) shallow (i.e., 0.5 and 1.5 feet deep) soil samples were also collected from native soils within all tree well / planter areas (P-1 through P-4 and P-7). In addition, following receipt of initial soil sample analytical results, we installed four (4) "data gap" soil borings (DG-1 through DG-4) to depths of 8 feet bgs and advanced borings B-9 and P-2 to depths of 8 and 18 feet, respectively, in order to provide better vertical and lateral definition of detected soil impacts.

- ***Groundwater Characterization:*** Collected grab groundwater samples from five (5) locations throughout the Site (GW-1 through GW-5) in order to provide additional data on previously detected low-level chemical impacts to groundwater.
- ***Soil Vapor Characterization:*** Installed and sampled five (5) permanent dual-depth (i.e., 5 and 10 feet bgs) soil vapor sample points (SV-1 through SV-5) to assess potential soil vapor intrusion concerns.

2.3.1 *Results of Soil Characterization*

In general, the extensive soil characterization identified relatively shallow (i.e., approximately 2-4 feet below grade) polynuclear aromatic hydrocarbons (PAHs), and to a much lesser extent Total Petroleum Hydrocarbons as diesel/motor oil (TPH-d/mo) and/or lead concentrations exceeding applicable commercial screening thresholds which correlate with the historic MGP infrastructure footprint (i.e., central to northwestern portion of the parking lot), with deeper PAH and TPH-d/mo soil impacts that appear to originate in the vicinity of boring P-2 (adjacent to the former MGP generator room) as evidenced by black soil discoloration and associated strong hydrocarbon-like odors persisting from approximately 6.5 feet to 15 feet below the ground surface (bgs). The impacts observed at boring P-2 appear to migrate laterally and deeper to borings B-8, B-11 and DP-7 (DP-7 installed in 2010) as evidenced by a lens of soil discoloration/odor at progressively deeper depths to the west-southwest of boring P-2. Boring B-9 (near impacted boring P-2) also exhibited deeper PAH impacts to at least 8 feet bgs. The most significant soil impacts are observed at borings B-9 and P-2.

The well-defined areal extent of soil impacts within the parking lot is approximately 6,000 square feet (see Figure 4).

2.3.2 *Results of Groundwater Characterization*

Concentrations of PAHs (including naphthalene), TPH-diesel and cyanide (GW-3 only) exceeding conservative groundwater ESLs were limited to borings GW-1 and GW-3 (along the western property line with Jalisco Restaurant), with only a slight exceedance of naphthalene detected in upgradient boring GW-2. Similar order of magnitude groundwater concentrations detected in the Jalisco Restaurant property monitoring well network correlate with these detections, indicating a relatively small, low-concentration groundwater plume.

We note that nearly 25 years of groundwater monitoring at the hydraulically downgradient Jalisco Restaurant property has confirmed that the dissolved plume is stable and not migrating. A semi-annual grab groundwater sampling program is currently being completed to confirm this (see Section 3.0).

2.3.3 *Results of Soil Vapor Characterization*

VOC sample analytical results revealed no exceedance above applicable commercial screening thresholds, and were several orders of magnitude below the *Risk Based Soil Gas Screening Levels* (RBSLs) developed

for the adjacent Jalisco Restaurant property, with the exception of 1,2-Dibromoethane (a.k.a EDB) detected at a concentration of 99 µg/m^3 in sample SV-3 at 10 feet below grade, which is above the California DTSC Modified Soil Gas Screening level ("near-source") set at 20 µg/m^3. The sample collected at 5 feet bgs at this location was non-detect for this compound.

Based on these initial results there does not appear to be a soil vapor intrusion risk for the Site. A semi-annual soil vapor sampling program is currently being completed to confirm this (see Section 3.0).

2.4 SITE ASSESSMENT CONCLUSIONS

The extensive soil, soil vapor and groundwater data set obtained during the current *Additional Site Assessment* and previous 2010 *Preliminary Soil and Groundwater Assessment* confirm that the Site has been well characterized with no significant data gaps. Specifically:

- The relatively dense soil sampling grid across the Site parking lot (i.e., ~20 foot on center sample locations) with soil sample analysis at depths of at least 0.5, 1.5 and 4 feet bgs have provided high resolution characterization of shallow soil impacts across this Site. Contaminants that could pose a potential direct exposure risk to commercial receptors (only if handling of impacted soils were to occur) include PAHs, and to a much lesser extent TPH-d/mo and lead. The areal extent of these well-defined soil impacts across the parking lot area is approximately 6,000 square feet (see Figure 4).
- Shallow groundwater impacts are limited to the northwestern portion of the Site (i.e., elevated concentrations of PAHs, cyanide and/or TPH-diesel detected in two of the nine on-Site grab groundwater sample borings) and are similar to concentrations observed at the adjacent Jalisco Restaurant property. Nearly twenty-five (25) years of groundwater monitoring at the hydraulically downgradient Jalisco Restaurant property has confirmed that the dissolved plume is stable and not migrating.
- The very low-level soil vapor concentrations initially detected in the dual depth vapor wells positioned in front of the on-Site warehouse building indicate that there is no soil vapor intrusion concern for the building occupants. We note that soil vapor sample points SV-2 and SV-3, which are positioned in the immediate vicinity of the most significant Site soil impacts (i.e., detected at borings P-2 and B-9) yielded no elevated concentrations of VOCs.

3.0 SEMI-ANNUAL GRAB GROUNDWATER AND SOIL VAPOR MONITORING – FIRST HALF 2017

The semi-annual groundwater and soil vapor sampling is designed to provide seasonal data on chemicals of potential concern (COPC) in the first and third calendar quarters to confirm initial concentration data obtained during recent Additional Site Assessment sampling (May 2016) and to determine potential seasonal variability in chemical concentrations. Plans for semi-annual sampling and laboratory analysis

were presented in our *Proposed Semi-Annual Groundwater and Soil Vapor Monitoring* report dated March 6, 2017, which includes:

- Grab groundwater sampling at previous sample locations GW-1, GW-2 and GW-3 (see Figure 2). Collected groundwater samples are analyzed for the following chemicals of potential concern (COPC):
    - PAHs by EPA Method 8270SIM
    - TPH-diesel and TPH-motor oil by EPA Method 8015B
    - TPH-gas and BTEX/MTBE and 1,2-dibromoethane by EPA Method 8260B
    - Total cyanide by EPA Method 9012
    - Ammonia as nitrate by EPA Method 350.2
- Sampling of previously installed dual depth (5 and 10 foot depths) soil vapor wells SV-1 through SV-5 (see Figure 3). Collected samples are analyzed for:
    - VOCs analysis by EPA Method TO-15

The Santa Cruz County Environmental Health Services (Environmental Health) conditionally approved this semi-annual sampling and analysis plan in their letter response dated March 8, 2017[10], with the following condition:

- *"In addition to the groundwater chemical analysis proposed in the plan, because 1,2-dibromoethane was detected in soil vapor, our agency recommends at a minimum also analyzing groundwater samples for 1,2- dibromoethane".*

3.1 GRAB GROUNDWATER SAMPLING & LABORATORY ANALYSIS

The previously completed Additional Site Assessment confirmed that shallow groundwater impacts are limited to the northwestern portion of the Site and are similar to concentrations observed at the adjacent Jalisco Restaurant property. Specifically, elevated COPC concentrations were limited to temporary borings GW-1 and GW-3 (see Figure 2). Based on the localized extent of observed groundwater impacts at the Site, we proposed collecting grab groundwater samples from previous sample locations GW-1, GW-2 and GW-3. The sample obtained from GW-2 serves as a "clean" upgradient monitoring point and samples obtained from GW-1 and GW-3 serve as downgradient, property line monitoring points.

The grab groundwater samples were obtained on March 22, 2017 by installing temporarily cased boreholes that were installed by a licensed C-57 driller [Environmental Control Associates (ECA) of Aptos – License #695970]. The boreholes were advanced via a direct push drill rig to depths ranging from 27 to

[10] Santa Cruz County Environmental Health Services: *Response to Proposed Semi-Annual Groundwater and Soil Vapor Monitoring, E. 5th Street Warehouse Property (GeoTracker Global ID T10000008129), 25 E. Fifth Street, Watsonville, Ca,* dated March 8, 2017

29 feet bgs. Following borehole advancement, borehole GW-1 was cased with ¾-inch PVC casing with a 0.010-inch factory slotted screen interval from 19 to 29 feet bgs (i.e., similar construction as previous temporarily cased boreholes at these locations). Due to borehole caving issues at GW-2 and GW-3, these boreholes were advanced to 27 feet bgs and a stainless steel screen point was exposed from 24 to 27 feet bgs for groundwater sample collection. Grab groundwater sampling followed our standard Field Methodology for Hydraulic Driven Probes, which is presented in Appendix C.

Depth to relatively stabilized groundwater ranged from 23.5 to 25.8 feet bgs, which is an average of 3.2 feet higher than when groundwater was previously sampled in May 2016.

The grab groundwater samples were submitted to a state certified laboratory (ESC Lab Sciences) for the following analysis:

- PAHs by EPA Method 8270SIM
- TPH-diesel and TPH-motor oil by EPA Method 8015B
- TPH-gas and BTEX/MTBE and 1,2-dibromoethane by EPA Method 8260B
- Total cyanide by EPA Method 9012
- Ammonia as nitrate by EPA Method 350.2

Following sample collection, each of the temporary boreholes were completely sealed with neat cement grout. Investigative derived waste generated during the installation of the temporary boreholes and purging / collection of groundwater (i.e., groundwater & decontamination rinse water) was properly disposed of by Bayside Oil, Inc (a licensed waste hauler) following the sampling event. Documentation of proper investigative derived waste disposal is provided in Appendix C.

3.1.1 *Grab Groundwater Sample Analytical Results*

The Laboratory analytical report is included in Appendix D and current results along with previous May 2016 results are tabulated in Tables 1 and 2. Current grab groundwater results are also presented on Figure 2. Groundwater sample analytical results revealed the following:

PAHs (including naphthalene):

Concentrations of PAH constituents that previously exceeded the conservative ESLs, including naphthalene have decreased at the location of GW-3. Naphthalene, which was previously detected at a concentration of 34.7 µg/L, is currently detected at 2.78 µg/L. The ESL for naphthalene is set at 0.17 µg/L, while the established health-based advisory level, currently called a "notification level" is set at 17 µg/L. Notification/action levels, established by the State Division of Drinking Water, have been used to provide information to public water systems and others about certain non-regulated chemicals in drinking water that lack maximum contaminant levels (MCLs).

The concentration of naphthalene detected at GW-1 increased from 9.27 µg/L to 84.5 µg/L and the concentration detected at GW-2 decreased from 0.454 µg/L to 0.128 µg/L, respectively. No other elevated PAHs were detected in these samples.

Total Petroleum Hydrocarbons, BTEX/MTBE and 1,2-dibromoethane:

TPH diesel was detected above the conservative ESL set at 100 µg/L in samples GW-1 and GW-3 at concentrations of 1,490 and 336 µg/L, respectively. Low-level concentrations of TPH-motor oil were also detected in samples GW-1 and GW-3, well below the ESL which is set at 50,000 µg/L.

A low-level concentration of TPH-gas was detected in sample GW-1 at 250 µg/L, slightly above the conservative ESL set at 100 µg/L.

Only trace concentrations of BTEX were detected in sample GW-1. **MTBE and 1,2-dibromoethane were not detected in any of the grab groundwater samples.**

Cyanide:

Cyanide was detected in all groundwater samples at concentrations ranging from 28.2 to 604 µg/L. Only the concentration detected in sample GW-3 (604 µg/L) exceeded the ESL/MCL of 150 µg/L, which has increased from the previous detection of 237 µg/L.

Ammonia as Nitrogen:

Ammonia as nitrogen was detected in groundwater samples GW-1 and GW-3, at concentrations ranging from 1,100 to 50,000 µg/L. These concentrations are similar to those previously detected at these locations. There are no established risk-based screening values for ammonia as nitrogen in groundwater.

3.1.2 *Discussion of Grab Groundwater Analytical Results*

Concentrations of PAHs (including naphthalene), TPH-gas and diesel, and cyanide (GW-3 only) exceeding conservative groundwater ESLs continue to be limited to borings GW-1 and GW-3 (along the western property line with Jalisco Restaurant), with no current exceedances in upgradient boring GW-2. Similar order of magnitude groundwater concentrations detected in the Jalisco Restaurant property monitoring well network appear to correlate well with these detections, indicating a relatively small, low-concentration groundwater plume (see Figure 2).

We note that nearly 25 years of groundwater monitoring at the hydraulically downgradient Jalisco Restaurant property has confirmed that the dissolved plume is stable and not migrating.

3.2 SOIL VAPOR SAMPLING & LABORATORY ANALYSIS

In order to evaluate potential soil vapor intrusion concerns at the Site, in May 2016 we directed the installation of five (5) permanent dual-depth (i.e., 5 and 10 feet deep) soil vapor probes for periodic sampling and evaluation. Four (4) of the soil vapor sample points are installed adjacent to the warehouse (SV-1 through SV-4) and are expected to provide reasonable spatial coverage at accessible locations

adjacent to the building. Soil vapor sample point SV-5 is positioned along the western property boundary adjacent to the Jalisco Restaurant property where slightly elevated concentrations of soil vapor have been detected at that property. Soil vapor sample locations are shown on Figure 3.

Soil vapor sampling was conducted on March 30, 2017. Sampling of all existing Site soil vapor wells (SV-1 through SV-5; see Figure 3) was scheduled; however, "no flow" conditions were encountered at the following sample locations and depths, and no samples were obtained:

- **SV-1 at 10 feet** (water observed in sample tubing during purge)
- **SV-2 at 10 feet** (down hole vacuum > 7.5 inches Hg)
- **SV-3 at 5 and 10 feet** (down hole vacuum > 7.5 inches Hg)
- **SV-4 at 10 feet** (down hole vacuum > 7.5 inches Hg)

Note: These sample locations were checked again for flow conditions on May 17, 2017. A peristaltic pump was connected to the sample tubing at each location to gauge flow and check for the potential presence of water and it was confirmed that each sample point contained small volumes of water (~100 +/- mL). **To date, sampling of these locations has not been conducted since May 2016. We will periodically check these locations for flow conditions during the Summer of 2017 and will collect samples if appropriate. We will provide Environmental Health with at least 5 days notification prior to sampling.**

Soil vapor sampling was conducted in general accordance with the procedures outlined in the CalEPA's/DTSC/LARWQCB/SFRWQCB Advisory – Active Soil Gas Investigations (updated July 2015) and followed our Field Methodology for Active Soil Gas Sampling which is included in Appendix C. Samples were collected in laboratory supplied Summa canisters and submitted to a state certified laboratory (BC Laboratories, Inc) for the following analysis:

- VOCs analysis by EPA Method TO-15

3.2.1 *Soil Vapor Sample Analytical Results*

The Laboratory analytical report is included in Appendix D and current results along with previous May 2016 results are tabulated in Tables 3. Current soil vapor results are also presented on Figure 3.

During sample collection, leak trace monitoring was conducted by applying tracer gas (isopropyl alcohol) within a shroud that encapsulated the entire sample train and sample canister. The concentration of applied leak trace compound was monitored within the shroud via a handheld photoionization detector and recorded on a field data sheet for each sample. The field data sheets are included in Appendix C for reference. Each sample was then laboratory analyzed for the leak trace compound for comparison with the average concentration measured within the shroud for each sample to determine a percent leakage. The calculated percent leakage for each sample was non-detectable (with the exception of sample SV-5

at 5 feet) confirming that no significant leakage of ambient air to the sample canister had occurred, thus validating the integrity of these sample.

The calculated percent leakage for sample SV-5 (at 5 feet bgs) was 49%. Leakage greater than 5% is considered significant and therefore this particular sample cannot be considered as representative of subsurface conditions. The leak check monitoring results are presented in Table 3.

Soil vapor sample analytical results revealed the following:

Total Petroleum Hydrocarbons and BTEX:

Low levels of BTEX were detected below applicable commercial screening levels in sample SV-1 (5 feet) only, with the exception of benzene detected at a concentration of 69 µg/m^3, which is slightly the above the US EPA Regional Screening Level set at 53 µg/m^3. Benzene was previously not detected at this location (i.e., <5.9 µg/m^3).

Previously (May 2016) samples SV-2 (5 feet only), SV-3 (5 and 10 feet) and SV-5 (5 and 10 feet) yielded low level detections of TPH-gas and/or BTEX below applicable screening levels with highest concentrations detected in SV-3 at 10 feet bgs.

Naphthalene:

Naphthalene was not detected above laboratory detection limits in any of the collected samples (detection limits ranged from 78 to 86 µg/m^3), which are sufficiently below applicable screening thresholds for this compound, with the exception of the US EPA Regional Screening Level which is set at 12 µg/m^3.

Previously (May 2016) Naphthalene was not detected above laboratory detection limits at any of the sample locations (detection limits ranged from 16 to 160 µg/m^3). We note that the split sample collected from SV-5 at 5 and 10 feet bgs and analyzed by EPA Method TO-17 yielded non-detectable concentrations of naphthalene with a detection limit of 16 µg/m^3 (see Table 3)

Other VOCs:

No other VOCs were detected in any of the collected samples, with the exception of a trace concentration of acetone detected in sample SV-5 (at 5 feet), at concentrations well below applicable commercial screening thresholds. However, as noted above, the integrity of this sample was compromised (i.e., significant sample leakage) and cannot be relied upon.

Previously (May 2016) a few trace to low-level concentrations of other VOCs including tetrachloroethylene (PCE), styrene, n-Heptane, acetone and propylene were sporadically detected in samples SV-1, SV-2, SV-3 or SV-5, at concentrations well below applicable commercial screening thresholds (see Table 3). Sample SV-1 (10 foot sample depth) revealed a concentration of 1,2-Dibromoethane (a.k.a EDB) detected at 99 µg/m^3, above the California DTSC Modified Soil Gas Screening level ("near-source") set at 20 µg/m^3. This was the only detection that exceeded applicable commercial

screening thresholds during the May 2016 sampling event. There were no detections of any VOC compounds in the sample collected from the 5-foot depth at SV-1 (see Table 3).

3.2.2 *Discussion of Soil Vapor Sample Analytical Results*

VOC sample analytical results for samples that we were able to collect during the current monitoring period continue to confirm no exceedance above applicable commercial screening thresholds, with the exception of benzene detected at SV-1 (shallow), which was slightly the above the US EPA Regional Screening Level. Benzene was previously not detected at this location, nor was it previously detected in nearby shallow soil samples (B-3 and B-6 positioned ~15-20 feet away). All detected concentrations were several orders of magnitude below the Risk Based Soil Gas Screening Levels (RBSLs) developed for the adjacent Jalisco Restaurant property (see Table 3). A previous detection of 1,2-Dibromoethane (a.k.a EDB) at a concentration of 99 µg/m^3 in sample SV-1 at 10 feet below grade during the May 2016 sampling event was the only slightly elevated VOC concentration detected at the Site, which was above the California DTSC Modified Soil Gas Screening level ("near-source") set at 20 µg/m^3. **While we were unable to obtain a sample from the 10 foot deep sample point SV-1 during the current monitoring period to confirm this concentration, current and previous samples collected from the 5-foot sample depth at this location were non-detect for this compound. Furthermore, grab groundwater samples collected and analyzed for 1,2-Dibromoethane during the current monitoring period revealed no detections of this compound indicating there is no significant source of this compound present at the Site.**

While were unable to obtain samples from the 10 foot sample depths at 4 of the 5 locations, results of shallow samples obtained from sample points situated adjacent to the warehouse building (i.e., SV-1, SV-2 and SV-4) continue to indicate that there is not a soil vapor intrusion risk for the Site. We anticipate that future seasonal sampling will confirm this.

4.0 REMEDIAL ACTION GOALS

The results of extensive Site characterization analysis indicate that corrective actions completed at the adjacent Jalisco Restaurant property, which included focused shallow soil removal/capping and institutional controls (i.e., deed restriction) would similarly be appropriate for reducing risk at the subject commercial Site.

It has been more than 100 years since the MGP ceased operations and ongoing groundwater and soil gas monitoring at the Jalisco Restaurant property indicates that residual contaminants in these media generally appear to be in equilibrium. Based on the extensive data collected to date, it is very unlikely that residual soil or groundwater impacts will create a soil vapor intrusion issue, and conversely, residual soil impacts are not a leachable source that will impact shallow groundwater in any significant way. **Because residual contaminants in groundwater and soil vapor media do not pose a threat to human health or the environment, they are not being considered for remedial action.**

Residual contaminant concentrations in shallow soils could potentially pose a threat to human health during construction/maintenance (i.e., future utility trench installations or planter area maintenance) where workers could be directly exposed to the impacted soils. **Therefore, the overall goal of any proposed remedial action will be to reduce potential future exposure of humans (workers/visitors) to prevent potential ingestion or dermal contact to underlying soils impacted by elevated concentrations of MGP contaminants.**

5.0 FEASIBILITY STUDY – REMEDIAL ACTION ALTERNATIVES

We screened three (3) remedial action options/remedial alternatives for reducing soil concentrations at the Site, which include:

1. No Action (with institutional control)
2. Focused excavation with offsite disposal and capping with institutional control
3. Removal of all accessible soil impacts with institutional control

Each remedial alternative is evaluated for technical feasibility, cost and effectiveness below:

5.1 ALTERNATIVE NO. 1 - NO ACTION WITH INSTITUTIONAL CONTROL

The No Action Alternative serves as a baseline in which other remedial action alternatives can be evaluated. There would be no remedial action under this alternative and no associated cost, aside from future monitoring of the existing cap of parking lot asphalt and the building's concrete slab foundation.

There would be no additional risk posed to the community or the environment as no action would be conducted.

There are no remediation costs associated with this alternative.

5.2 ALTERNATIVE NO. 2 - FOCUSED EXCAVATION WITH OFFSITE DISPOSAL AND CAPPING WITH INSTITUTIONAL CONTROL

This remedial action alternative entails:

- Removal of the well characterized near surface soil impacts from an approximate 6,000 ft^2 area within the asphalt parking lot to a depth of 1.5 feet bgs (see Figure 4)
- Removal of two (2) existing tree planter wells, which would not be replaced
- Destruction of three (3) soil vapor monitoring points that are situated within the footprint of proposed remedial excavation areas
- The affected parking lot area would be restored with 15-inches of compacted base rock and 3-inches of asphalt. The unaffected areas of the parking lot would be slurry sealed to provide

additional integrity and impede surface water infiltration. Parking lot surface water drainage to the city storm sewer along E. Fifth Street would also be improved upon to minimize or eliminate ponding.

- The focused near surface soil removal effort would generate approximately 310 cubic yards of non-hazardous soils exceeding commercial screening thresholds and approximately 48 cubic yards of soils classified as California hazardous waste (also exceeding applicable commercial screening thresholds) for off-site disposal at permitted landfills.
- Recording of an environmental deed restriction/land use covenant restricting the property to commercial use only
- Preparation and submittal of an Environmental Site Management Plan documenting the locations of residual soil impacts

This remedial action alternative is technically feasible. Conventional earth moving equipment such as an excavator and front-end loader could easily access the Site to conduct the removal effort, which would be anticipated to take approximately one week to complete. Soil off-hauling would result in approximately 20 end dump truck loads from the Site to the receiving landfills. Risks to the community during remedial action activities could include potential nuisance dust, increased traffic and stress to roadways from export of impacted soils and import of fill material.

The estimated cost for the Remedial Action alternative is $117,960 (see Table 4)

5.3 ALTERNATIVE NO. 3 - EXCAVATION OF ALL ACCESSIBLE SOIL IMPACTS WITH OFFSITE DISPOSAL AND INSTITUTIONAL CONTROL

This remedial action alternative entails:

- Removal of the well characterized shallow soil impacts from an approximate 6,000 ft^2 area within the asphalt parking lot to depth of 1.5 feet bgs and removal of deeper soil impacts from an approximate 2,200 ft^2 area to a depth of approximately 20 feet bgs (see Figure 5).
- Deeper excavation would require shoring on all sides and a sloped 3:1 entrance ramp. The entrance ramp alone would generate approximately 890 cubic yards of additional soils that would need to be off-hauled and subsequently replaced as there is no space on-site to stockpile and subsequently reuse these soils.
- Removal of two (2) existing tree planter wells, which could be replaced
- Destruction of three (3) soil vapor monitoring points that are situated within the footprint of proposed remedial excavation areas
- The deeper excavation footprint would be backfilled with quarry sourced fill materials and compacted in lifts to 1.5 feet bgs. The affected parking lot area would then be restored with 15-inches of compacted base rock and 3-inches of asphalt.

- The excavation of all accessible soil impacts beneath the parking lot would generate approximately 1,758 cubic yards of non-hazardous soils and approximately 48 cubic yards of soils classified as California hazardous waste for off-site disposal at permitted landfills.
- Recording of an environmental deed restriction/land use covenant restricting the property to commercial use only as some limited residual soil impacts would remain beneath the warehouse structure (i.e., elevated lead in sub-slab fill detected at DG-2 and DG-3).
- Preparation and submittal of an Environmental Site Management Plan documenting the locations of residual soil impacts.

This remedial action alternative would be very challenging do to the depth of excavation and limited space onsite, and is not recommended. In order to achieve excavation depths of 20 feet bgs shoring would be required and a minimum 3:1 sloped entrance ramp would be needed for equipment to move in and out of the excavation, resulting in a significant additional volume of soil that would need to be off-hauled and subsequently replaced. Conventional earth moving equipment such as an excavator and front-end loader could access the Site to conduct the removal effort, but would be very constrained. Soil off-hauling and import would result in approximately 200 end dump truck loads from the Site to the receiving landfills. Risks to the community during remedial action activities could include potential nuisance dust, nuisance odor, increased traffic and stress to roadways from export of impacted soils and import of fill material.

The estimated cost for the remedial action alternative is $841,185 (see Table 5).

6.0 SELECTED REMEDIAL ACTION - FOCUSED EXCAVATION WITH OFFSITE DISPOSAL AND CAPPING WITH INSTITUTIONAL CONTROL

The most cost effective and practical remedial action for the Site is *Remedial Alternative No. 2* - focused excavation of shallow soil impacts with capping and institutional control (i.e., deed restriction). This alternative removes the majority of the most significant, well defined soil impacts from the subsurface while effectively reducing potential future exposure to on-site workers and visitors (see Figure 4). The cap (i.e. imported clean fill/base rock and asphalt pavement) would prevent direct contact with contaminants by property users. Because of the relatively immobile nature of the Site contaminants of concern, it is our opinion that there would be no increased overall benefit to removing deeper soil impacts as it would pose an incredible fiscal hardship on the property owners who innocently purchased the subject Site in 1987 with assurances the property was not impacted (Appendix F).

The advantages of implementing the selected remedial action include a significant reduction in:

- overall cost - an estimated $117,960 vs. $841,185
- worker exposure to contaminants during soil removal efforts (approximately 5 days vs. 25 days)
- increased traffic and stress to local roadways from import/export of soil and fill material

- off-site migration of impacted soils via (i.e., via potential tire tracking or dust)
- dust and potential nuisance odor to on-site workers and nearby community
- overall disturbance to the on-site tenants that require the parking lot area for numerous shipments of product during the week and customer access

The following subsections describe in detail the remedial action implementation field activities including impacted soil removal and off-site disposal and cap emplacement / parking lot restoration.

6.1 REMEDIAL EXCAVATION OF SHALLOW IMPACTED SOILS

Based on results of the extensive soil characterization completed at the Site, we have defined the areal extent of soil impacts within the parking lot to be approximately 6,000 square feet (see Figure 4). The lateral extent of impacted areas proposed for removal are defined to the north and south by surrounding soil samples that revealed no elevated impacts (i.e., less than applicable commercial screening levels, at a minimum), to the west by adjacent property boundaries, and to the eat by a 5-foot wide concrete walkway that runs parallel to the on-site warehouse building. The impacted areas proposed for removal include: 1) a smaller, approximate 895ft^2 area at the northwestern corner of the property, and 2) a larger, approximate 5,160 ft^2 area within the central portion of the parking lot.

The most significant PAH, lead and TPH soil impacts are generally limited to the 1.5 foot sample depth across these impacted areas, with the exception of a few sample locations (i.e., B-8, B-9, DG-1 and P-2) that exhibit deeper soil impacts of similar magnitude. Previously collected soil sample analytical data is presented in Tables 6 through 8.

Two (2) of the existing planters situated within the proposed excavation footprints will be completely removed as part of the removal effort and will not be replaced.

Remedial excavation of these well-defined soil impacts to a depth of 1.5 feet bgs will result in approximately 358 yds^3 of soil for off-site disposal. Approximately 48 yds^3 of this material is classified as a State hazardous waste for disposal due to lead soluble threshold limit concentrations (STLC) that exceed 5 mg/L (samples B-7 and B-11; see Figure 4 & Table 7).

6.2 PRE-EXCAVATION ACTIVITIES

Pre-excavation tasks will include the following:

- Obtain regulatory approved of this Remedial Action Plan
- Preparation of an Environmental Site Health & Safety Plan in accordance with State and Federal hazardous waste operations regulations (California Code of Regulations, Title 8, Section 5192 and 29 Code of Federal Regulations 1910.120) (included as Appendix E)
- Pre-Profiling soils for disposal at appropriate landfills
- Obtain a Grading Permit through the City of Watsonville Public Works Department

- Obtain an Encroachment Permit through the City of Watsonville Public Works Department for parking lane encroachment adjacent to the Site for truck loading
- Issuing a Public Notification to property owners with an approximate 200-foot radius of the Site describing the proposed remedial actions
- Properly destroy existing soil vapor monitoring wells SV-2, SV-3, and SV-5 under permit issued by Santa Cruz County Environmental Health Services as these wells are situated within the proposed remedial excavation footprint
- Prior to beginning excavation activities, Underground Service Alert (USA) will be contacted at least 48 hours in advance to identify the location of utilities that enter the property. The perimeter of the entire Site will be clearly marked with white paint as required by USA. USA will contact all utility owners of record within the Site vicinity and notify them of the intent to excavate. All utility owners of record will be expected to clearly mark the position of their utilities on the ground surface throughout the designated area.

6.3 EXCAVATION ACTIVITIES

A Haz-certified licensed excavation contractor will be retained to excavate and load the impacted soils on to end dump trucks for transport to the designated landfills. Details regarding landfill pre-approval and approved facilities are included in Section 6.3.4 of this report. The soil will be removed using standard earthmoving equipment (e.g., excavator, front end loader).

Prior to soil removal efforts, the following existing surface features / coverings within the prescribed excavation areas will be removed and hauled to an approximate recycling and/or disposal facility:

- A cinderblock trash enclosure and associated concrete pad
- Two planter areas / tree wells including the associated landscaping
- A concrete swale
- Asphalt

All soils / base material beneath these surface features / coverings to a depth of 1.5 feet below the existing parking lot grade within the prescribed excavation areas will be removed and hauled to appropriate landfills for proper disposal.

6.3.1 *Surveying Activities*

Prior to soil removal activities, we will clearly mark out the proposed excavation footprints as shown on Figure 4 in order to accurately guide the soil removal effort. The final depth of the proposed remedial excavations (i.e., 1.5 feet below the respective Site grade) will be confirmed by using standard elevation control equipment (laser transit level).

6.3.2 *Dust Control*

During excavation activities, depending on soil conditions, there is potential to generate airborne dust. The following dust control measures will be employed to protect on-Site and off-site receptors from chemicals in soil and nuisance dust.

- Dust suppression will be performed by lightly spraying or misting the work areas with water.
- During soil load-out, efforts will be made to minimize the soil drop height from the excavator's bucket into the transport trucks. Misting may also be used on soil placed in the transport trucks. After the soil is loaded into the transport trucks, the soil will be covered with fabric tarp to prevent soil from spilling out of the truck during transport to the disposal facility.
- Before exiting the job site, the vehicle's tires will be inspected and brushed, if necessary, to ensure that potentially impacted soil remains on-Site. In addition, street sweeping may be employed if sediment is being inadvertently tracked off-site.
- Weather will be monitored to prepare for potential rainfall during excavation activities. If precipitation is anticipated, Best Management Practices (i.e., additional engineering controls such as wattles, silt traps installed in storm drains, etc.) will be implemented as needed to minimize the migration of sediment from the Site. A Storm Water Pollution Prevention Plan (SWPPP) is not required for these limited grading activities.

6.3.3 *Dust Monitoring*

Dust monitoring strategies and methodologies will be implemented during soil excavation activities to achieve several goals:

1. Construction Worker Health & Safety
   - Minimize dust generated in the work zone during the soil removal efforts to reduce particulate inhalation and provide feedback to site personnel regarding the effeteness of dust control measures
2. Off-Site Health & Safety
   - Measure particulates at the down-wind perimeter of the Site. Air monitoring will be conducted to monitor the effectiveness of dust control measures implemented during excavation and soil removal activities, and ensure that off-Site migration of airborne particulates is not occurring.

Effective dust control in the work zone will be monitored by visual observation. If dust is visually observed, then dust suppression measures (i.e., wetting) will be increased. In addition, particulate monitoring equipment (i.e., DustTrak 8533 Dust Monitor) will be set up at the Site for continuous monitoring of particulate concentrations throughout each workday. Specifically, we will deploy one monitor at the downwind perimeter of the Site to monitor off-site migration of dust. Wind direction will be determined

by deploying small windsocks throughout the Site and the dust monitor will be adjusted accordingly. A Dust Action Level of 2.5 mg/m^3 for respirable fraction of nuisance dust will be the "not to exceed" threshold for evaluating effective dust control at the Site[11]. Dust monitor data will be reviewed at the end of each work day to evaluate whether or not the Dust Action Level was exceeded, and if so increased efforts will be employed to reduce concentrations.

6.3.4 *Off-Site Soil Disposal*

Soils planned for removal will be pre-profiled with the following landfills based on the existing Site characterization data such that soil can be loaded directly onto transport trucks during excavation activities, thus eliminating stockpiling:

Class III Landfill Disposal Facility – John Smith Road Landfill, Hollister, CA

- Preliminary communication with this landfill indicates that the approximate 310 yds^3 (~434 tons) of non-hazardous soils can be disposed of at this facility as Petroleum Contaminated Soils.

Class I Disposal Facility - Kettleman Hills Landfill, Kettleman Hills, CA

- Preliminary communication with this landfill indicates that the approximate 48 yds^3 (~68 tons) of soils with STLC lead concentrations exceeding 5 mg/L can be disposed of at this facility as a State hazardous waste.

Soils will be loaded onto 15-yard capacity end dump trucks for direct transport to the approved landfill facilities. All hazardous waste material will be hauled by a licensed haz-waste hauler. Documentation of proper soil disposal will be provided in a follow-up summary report (i.e., manifests and landfill receipts).

6.3.5 *Confirmation Soil Sampling*

The extensive Site soil characterization data set provides adequate documentation of residual soil impacts that will remain at the Site following remedial excavation activities. It is our opinion that confirmation soil sampling following remedial excavation is unnecessary and is therefore not planned.

6.4 SOIL CAP / SITE RESTORATION

Following completion of the prescribed remedial excavation, we will subcontract with a licensed grading and paving company to restore the parking lot as follows:

- Emplace 15 inches of compacted base rock into the excavation areas (i.e., recycled concrete sourced from Buena Vista Landfill, Watsonville), followed by 3 inches of asphaltic concrete

[11] The Dust Action Level is defined as ½ the OSHA Permissible Exposure Limit of the respirable fraction for particulates which is set at 5 µg/m^3

- Replace a concert swale that channels parking lot surface water to a storm drain inlet along E. Fifth Street
- Replace a cinder block trash enclosure and concrete pad that is situated at the northwestern corner of the site
- Apply a slurry seal to the unaffected areas of the parking lot to improve asphalt pavement integrity and minimize surface water infiltration
- Restripe parking spaces
- As previously noted, two existing planter areas that will be removed as part of remedial excavation activities will not be replaced, but will be paved over in order to eliminate future contact with impacted soils beneath these locations.

7.0 PROPOSED SCHEDULE AND REMEDIAL ACTION COMPLETION REPORTING

Following the approval of this Remedial Action Plan, a detailed schedule for implementation and completion will be provided to Environmental Health. We anticipate completing the proposed remedial action activities in mid-to-late summer 2017.

Within four (4) to six (6) weeks following completion of remedial excavation and Site restoration / capping we will provide a report summarizing field activities. We will also prepare an *Environmental Site Management Plan* (under separate cover) that will provide a description of the capped area, residual soil impacts and notification procedures should potential future subsurface utility work at the Site penetrate into the residual impacts.

Following the completion and documentation of remedial actions, preparation and submittal of an *Environmental Site Management Plan*, and recording of an environmental deed restriction documenting the residual soil impacts and restricting the property for commercial use only, we will request that Environmental Health issue a No Further Action letter for the completed remediation.

8.0 LIMITATIONS

Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic and engineering principles and practices. This warranty is in lieu of all others, either express or implied. The analysis and conclusions in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modification of the opinions expressed herein.

All work related to this investigation and remediation at this Site is done under the direct supervision of a Professional Geologist or Engineer, registered in California, and experienced in environmental assessment and remediation.

Thank you for this opportunity to participate in the environmental assessment of this Site. If you have any questions or comments regarding this project, please contact us at our offices.

Sincerely yours,

WEBER, HAYES AND ASSOCIATES

A California Corporation

By: _____ And: _____

Jered Chaney, PG
Project Geologist

Pat Hoban PG
Senior Geologist

9.0 REFERENCES

PREVIOUS ENVIRONMENTAL REPORTS PREPARED FOR:

Former Watsonville-1 Manufactured Gas Plant – 618 Main Street, Watsonville

Draft Screening Levels for Chemicals in Soil Gas, Sub-Slab Soil Gas, and Indoor Air, Iris Environmental, dated September 29, 2009.

Contingency Plan for Soil Gas Sampling, Terra Pacific Group, dated September 30, 2009.

Final Removal Action Completion Report, Terra Pacific Group, dated October 27, 2011.

Vapor Extraction Pilot Study Results, Terra Pacific Group, dated December 21, 2011.

April 2015 Groundwater and Soil Gas Monitoring Report, Terra Pacific Group, dated June 20, 2015.

25 East Fifth Street, Watsonville

Preliminary Assessment of Potential Historic Land Use Impacts, Weber, Hayes and Associates, dated December 10, 2009.

Preliminary Soil and Groundwater Assessment, Weber, Hayes and Associates*,* dated July 29, 2010

Work Plan for Additional Site Assessment, Weber, Hayes and Associates, dated January 13, 2016

Proposed Semi-Annual Groundwater and Soil Vapor Monitoring, dated March 6, 2017

REGULATORY CORRESPONDENCE FOR 25 EAST FIFTH STREET, WATSONVILLE:

Letter Directive: *Response to Preliminary Soil and Groundwater Assessment* (Request for Work Plan), County of Santa Cruz Health Services Agency, dated December 15, 2016

Email Correspondence: Request for additional soil analysis and Work Plan approval, County of Santa Cruz Health Services Agency and Weber, Hayes and Associates, dated April 7, 2016

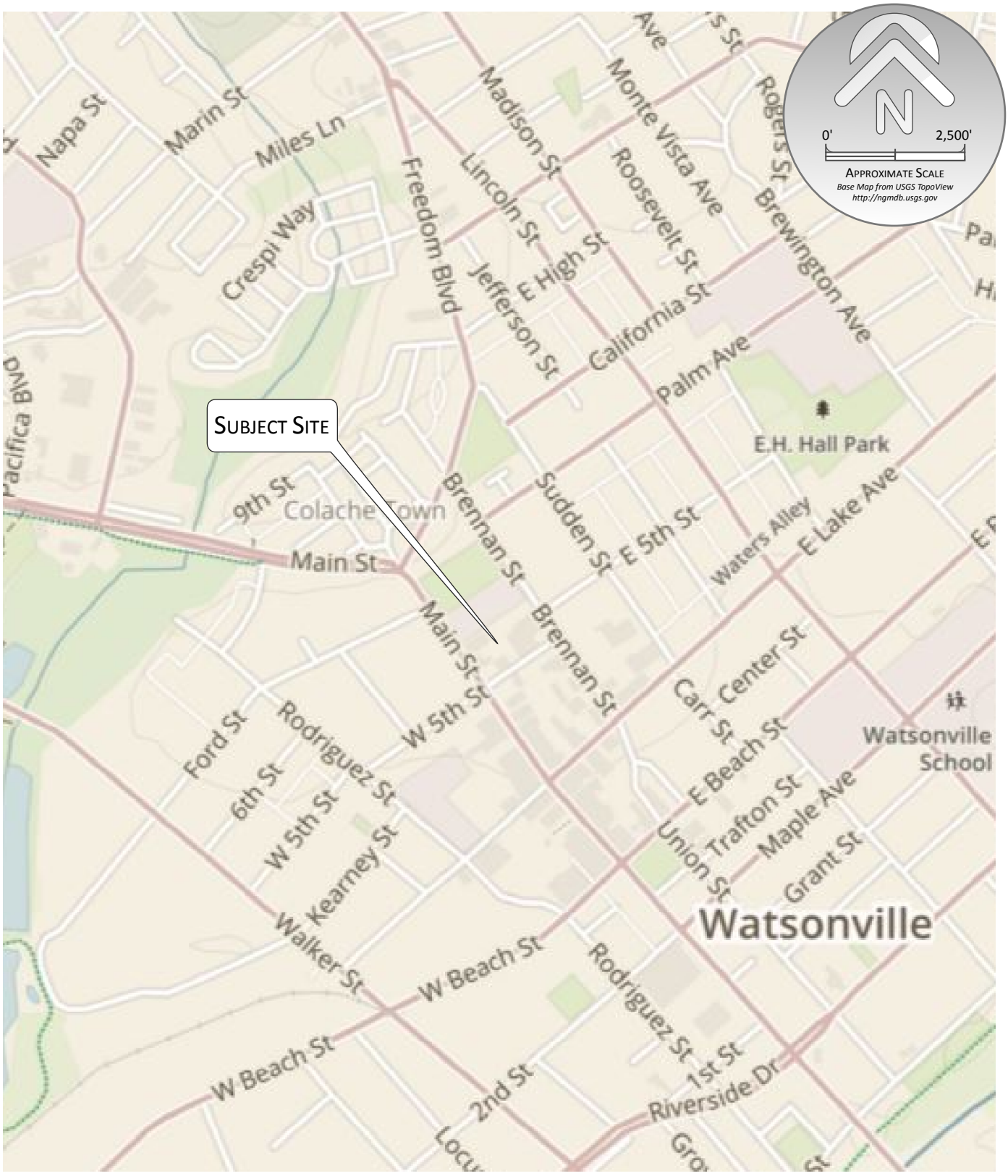
Email Correspondence: Testing for Ammonia as Nitrogen (response to regulatory concerns that this may be a contaminant of potential concern), County of Santa Cruz Health Services Agency and Weber, Hayes and Associates, dated May 4, 2016

Email Correspondence: Results update and Request to install Soil Data Gap Borings, Weber, Hayes and Associates, dated July 6, 2016 (request approved by County of Santa Cruz Health Services Agency on July 26, 2016)

Letter Directive: *Response to Additional Site Assessment* (Request for Feasibility Study & Remedial Action Plan), County of Santa Cruz Health Services Agency, dated February 24, 2017

Letter Directive: *Response to Proposed Semi-Annual Groundwater and Soil Vapor Monitoring*), County of Santa Cruz Health Services Agency, dated March 8, 2017

FIGURES



WEBER, HAYES & ASSOCIATES
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LOCATION MAP

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: SEPTEMBER 2015

REVISIONS/NOTES:

FIGURE 1
Project 2X404

Explanation of Symbols

GW-2 Current & Previous Grab Groundwater Sample
All concentrations presented in ug/L

Previous On-Site Sample Locations

GW-4 Grab Groundwater Sample (5/4/2016)

DP-7 Grab Groundwater Sample (June 29, 2010)

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

Approximate Limits of Groundwater Contaminant Plume Exceeding ESLs/MCLs

GW-1

Temporary Screen Interval:	19-29'
Depth to Groundwater:	23.5'
Naphthalene:	84.5
Gasoline Range C5-C12:	250
Diesel Range C12-C22:	1,490
Ammonia (as N):	50,000

GW-2

Temporary Screen Interval:	23-27'
Depth to Groundwater:	22.4'
Ammonia (as N):	< 280

GW-3

Temporary Screen Interval:	24-27'
Depth to Groundwater:	25.8'
Naphthalene:	2.78
Benzo[a]pyrene:	0.0158
Benzo[a]anthracene:	0.0531
Benzo[b]fluoranthene:	0.0184
Diesel Range C12-C22:	336
Cyanide:	604
Ammonia (as N):	1,100

Parcel Boundary
APN: 081-151-39

0' 30'
Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
(Based on groundwater monitoring conducted at Former Watsonville-1 Manufactured Gas Plant)

Baker Bros. Appliance
Tile & Marble Outlet
Chase Bank
Watsonville Cyclery
Jalisco Restaurant
Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC
La Rosa Supermercado
Laundromat
Residence

Former Gas Holder
Former Retorts, & Purifier/Scrubber
Generator Room
Purifier
Former Above Ground Crude Oil Tanks

DP-1 DP-2 DP-5 DP-7 GW-4 GW-5

MW-WAT1-1 MW-WAT1-2 MW-WAT1-3 MW-WAT1-4 MW-WAT1-5 MW-WAT1-6 MW-WAT1-7
SG-1A SG-1B SG-2A SG-2B SG-2C SG-3A SG-4A SG-5A SG-5B SG-6A SG-8 SG-9 SG-9A SG-10

MAIN STREET

EAST FIFTH STREET

Groundwater analytical results presented on Tables 1 & 2

Note: Only Concentrations with exceedances above Environmental Screening Levels are presented in this figure.

Note: Ammonia (as Nitrogen) has no established screening threshold

FIGURE 2
Project 2X404

SITE MAP WITH GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS MARCH 22, 2017

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: JUNE 2017

FILE: 2X404.ONETO-WATSONVILLE\REPORT\2017 SEMI-ANNUAL MONITORING\SPRING 2017\FIGURES

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Explanation of Symbols

SV-1 Multi-Depth Soil Vapor Well (5 and 10 feet bgs)

All results presented in ug/m^3

We were unable to obtain samples from soil vapor monitoring points SV-1 (10 feet), SV-2 (10 feet), SV-3 (5 & 10 feet) and SV-4 (10 feet) on March 30, 2017 due to "No Flow" conditions. These sample locations were checked again for flow conditions on May 17, 2017 using a peristaltic pump. Slugs of water were observed in the sample tubing at each location during purging and no soil vapor samples were obtained. An effort was made to evacuate all water from the sample tubing and well annulus. Small volumes of water (i.e., ~100 mL) were removed at each location until no more water was observed.

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Sample (Terra Pacific Group)

SV-1

Depth:	5'
TPH-g	<290
Benzene	69
Toluene	59
EthylBenzene	64
Xylenes	170
Naphthalene	<82

All Other VOCs = ND

SV-5

Depth:	5'	10'
TPH-g	<290	<290
Benzene	<3.2	<3.1
Toluene	<2.4	<2.4
EthylBenzene	<2.1	<2.1
Xylenes	<6.4	<6.3
Naphthalene	<82	<81

All Other VOCs = ND

SV-2

Depth:	5'
TPH-g	<310
Benzene	<3.3
Toluene	<2.5
EthylBenzene	<2.2
Xylenes	<6.8
Naphthalene	<86

All Other VOCs = ND

SV-4

Depth:	5'
TPH-g	<280
Benzene	<3.0
Toluene	<2.3
EthylBenzene	<2.0
Xylenes	<6.1
Naphthalene	<78

All Other VOCs = ND

SV-3

No Samples Obtained - No Flow

Parcel Boundary
APN: 081-151-39

0' 30'

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

Tile & Marble Outlet

Baker Bros. Appliance

Watsonville Cyclery

Chase Bank

Former Gas Holder

Former Retorts, & Purifier/Scrubber

Generator Room

Purifier

Former Above Ground Crude Oil Tanks

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

La Rosa Supermercado

Laundromat

Residence

MW-WAT1-1 MW-WAT1-2 MW-WAT1-3 MW-WAT1-4 MW-WAT1-5 MW-WAT1-6 MW-WAT1-7

SG-1A SG-1B SG-2A SG-2B SG-2C SG-3A SG-4A SG-5A SG-5B SG-6A SG-8 SG-9 SG-9A SG-10

Main Street

East Fifth Street

Soil Vapor analytical results presented on Table 3

No Contaminants of Concern exceeded the CA DTSC-Modified Soil Gas Levels "Near Source" Threshold Limits for Commercial Scenarios

Figure 3
Project 2X404

Site Map with Soil Vapor Sample Analytical Results
March 30, 2017

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File: 2x404.Oneto-watsonville\Report\2017 Semi-Annual Monitoring\Spring 2017\Figures

Date: June 2017

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

FIGURE 4

Project 2X404.B

SITE MAP SHOWING: 1) REMEDIAL ALTERNATIVE NO.2 - FOCUSED REMOVAL OF SHALLOW SOIL IMPACTS, AND 2) SOIL IMPACTS EXCEEDING COMMERCIAL SCREENING THRESHOLDS

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: MAY 2017

FILE:2X404\REPORT\2017 CAP WP\FIGURES\

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

EXPLANATION OF SYMBOLS

Proposed Removal Action and Cap Areas
Non-hazardous waste removal to 1.5 feet bgs
(~310 yds^3 or ~434 tons for off-site disposal)

Proposed Removal Action and Cap Areas
Hazardous waste removal to 1.5 feet bgs
(~48 yds^3 or ~68 tons for off-site disposal)

Soil Sample Locations (WHA, 2016)

- **DG-1** Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** Shallow Soil Sample (0.5, 1.5 & 4 feet bgs; B-9 to 18 feet bgs)
- **B-3** Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)

Former Watsonville-1 MGP Site Existing Sample Locations

- Groundwater Monitoring Well (Terra Pacific Group)
- Soil Vapor Well (Terra Pacific Group)

Concentrations in Soil (mg/kg)

Note: Only Concentrations with exceedances above applicable screening threshold values are presented in this figure.

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Although most samples yielded concentrations of **cyanide** exceeding the very low-level commercial screening threshold protective of potential leaching impacts to groundwater, none exceeded the direct exposure threshold.

B-1

Depth:	BaP EQV:
0.5'	28.626
1.5'	0.101
4'	0.005

B-8

Depth:	BaP EQV:	Diesel Range:
0.5'	0.001	--
1.5'	5.299	--
4'	0.001	--
10'	0.002	--
15'	0.197	346
17'	10.662	1,850
20'	0.010	29.5
23'	0.001	12.1

DG-1

Depth:	BaP EQV:	Lead:
0.5'	2.253	7.4
1.5'	2.500	7.06
4'	3.724	83.4
6'	0.001	--
8'	0.001	--

DG-2

Depth:	Lead:
0.5'	194
1.5'	18.8
4'	8.1

B-9

Depth:	BaP EQV:	Diesel Range:	Motor Oil Range:
0.5'	0.039	ND	2,860
1.5'	89.894	4.26	3.41 J
4'	37.983	4,980	12,350
6'	4.200	358	1,231
8'	1.703	234	409

DG-3

Depth:	Lead:
0.5'	182
1.5'	15.5
4'	8.25

P-2

Depth:	BaP EQV:	Lead:	Diesel Range:	Motor Oil Range:
0.5'	0.001	0.746	2.37 J	2.13 J
1.5'	18.156	211	2,260	6,980
4'	30.274	17.3	4,130	8,060
6'	4.856	6.83	706	899.3
8'	5.488	6.27	2,730	2,109
12'	2.226	--	2,210	1,305
15.5'	0.345	--	394	268.9
18'	3.098	--	2,220	1,341

B-7

Depth:	BaP EQV:	Lead:	Diesel Range:
0.5'	0.002	0.936	<7.54
1.5'	16.768	356	928
4'	0.001	7.34	--

B-10

Depth:	BaP EQV:
0.5'	0.493
1.5'	14.013
4'	0.002

B-12

Depth:	Lead:
0.5'	376
1.5'	63
4'	6.46

B-11

Depth:	BaP EQV:	Lead:
0.5'	0.003	0.968
1.5'	4.782	206
4'	0.002	6.43
10'	0.001	3.79
15'	0.001	--
20'	0.001	--
24'	0.001	--
28'	0.001	--

Parcel Boundary
APN: 081-151-39

Approximate Scale
0' 30'
Base Map Generated from http://gis.co.santa-cruz.ca.us

Baker Bros. Appliance
Tile & Marble Outlet
Watsonville Cyclery
Jalisco Restaurant
Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC
La Rosa Supermercado
Residence
Laundromat
Former Gas Holder
Former Retorts, & Purifier/Scrubber
Former Above Ground Crude Oil Tanks
Generator Room
concrete walkway
East Fifth Street
Main Street

Explanation of Symbols

Proposed Removal Action Areas
Non-hazardous waste removal to 1.5 feet bgs
(310 yds^3 or ~434 tons for off-site disposal)

Proposed Removal Action Areas
Hazardous waste removal to 1.5 feet bgs
(~48 yds^3 or ~68 tons for off-site disposal)

Deeper Removal Action Area
Non-hazardous waste removal up to 20 feet bgs
(~1,515 yds^3 or ~2,120 tons for off-site disposal)

Soil Sample Locations (WHA, 2016)

DG-1 Data Gap Soil Sample (to at least 8 feet bgs)

B-1 Shallow Soil Sample (0.5, 1.5 & 4 feet bgs; B-9 to 18 feet bgs)

B-3 Shallow & Deeper Soil Sample (to at least 20 feet bgs)

P-1 Tree Well/Planter Shallow Soil Sample
(0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

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Depth:	BaP EQV:
0.5′	**28.626**
1.5′	0.101
4′	0.005

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Depth:	BaP EQV:	Diesel Range:
0.5′	0.001	--
1.5′	**5.299**	--
4′	0.001	--
10′	0.002	--
15′	0.197	346
17′	**10.662**	**1,850**
20′	0.010	29.5
23′	0.001	12.1

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Depth:	BaP EQV:	Lead:
0.5′	**2.253**	7.4
1.5′	**2.500**	7.06
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8′	0.001	--

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Depth:	Lead:
0.5′	**194**
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6′	**4.200**	358	1,231
8′	**1.703**	234	409

DG-3

Depth:	Lead:
0.5′	**182**
1.5′	15.5
4′	8.25

P-2

Depth:	BaP EQV:	Lead:	Diesel Range:	Motor Oil Range:
0.5′	0.001	0.746	2.37 J	2.13 J
1.5′	**18.156**	**211**	**2,260**	**6,980**
4′	**30.274**	17.3	**4,130**	**8,060**
6′	**4.856**	6.83	**706**	899.3
8′	**5.488**	6.27	**2,730**	2,109
12′	**2.226**	--	**2,210**	1,305
15.5′	0.345	--	394	268.9
18′	**3.098**	--	**2,220**	1,341

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Depth:	BaP EQV:	Lead:	Diesel Range:
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1.5′	**16.768**	**356**	**928**
4′	0.001	7.34	--

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Depth:	BaP EQV:
0.5′	0.493
1.5′	**14.013**
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B-12

Depth:	Lead:
0.5′	**376**
1.5′	63
4′	6.46

B-11

Depth:	BaP EQV:	Lead:
0.5′	0.003	0.968
1.5′	**4.782**	**206**
4′	0.002	6.43
10′	0.001	3.79
15′	0.001	--
20′	0.001	--
24′	0.001	--
28′	0.001	--

Parcel Boundary
APN: 081-151-39

Approximate Scale
Base Map Generated from
http://gis.co.santa-cruz.ca.us
0′ 30′

Baker Bros. Appliance
Tile & Marble Outlet
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concrete walkway
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La Rosa Supermercado
Residence
Laundromat
East Fifth Street
Main Street

Concentrations in Soil (mg/kg)

Note: Only Concentrations with exceedances above applicable screening threshold values are presented in this figure.

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Although most samples yielded concentrations of **cyanide** exceeding the very low-level commercial screening threshold protective of potential leaching impacts to groundwater, none exceeded the direct exposure threshold.

Figure 5
Project 2X404.B

Site Map Showing: 1) Remedial Alternative No.3 - Removal of All Accessible Soil Impacts, and 2) Soil Impacts Exceeding Commercial Screening Thresholds

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File:2x404\Report\2017 CAP WP\Figures\

Date: May 2017

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

TABLES

Table 1: Grab Groundwater - PAH Analytical Results
Additional Site Assessment & Semi-Annual Monitoirng
25 East Fifth Street, Watsonville, CA

All soil results are in micrograms per liter (ug/L)

Sample Information				***Polycyclic Aromatic Hydrocarbons (PAHs)*** *by EPA Method 8270C-SIM*														
Sample ID	***Sample Date***	****Depth to Groundwater (ft, bgs)***	***Temporary Screen Interval (feet, bgs)***	***Acenaphthene***	***Acenaphthylene***	***Anthracene***	***Benzo[g,h,i] perylene***	***Fluoranthene***	***Fluorene***	***Naphthalene***	***Phenanthrene***	***Pyrene***	***Benzo[a]pyrene***	***Benzo[a] anthracene***	***Benzo[b] fluoranthene***	***Benzo[k] fluoranthene***	***Chrysene***	***Dibenzo[a,h] anthracene***	***Indeno [1,2,3-cd] pyrene***
GW-1	**3/22/2017**	**23.5**	**19 - 29**	**10.3**	**4.93**	**0.267**	**0.00326 J, B**	< 0.0157	**0.488**	**84.5**	**0.243**	**0.0380 J**	< 0.0116	< 0.00410	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
	5/4/2016	**27.9**	**22 - 32**	**0.446**	**0.256**	**0.0480 J**	**0.00393 J, B**	< 0.0157	**0.176**	**9.27**	**0.0673 B**	< 0.0117	< 0.0116	< 0.00410	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-2	**3/22/2017**	**22.4**	**23 - 27**	< 0.0100	< 0.0120	< 0.0140	**0.00386 J, B**	< 0.0157	< 0.00850	**0.128 J, B**	**0.00848 J**	< 0.0117	< 0.0116	< 0.00410	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
	5/4/2016	**27**	**24 - 34**	**0.0191 J**	< 0.0120	**0.0169 J**	**0.00459 J, B**	< 0.0157	**0.0377 J**	**0.454**	**0.0379 J, B**	< 0.0117	< 0.0116	**0.00789 J**	**0.00338 J**	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-3	**3/22/2017**	**25.8**	**24 - 27**	**0.25**	**0.126**	**0.185**	**0.00732 J, B**	**0.173**	**0.28**	**2.78**	**0.297**	**0.156**	**0.0158 J**	**0.0531**	**0.0184 J**	< 0.0136	**0.0328 J**	< 0.00396	< 0.0148
	5/4/2016	**26.5**	**24 - 34**	**7.85**	**3.94**	**5.91**	**0.0923**	**3.45**	**7.35**	**34.7**	**7.38**	**3.11**	**0.377**	**0.733**	**0.309**	**0.159**	**0.45**	**0.0367 J**	**0.0886**
GW-4	**5/4/2016**	**26.6**	**20 - 30**	**0.0517**	**0.0536**	**0.0146 J**	**0.00404 J, B**	< 0.0157	**0.0262 J**	**0.106 J**	**0.0197 J, B**	< 0.0117	< 0.0116	**0.00806 J**	**0.00352 J**	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-5	**5/4/2016**	**22.5**	**24 - 34**	**0.0146 J**	**0.0149 J**	< 0.0140	**0.00509 J, B**	< 0.0157	**0.0199 J**	**0.165 J**	**0.0297 J, B**	< 0.0117	< 0.0116	**0.00921 J**	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
Reported Detection Limit (RDL) :				0.05	0.05	0.05	0.05	0.05	0.05	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Water Board ***Environmental Screening Levels*** [1] (Groundwater)				**20**	**30**	**0.73**	**0.1**	**8**	**3.9**	**0.17**	**4.6**	**2**	**0.014**	**0.027**	**0.012**	**0.017**	**0.049**	**0.0034**	**0.034**
Maximum Contaminant Levels (MCLs) [2]				NE	NE	NE	NE	NE	NE	**17** [3]	NE	NE	**0.2**	NE	NE	NE	NE	NE	NE

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted.

2 = **Maximum Contaminant Levels (MCLs):** MCL's are drinking water standards established in Title 22 of the California Code of Regulations.

3 = **Napthalene's** objective is based on its established health-based advisory level, currently called a "notification level". These notification/action levels have been used to provide information to public water systems and others about certain non-regulated chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than these levels, certain requirement and recommendations apply.

***=** Depth to groundwater may not neccesarilly be stabilized.

bgs= below ground surface

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and RDL, and should be considered to be an estimate.

B = Laboratory reports that the same analyte is found in the associated blank.

NE = Not Established

BOLD = Result exceeds the Commercial ESL threshold.

Table 2: Grab Groundwater - TPH, VOC, Ammonia as N, & Cyanide Analytical Results
Additional Site Assessment & Semi-Annual Monitoring
25 East Fifth Street, Watsonville, California

All groundwater sample results are in parts per billion (ug/L).

Groundwater Sampling Information				*Laboratory Analytical Results*											
				HydroCarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8021)*						*Ammonia as N*	*Cyanide*
Sample ID #	*Sample Date*	**Depth to Groundwater (ft, bgs)*	*Temporary Screen Interval (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	***Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	*MTBE*	*1,2-Dibromoethane*		
GW-1	*3/22/2017*	23.5	19 - 29	250	1,490	516	0.827 J	1.57	2.87	19.9	< 0.367	< 0.381	50,000	28.2
	5/4/2016	27.9	22 - 32	< 30.4	546	361.1	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	--	55,000	75
GW-2	*3/22/2017*	22.4	23 -27	< 30.4	48.8 J	< 66.0	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.381	< 280	2.86
	5/4/2016	27	24 - 34	< 30.4	43.6 J	< 66.0	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	--	< 280	< 1.80
GW-3	*3/22/2017*	25.8	24 - 27	< 30.4	336	216	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.381	1,100	604
	5/4/2016	26.5	24 - 34	< 30.4	870	441.2	0.333 J	< 0.780	< 0.384	1.50 J	< 0.367	--	6,400	237
GW-4	*5/4/2016*	26.6	20 - 30	< 30.4	78.8	53.5 J	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	--	17,000	60
GW-5	*5/4/2016*	22.5	24 - 34	< 30.4	< 71.3	< 142.6	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	--	4,000	21
Laboratory Reported Detection Limit (RDLs):				100	100	200	1.0	5.0	1.0	3.0	1.0	1.0	280	5.0
Water Board *Environmental Screening Levels* [1] Groundwater				100		50,000	1.0	40	13	20	5.0	0.05	NE	150
Maximum Contaminant Levels (MCLs) [2]				--			1	150	300	1,750	5	0.05	NE	150

NOTES:

WQG = **W**ater **Q**uality **G**oals: Goals establised by the CRWQCB Central Coast Region based on Maximum Contaminant Limits (Department of Health Services) or taste & odor threshold limits.

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). <http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf > The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted.

2 = **Maximum Contaminant Levels (MCLs):** MCL's are drinking water standards established in Title 22 of the California Code of Regulations.
Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule

BOLD = Result exceeds the MCL or ESL threshold.

ND = Not detected at or above the lab's practical quantitation limit.

*** =** Depth to groundwater may not neccesarilly be stabilized.

**** =** C22-C32 and C32-C40 ranges combined for Motor Oil Hydrocarbon Range results.

NE = Not Established

< X = Constituent not detected above laboratory's Method Detection Limit (MDL), X.

(a) = Micro-Extraction -No TPH as Motor Oil pattern present at 200 ug/L.

bgs = below ground surface

MTBE = Methyl-tert-Butyl-Ether

Table 3: Soil Vapor - Volatile Organic Compounds Analytical Results
Additional Site Assessment & Semi-Annual Monitoring
25 East Fifth Street, Watsonville, CA

All soil vapor results are in micrograms per meter cubed (ug/m ^{3})

Sample Information			Total Petroleum Hydrocarbons as Gasoline	Volatile Organic Compounds (VOCs) — Laboratory Analysis by EPA Method TO-15						Leak Check Monitoring (Isopropyl Alcohol)		
Sample ID	Sample Date	Depth (feet below ground surface)		Benzene	Toluene	EthylBenezene	Xylenes	Naphthalene	Other VOCs	Field Shroud Concentration (avg., in ppm)	Laboratory Results (in ug/m^3)	Calculated Leakage (percent)
SV-1 (by EPA Method TO-15)	3/30/2017	5'	< 290	69	59	64	170	< 82	All Other VOCs = ND	15.5	< 3.5	< 0.01
	5/12/2016		< 280	< 5.9	< 4.5	< 3.9	< 12	< 150	All Other VOCs = ND	13.3	< 6.6	< 0.02
	3/30/2017	10'	*No Flow Conditions - Water Observed in Sample Tubing During Purge									
	5/12/2016		< 280	< 5.8	< 4.4	< 3.9	< 12	< 150	1,2-Dibromoethane = 99 PCE = 65 J All Other VOCs = ND	26.3	< 6.5	< 0.01
SV-2 (by EPA Method TO-15)	3/30/2017	5'	< 310	< 3.3	< 2.5	< 2.2	< 6.8	< 86	All Other VOCs = ND	30.3	< 3.7	0.00
	5/12/2016		< 290	17 J	20 J	< 4.0	< 12	< 160	All Other VOCs = ND	78	540	0.28
	3/30/2017	10'	*No Flow Conditions									
	5/12/2016		< 280	< 6.0	< 4.5	< 4.0	< 12	< 160	Styrene = 31 J All Other VOCs = ND	8.8	< 6.7	< 0.03
SV-3 (by EPA Method TO-15)	3/30/2017	5'	*No Flow Conditions									
	5/12/2016		< 290	27 J	67	37 J	210	< 160	n-Heptane = 13 J All Other VOCs = ND	34.8	< 6.8	< 0.01
	3/30/2017	10'	*No Flow Conditions									
	5/12/2016		6,400	170	200	69 J	370	< 150	Propylene = 1,500 All Other VOCs = ND	38.1	< 6.5	< 0.01
SV-4 (by EPA Method TO-15)	3/30/2017	5'	< 280	< 3.0	< 2.3	< 2.0	< 6.1	< 78	All Other VOCs = ND	12.1	< 3.3	< 0.01
	5/12/2016		< 280	< 6.0	< 4.5	< 4.0	< 12	< 160	All Other VOCs = ND	15.7	< 6.7	< 0.02
	3/30/2017	10'	*No Flow Conditions									
	5/12/2016		< 270	< 5.8	< 4.4	< 3.8	< 12	< 150	All Other VOCs = ND	71.2	< 6.4	< 0.004
Laboratory's *Practical Quantitation Limit (PQL)*			200	2	2	5	5	20	Various	--	--	--
Environmental Screening Levels [1] Residential ATTENUATION FACTOR: 0.002 Commercial ATTENUATION FACTOR: 0.001			50,000 100,000	48 420	160,000 1,300,000	560 4,900	52,000 440,000	41 360	1,2-Dibromoethane: 2.3 / 20 PCE: 240 / 2,100 Styrene: 470,000 / 1,400,000 Acetone: 15,000,000 / 31,000,000 All Others: vary or Not Established			
US EPA Regional Screening Levels Residential / Commercial (0.03 ATTENUATION FACTOR) [2]			Not Established	12 53	173,333 733,333	37 163	3,333 14,667	2.8 12	1,2-Dibromoethane: 0.157 / 0.66 PCE: 3.67 / 1,567 Styrene: 33,333.33 / 146,667 Propylene: 103,333 / 433,333 Acetone: 1,066,667 / 4,666,667 All Others: vary or Not Established			
CA DTSC-Modified Soil Gas Levels [3] "Near Source" Threshold Limits Residential ATTENUATION FACTOR: 0.002 Commercial ATTENUATION FACTOR: 0.001			Not Established	49 420	155,000 1,300,000	550 4,900	50,000 440,000	42 360	1,2-Dibromoethane: 2.35 / 20 PCE: 240 / 2,100 Styrene: 470,000 / 3,900,000 Propylene: 1,550,000^r / 13,000,000^r Acetone: 16,000,000^r / 140,000,000^r All Others: vary or Not Established			
"Subslab" Threshold Limits Residential / Commercial *(0.05 ATTENUATION FACTOR)* [3]			Not Established	1.9 8	6,200 26,000	22 98	2,000 8,800	2 7	1,2-Dibromoethane: 0.094 / 0.4 PCE: 9.6 / 42 Styrene: 18,800 / 78,000 Propylene: 62,000^r / 260,000^r Acetone: 640,000^r / 2,800,000^r All Others: vary or Not Established			
Site-Specific Risk-based Soil Gas Screening Levels [4] @5 ft bgs/ @15 ft bgs			850,000 2,000,000	3,100 7,300	960,000 2,300,000	39,000 97,000	320,000 780,000	3,400 8,800	Styrene: 3,300,000 / 8,200,000 Acetone: 80,000,000 / 180,000,000 All Others: Not Established			

Table 3: Soil Vapor - Volatile Organic Compounds Analytical Results
Additional Site Assessment & Semi-Annual Monitoring
25 East Fifth Street, Watsonville, CA

All soil vapor results are in micrograms per meter cubed (ug/m ^{3})

Sample Information			Total Petroleum Hydrocarbons as Gasoline	Volatile Organic Compounds (VOCs) — Laboratory Analysis by EPA Method TO-15						Leak Check Monitoring (Isopropyl Alcohol)		
Sample ID	Sample Date	Depth (feet below ground surface)		Benzene	Toluene	EthylBenezene	Xylenes	Naphthalene	Other VOCs	Field Shroud Concentration (avg., in ppm)	Laboratory Results (in ug/m^3)	Calculated Leakage (percent)
SV-5 (by EPA Method TO-15)	3/30/2017	5'	< 290	< 3.2	< 2.4	< 2.1	< 6.4	< 82	Acetone = 36 All Other VOCs = ND	15.8	19,000	48.93
	5/12/2016		< 280	< 5.8	< 4.4	< 3.9	< 12	< 150	All Other VOCs = ND	22.6	< 6.5	< 0.01
	3/30/2017	10'	< 290	< 3.1	< 2.4	< 2.1	< 6.3	< 81	All Other VOCs = ND	34.5	< 3.5	< 0.00
	5/12/2016		< 280	< 5.9	< 4.5	< 3.9	< 12	< 150	Acetone = 18 [j] All Other VOCs = ND	53.6	< 6.6	< 0.01
SV-5 (by EPA Method TO-17)	5/12/2016	5'	**380** [a]	< 16	**18**	< 16	**57**	< 16	All Other VOCs = ND	89.8	23	0.01
		10'	**370** [a]	< 16	**28**	< 16	**31**	< 16	All Other VOCs = ND	25.8	22	0.03
Laboratory's *Practical Quantitation Limit (PQL)*			200	2	2	5	5	20	Various	--	--	--
Environmental Screening Levels [1] **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			50,000° 100,000°	48 420	160,000 1,300,000	560 4,900	52,000 440,000	41 360	**1,2-Dibromoethane:** 2.3 / 20 **PCE:** 240 / 2,100 **Styrene:** 470,000 / 1,400,000 **Acetone:** 15,000,000° / 31,000,000° All Others: vary or Not Established			
US EPA Regional Screening Levels **Residential / Commercial** **(0.03 ATTENUATION FACTOR)** [2]			**Not Established**	12 53	173,333 733,333	37 163	3,333 14,667	2.8 12	**1,2-Dibromoethane:** 0.157 / 0.66 **PCE:** 3.67 / 1,567 **Styrene:** 33,333.33 / 146,667 **Propylene:** 103,333 / 433,333 **Acetone:** 1,066,667 / 4,666,667 All Others: vary or Not Established			
CA DTSC-Modified Soil Gas Levels [3] **"Near Source" Threshold Limits** **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			**Not Established**	49 420	155,000 1,300,000	550 4,900	50,000 440,000	42 360	**1,2-Dibromoethane:** 2.35 / 20 **PCE:** 240 / 2,100 **Styrene:** 470,000 / 3,900,000 **Propylene:** 1,550,000r / 13,000,000r **Acetone:** 16,000,000r / 140,000,000r All Others: vary or Not Established			
"Subslab" Threshold Limits **Residential / Commercial** ***(0.05 ATTENUATION FACTOR)*** [3]			**Not Established**	1.9 8	6,200 26,000	22 98	2,000 8,800	2 7	**1,2-Dibromoethane:** 0.094 / 0.4 **PCE:** 9.6 / 42 **Styrene:** 18,800 / 78,000 **Propylene:** 62,000r / 260,000r **Acetone:** 640,000r / 2,800,000r All Others: vary or Not Established			
Site-Specific **Risk-based Soil Gas Screening Levels** [4] **@5 ft bgs/ @15 ft bgs**			850,000 2,000,000	3,100 7,300	960,000 2,300,000	39,000 97,000	320,000 780,000	3,400 8,800	**Styrene:** 3,300,000 / 8,200,000 **Acetone:** 80,000,000 / 180,000,000 All Others: Not Established			

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (Interim Final, Feb 2016) <http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >. The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document,"Tier 1 ESLs", based on shallow soils (<3m), groundwater is a current or potential source of drinking water.

2 = **US EPA Region 9's *Regional Screening Levels* (RSLs):** From *US EPA Regional Screening Levels for Indoor Air* (http://www.epa.gov/region9/superfund/prg/, revised November 2015) . The Indoor Air RSLs are divided by the **US EPA's Recommended Vapor Attenuation Factor (0.03)** (from the US EPA's *Recommended Vapor Attenuation Factor for Risk Based Screening* of *sub-slab soil gas* [*Table 6-1 in Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway From Subsurface Sources to Indoor Air* , June 2015]) to calculate the Risk Level concentration appropriate for the specific sample collected (i.e., *Sub-slab soil gas* , *"Near-source" exterior soil gas* , *Crawl space air* , etc.).

3 = **CA DTSC Modified Air Screening Levels:** From the California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), *Human Health Risk Assessment (HHRA) Note Number 3, Table 3* , Jan 2016 < **https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-2016-01.pdf** >. The Modified Air Screening Levels are divided by the DTSC's Recommended Vapor Attenuation Factor (0.05) to calculate the Risk Level concentration appropriate for the specific sample collected. Where Modified Air Screening Levels are not available, US EPA RSLs (see Note 2 above) are used with the DTSC attenuation factor.

4 = **Site-Specific Risk-Based Soil Gas Screening Levels (adjacent MGP site):** From *Table 8. Risk-based Soil Gas Screening Levels taken from the "Soil gas, Sub-slab Soil Gas, and Indoor Air Screening Levels" section of the* ***Watsonville-1 Former MGP Site Report (September 29, 2009) prepared by Iris Environmental.***

*** =** Soil vapor monitoring points SV-1 (10 feet), SV-2 (10 feet), SV-3 (5 & 10 feet) and SV-4 (10 feet) were checked again for flow conditions on May 17, 2017 using a peristaltic pump. Slugs of water were observed in the sample tubing at each location during purging and no soil vapor samples were obtained. An effort was made to evacuate all water from the sample tubing and well annulus. Small volumes of water (i.e., ~100 mL) were removed at each location until no more water was observed.

o = ESL threshold is due to Odor. (See note 2 for more information)

r = No DTSC CA Note 3 screening level established for this compound, used RSL when calculating Subslab

PCE = Tetrachloroethene -- = Sample was not analyzed for this constituent

< X = Constituent not detected above laboratory's Method Detection Limit (MDL), X.

BOLD = Analytical result exceeds Commercial threshold. **BOLD =** Compound detected. [j] = Laboratory note: Estimated value

[a] = Laboratory notes, Result reported as gasoline but sample chromatogram does not match reference standard pattern. TPH value due to presence of heavy hydrocarbons (best match Stoddard Solvent pattern) within range of C5-C12 quantified as Gasoline.

Table 4:
Estimated Cost for Alternative No. 2 - Focused Excavation with Offsite Disposal and Capping with Institutional Control
Commercial Warehouse Property - 25 E. Fifth Street, Watsonville, CA
Feasibility Study

ITEM / DESCRIPTION	UNIT	UNIT COST	NUMBER OF UNITS	ITEM COST	TOTAL
Remedial Excavation and Direct Loading for Transport to Designated Landfills - 5 Days	Lump	$29,000	1	$29,000	
Project Management, Fieldwork & Completion Reporting - Weber, Hayes and Associates	Lump	$15,000	1	$15,000	
Class III Landfill - Transport and Disposal of ~434 Tons of Non-Haz Soil	Ton	$48	434	$20,832	
Class I Landfill - Transport and Disposal of ~68 Tons of State Haz-Waste Soil	Ton	$171	68	$11,628	
Compaction Testing & Reporting	Lump	$3,500	1	$3,500	
Parking Lot Restoration (15" Class II Base Rock / 3" AC)	Lump	$38,000	1	$38,000	
				Total:	***$117,960***

Table 5:

Estimated Cost for Remedial Alternative No. 3 - Excavation of All Accessible Soil Impacts with Offsite Disposal and Institutional Control

Commercial Warehouse Property - 25 E. Fifth Street, Watsonville, CA
Feasibility Study

ITEM / DESCRIPTION	*UNIT*	*UNIT COST*	*NUMBER OF UNITS*	*ITEM COST*	*TOTAL*
Remedial Excavation and Direct Loading for Transport to Designated Landfills - 25 Days	Lump	$135,000	1	$135,000	
Remedial Excavation Backfilling & Compaction - 5 Days	Lump	$28,000	1	$28,000	
Project Management, Fieldwork & Completion Reporting - Weber, Hayes and Associates	Lump	$25,000	1	$25,000	
Class III Landfill - Transport and Disposal of ~2,460 Tons of Non-Haz Soil	Ton	$48	2,554	$122,592	
Class I Landfill - Transport and Disposal of ~68 Tons of State Haz Soil	Ton	$171	68	$11,628	
Excavation Shoring	sq. ft.	$100	3,300	$330,000	
Excavation Entrance Ramp - Soil Off-Hauling & Class III Disposal (~1,245 Tons)	Ton	$48	1,245	$59,760	
Clean Excavation Fill - Material & Transport (including soils removed to create entrance ramp)	Ton	$17	3,365	$57,205	
Compaction Testing & Reporting	Lump	$12,000	1	$12,000	
Parking Lot Restoration (15" Class II Base Rock / 3" AC)	Lump	$60,000	1	$60,000	
				Total:	***$841,185***

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			***Polycyclic Aromatic Hydrocarbons (PAHs)*** *by EPA Method 8270C-SIM*															***Benzo[a]pyrene Equivalent***
Sample ID	***Sample Date***	***Depth (ft)***	***Acenaphthene***	***Acenaphthylene***	***Anthracene***	***Benzo[g,h,i] perylene***	***Fluoranthene***	***Fluorene***	***Naphthalene***	***Phenanthrene***	***Pyrene***	***Benzo[a]pyrene***	***Benzo[a] anthracene***	***Benzo[b] fluoranthene***	***Benzo[k] fluoranthene***	***Chrysene***	***Dibenzo[a,h] anthracene***	***Indeno [1,2,3-cd] pyrene***	
B-1	**5/3/2016**	0.5	**1.96**	**4.7**	**19.5**	**6.87**	**53**	**7.47**	**7.21**	**56.7**	**48.2**	**19.4**	**26.5**	**22.2**	**6.47**	**22.1**	**2.86**	**6.28**	**28.626**
		1.5	**0.00152 J**	**0.00173 J**	**0.0133**	**0.0524**	**0.0587**	**0.00397 J**	**0.00688 J**	**0.0352**	**0.0747**	**0.0696**	**0.0536**	**0.0688**	**0.0247**	**0.0503**	**0.0126**	**0.038**	**0.101**
		4	< 0.000674	< 0.000674	< 0.000674	**0.00156 J**	**0.00155 J**	< 0.000674	< 0.00225	**0.00256 J**	**0.00191 J**	**0.00146 J**	**0.00157 J**	**0.00211 J**	**0.000698 J**	**0.00167 J**	< 0.00674	**0.00116 J**	**0.005**
B-2	**5/3/2016**	0.5	< 0.000638	**0.00165 J**	**0.00168 J**	**0.00278 J**	**0.00746 J**	< 0.000638	< 0.00213	**0.00246 J**	**0.00953**	**0.00568 J**	**0.00672**	**0.006 J**	**0.00199 J**	**0.00549 J**	**0.000967 J**	**0.0022 J**	**0.008**
		1.5	< 0.000642	< 0.000642	**0.00257 J**	**0.00701**	**0.0207**	< 0.000642	**0.00412 J**	**0.0126**	**0.0197**	**0.0135**	**0.0153**	**0.0175**	**0.00455 J**	**0.0156**	**0.00244 J**	**0.00591 J**	**0.020**
		4	< 0.000687	< 0.000687	**0.000733 J**	< 0.000687	**0.00206 J**	< 0.000687	< 0.00229	**0.00233 J**	**0.00225 J**	**0.000846 J**	**0.00136 J**	**0.000857 J**	< 0.000687	**0.000919 J**	< 0.000687	< 0.000687	**0.001**
B-3	**5/4/2016**	0.5	< 0.00631	< 0.00631	< 0.00631	**0.00758 J**	**0.0103 J**	< 0.00631	< 0.0210	**0.00897 J**	**0.0125 J**	**0.00856 J**	**0.00967 J**	**0.0107 J**	< 0.00631	**0.00787 J**	< 0.00631	< 0.00631	**0.014**
		1.5	**0.000810 J**	**0.00110 J**	**0.0112**	**0.00789**	**0.0367**	**0.00317 J**	**0.00727 J**	**0.0313**	**0.0426**	**0.0195**	**0.0253**	**0.0182**	**0.00536 J**	**0.0212**	**0.003 J**	**0.00641 J**	**0.028**
		4	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.00226	< 0.000678	< 0.000678	< 0.00678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	**0.004**
		10	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	**0.00227 J**	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	**0.001**
		15	< 0.000687	< 0.000687	< 0.000687	**0.000929 J**	< 0.000687	< 0.000687	**0.00758 J**	**0.000956 J**	< 0.000687	**0.000742 J**	< 0.000687	**0.00096 J**	< 0.000687	< 0.000687	< 0.000687	**0.000689 J**	**0.001**
		20	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	**0.00334 J**	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	**0.001**
B-4	**5/3/2016**	0.5	< 0.000627	< 0.000627	< 0.000627	**0.00107 J**	**0.00160 J**	< 0.000627	**0.00311 J**	**0.000664 J**	**0.00217 J**	**0.00141 J**	**0.00151 J**	**0.0016 J**	< 0.000627	**0.00104 J**	< 0.000627	**0.000771 J**	**0.002**
		1.5	**0.00110 J**	**0.00324 J**	**0.0467**	**0.0699**	**0.27**	**0.00477 J**	**0.0198 J**	**0.109**	**0.291**	**0.169**	**0.216**	**0.199**	**0.067**	**0.19**	**0.0323**	**0.0666**	**0.258**
		4	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	**0.00270 J**	**0.00259 J**	**0.000719 J**	< 0.000664	< 0.000664	**0.000763 J**	< 0.000664	**0.000673 J**	< 0.000664	< 0.000664	**0.001**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board ***Environmental Screening Levels*** [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board ***Environmental Screening Levels*** [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 ***Regional Screening Levels (RSLs)*** [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-5	5/3/2016	0.5	< 0.000632	< 0.000632	0.00360 J	0.00862	0.0194	0.00128 J	0.00356 J	0.0109	0.0257	0.0115	0.0104	0.0112	0.00475 J	0.00969	0.00189 J	0.00615 J	0.017
		1.5	0.000894 J	0.000661 J	0.0211	0.058	0.127	0.00309 J	0.0100 J	0.0397	0.129	0.126	0.128	0.152	0.0419	0.11	0.0257	0.0546	0.190
		4	0.000727 J	< 0.000680	0.000868 J	0.00147 J	0.00152 J	< 0.000680	0.00340 J	0.00545 J	0.00169 J	0.00132 J	0.00138 J	0.00218 J	0.000793 J	0.00181 J	< 0.00068	0.00119 J	0.002
		10	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	0.00336 J	0.00143 J	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	0.001
		15	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	0.00297 J	0.000768 J	0.000981 J	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	0.001
		20	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	0.00532 J, B	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	0.001
B-6	5/3/2016	0.5	< 0.000669	0.00102 J	0.0113	0.0274 J3	0.0566 J3 , J5	0.00227 J	0.0105 J, B	0.0196 J3, J5	0.0660 J3, J5	0.0471 J3, J5	0.0466 J3, J5	0.047 J3, J5	0.0184	0.0478 J3	0.00961 J3	0.0185 J3	0.070
		1.5	0.00143 J	0.00214 J	0.0191	0.0422	0.113	0.00523 J	0.0175 J, B	0.0346	0.15	0.124	0.129	0.13	0.0494	0.109	0.0177	0.0426	0.178
		4	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	0.00439 J, B	0.000703 J	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	0.001
B-7	5/3/2016	0.5	< 0.000618	< 0.000618	< 0.000618	0.00136 J	< 0.000618	< 0.000618	0.0118 J, B	< 0.000618	0.000945 J	0.000794 J	< 0.000618	0.00118 J	< 0.000618	0.000652 J	0.000683 J	< 0.000618	0.002
		1.5	0.188 J	0.431	3.46	4.49	17.8	1	1.17 J, B	7.77	21.9	11.8	13.7	11	4.53	11.4	1.52	4.11	16.768
		4	< 0.000655	< 0.000655	< 0.000655	< 0.000655	0.00121 J	< 0.000655	< 0.00218	0.000923 J	0.00187 J	< 0.000655	0.00112 J	0.00189 J	< 0.000655	0.00287 J	< 0.000655	< 0.000655	0.001
B-8	5/3/2016	0.5	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	0.00242 J, B	< 0.000617	< 0.000617	< 0.000617	0.000657 J	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	0.001
		1.5	0.0705 J	0.0842 J	1.56	1.2	6.83	0.32	0.123 J, B	2.67	7.53	3.69	5.2	3.58	1.47	4.22	0.436	1.06	5.299
		4	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.00233	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	0.001
		10	< 0.000633	< 0.000633	0.00162 J	< 0.000633	0.00350 J	< 0.000633	0.00267 J, B	0.00332 J	0.00454 J	0.00143 J	0.00196 J	0.00151 J	0.000711 J	0.00123 J	< 0.000633	< 0.000633	0.002
		15	0.273	0.0922	0.441	0.036	0.459	0.199	0.0115 J, B	1.01	0.508	0.138	0.22	0.127	0.0459	0.163	0.0146	0.0355	0.197
		17	8.42	6.14	21	1.74	27.4	26.5	138	45.4	27	7.44	12.7	6.54	3.04	8.91	0.736	1.69	10.662
		20	0.0221	0.0452	0.0876	0.000754 J	0.0487	0.0881	0.156	0.14	0.0542	0.00709	0.0177	0.00547 J	0.00357 J	0.00753	< 0.000684	0.000941 J	0.010
		23	0.0384	0.0366	0.00631 J	< 0.000736	0.00102 J	0.00797	0.0184 J, B	0.027	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-9	5/3/2016	0.5	< 0.000619	< 0.000619	0.00209 J	0.0188	0.0258	< 0.000619	0.00389 J, B	0.00297 J	0.035	0.0284	0.0207	0.0243	0.0111	0.0195	0.0038 J	0.0141	0.039
		1.5	0.843 J	1.25 J	22.8	15.1	128	2.81	3.12 J, B	19.3	145	61	106	55.2	26.6	74.4	7.83	15.4	89.894
		4	0.783	0.464 J	7.73	7.51	69	1.23	0.440 J, B	1.95	76.6	25.3	43.8	26.9	11	31.5	3.45	7.48	37.983
	8/18/2016	6	0.0764	1.10	0.877	1.00	5.38	0.231	< 0.0226	1.15	7.66	2.81	4.2	2.8	1.19	2.99	0.442	0.989	4.200
		8	0.0498 J	0.0784	0.545	0.341	2.06	0.35	0.115 J	0.895	2.66	1.15	1.57	1.16	0.48	1.19	0.189	0.308	1.703
B-10	5/3/2016	0.5	0.00409 J	0.0132 J	0.083	0.21	0.657	0.0162 J	0.0277 J, B	0.34	0.881	0.352	0.34	0.318	0.103	0.315	0.0452	0.167	0.493
		1.5	0.0471 J	0.0987 J	1.24	3.03	9.82	0.226 J	0.364 J, B	0.97	11.5	9.4	13.5	11.1	3.97	10.8	1.34	3.08	14.013
		4	< 0.000662	< 0.000662	0.000837 J	0.00154 J	0.00195 J	< 0.000662	< 0.00221	0.00103 J	0.00256 J	0.00133 J	0.00158 J	0.00268 J	0.000946 J	0.00201 J	< 0.000662	0.00132 J	0.002
B-11	5/4/2016	0.5	< 0.000629	< 0.000629	0.000952 J	0.00136 J	0.00320 J	< 0.000629	< 0.00210	0.00217 J	0.00392 J	0.00203 J	0.00246 J	0.00227 J	0.000721 J	0.00227 J	< 0.000629	0.000803 J	0.003
		1.5	0.157	0.145	1.69	1.11	5.7	0.567	0.5	4.04	6.69	3.22	4.27	3.63	0.986	3.54	0.535	1.03	4.782
		4	< 0.000683	< 0.000683	< 0.000683	0.00108 J	0.00124 J	< 0.000683	< 0.00228	0.000703 J	0.00155 J	0.00139 J	0.00148 J	0.00175 J	< 0.000683	0.00108 J	< 0.000683	0.000865 J	0.002
		10	< 0.000653	< 0.000653	< 0.000653	< 0.000653	0.000891 J	0.00214 J	< 0.00218	0.00175 J	0.00117 J	< 0.000653	0.000973 J	< 0.000653	< 0.000653	0.000734 J	< 0.000653	< 0.000653	0.001
		15	0.0137	0.0269	0.0199	< 0.000699	0.00682 J	0.0364	0.00879 J	0.053	0.00564 J	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	0.001
		20	0.00650 J	0.0176	0.00173 J	< 0.000734	< 0.000734	0.0124	0.0602	0.00363 J	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	0.001
		24	0.0111	0.013	0.00708 J	< 0.000719	0.00571 J	0.0379	0.0116 J	0.0117	0.00654 J	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	0.001
		28	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.00231	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 / 16	13 / 13	2.8 / 2.8	2.5 / 2.5	60 / 60	8.9 / 8.9	0.033 / 0.033	11 / 11	85 / 85	0.016 / 0.29	0.16 / 2.9	0.16 / 2.9	1.6 / 2.6	3.8 / 3.8	0.016 / 0.29	0.16 / 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 / 16	13 / 13	2.8 / 2.8	2.5 / 2.5	60 / 60	8.9 / 8.9	0.033 / 0.033	11 / 11	85 / 85	0.016 / 0.29	0.16 / 2.9	0.16 / 2.9	1.6 / 2.6	3.8 / 3.8	0.016 / 0.29	0.16 / 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 / 45,000	--	18,000 / 230,000	--	2,400 / 30,000	2,400 / 30,000	3.8 / 17	--	1,800 / 23,000	0.016 / 0.29	0.16 / 2.9	0.16 / 2.9	1.6 / 29	16 / 290	0.016 / 0.29	0.16 / 2.9	0.016 / 0.29*

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-12	5/3/2016	0.5	< 0.00670	< 0.00670	< 0.00670	**0.0170 J**	**0.0102 J**	< 0.00670	< 0.0223	**0.00830 J**	**0.0150 J**	**0.0124 J**	**0.011 J**	**0.0166 J**	< 0.00067	**0.00914 J**	< 0.00067	**0.00739 J**	**0.016**
		1.5	< 0.000708	< 0.000708	**0.00140 J**	**0.00435 J**	**0.007 J**	< 0.000708	**0.00302 J**	**0.00510 J**	**0.00832**	**0.00765 J**	**0.00687 J**	**0.00871**	**0.00293 J**	**0.00735**	**0.00135 J**	**0.00352 J**	**0.011**
		4	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.00223	< 0.000670	< 0.000670	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	**0.001**
B-13	5/3/2016	0.5	< 0.000620	< 0.000620	**0.00116 J**	**0.00994**	**0.0106**	< 0.000620	< 0.00207	**0.00166 J**	**0.0166**	**0.0109**	**0.0076**	**0.0113**	**0.00403 J**	**0.00781 J**	**0.00153 J**	**0.00699**	**0.016**
		1.5	< 0.000784	< 0.000784	< 0.000784	< 0.000784	**0.00154 J**	**0.00154 J**	< 0.00261	**0.00574 J**	**0.00156 J**	< 0.000784	**0.00124 J**	**0.000972 J**	< 0.000784	**0.00132 J**	< 0.000784	< 0.000784	**0.001**
		4	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.00225	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	**0.001**
B-14	5/3/2016	0.5	< 0.0313	< 0.0313	**0.0543 J**	**0.0665 J**	**0.179 J**	< 0.0313	< 0.104	**0.136 J**	**0.215 J**	**0.11 J**	**0.144 J**	**0.115 J**	**0.0362 J**	**0.138 J**	< 0.0313	**0.0362 J**	**0.160**
		1.5	< 0.000731	< 0.000731	< 0.000731	**0.00487 J**	**0.00244 J**	< 0.000731	**0.00375 J**	**0.00634 J**	**0.00321 J**	**0.00206 J**	**0.00181 J**	**0.00313 J**	**0.000816 J**	**0.00355 J**	< 0.000731	**0.00164 J**	**0.003**
		4	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.00220	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	**0.001**
		10	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.00227	< 0.000680	< 0.000680	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	**0.001**
		15	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.00235	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	**0.001**
		20	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	**0.000902 J**	**0.00518 J**	**0.00122 J**	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	**0.001**
B-15	5/3/2016	0.5	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	**0.00356 J**	**0.00207 J**	**0.000796 J**	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	**0.001**
		1.5	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.00242	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	**0.001**
		4	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	**0.00470 J**	**0.00102 J**	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	**0.001**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

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Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
P-1	5/5/2016	0.5	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.00207	< 0.000620	< 0.000620	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	0.001
		1.5	< 0.000721	< 0.000721	0.00125 J	0.00198 J	0.00578 J	< 0.000721	0.00274 J	0.00160 J	0.00848	0.00464 J	0.00488 J	0.00529 J	0.00167 J	0.00427 J	< 0.000721	0.00149 J	0.006
P-2	5/5/2016	0.5	< 0.000631	< 0.000631	< 0.000631	< 0.000631	0.00102 J	< 0.000631	0.00215 J	0.000732 J	0.00150 J	0.000872 J	0.00108 J	0.001 J	< 0.000631	0.000784 J	< 0.000631	< 0.000631	0.001
		1.5	0.119 J	0.674	2.52	6.32	13.9	0.705	2.61	3.62	18.9	12.8	12.2	13.2	4.53	10.6	1.73	5.27	18.156
	8/18/2016	4	0.259	9.1	6.17	7.27	32.7	1.47	10	5.23	47.4	20.3	27.8	19.9	5.43	20.7	3.74	7.14	30.274
		6	0.134	2.39	2.69	1.07	8.34	0.693	0.683	4.19	7.54	3.3	5.25	3.43	1.04	4.24	0.439	1.03	4.856
		8	4.68	7.58	14.4	0.988	13.4	16	55.9	26.1	13.5	3.84	6.72	3.33	0.925	4.85	0.409	0.932	5.488
		12	2.32	2.51	6.46	0.385	5.88	8.12	34.6	11.9	5.14	1.58	2.63	1.31	0.467	1.88	0.152	0.346	2.226
		15.5	0.262	0.676	0.853	0.0801	0.684	1.01	3.59	1.52	0.778	0.235	0.399	0.221	0.0612	0.297	0.0318	0.071	0.345
		18	2.26	3.92	6.9	0.694	6.48	8.56	40.8	11.9	6.58	2.09	3.81	1.82	0.723	2.62	0.284	0.628	3.098
P-3	5/5/2016	0.5	< 0.000629	< 0.000629	< 0.000629	< 0.000629	0.00139 J	< 0.000629	< 0.00210	< 0.000629	0.00216 J	0.0013 J	0.00136 J	0.00154 J	< 0.000629	0.00097 J	< 0.000629	< 0.000629	0.002
		1.5	< 0.000772	< 0.000772	< 0.000772	< 0.000772	0.00147 J	< 0.000772	0.00388 J	0.00198 J	0.00218 J	0.000937 J	0.00129 J	0.00126 J	< 0.000772	0.00103 J	< 0.000772	< 0.000772	0.002
P-4	5/5/2016	0.5	< 0.000711	0.00123 J	0.00696 J	0.0223	0.0822	0.00172 J	0.00857 J	0.0296	0.0943	0.0494	0.0478	0.0583	0.0217	0.053	0.00645 J	0.0189	0.071
		1.5	< 0.000678	< 0.000678	< 0.000678	0.00209 J	0.00479 J	< 0.000678	0.00355 J	0.00432 J	0.00595 J	0.00329 J	0.00324 J	0.00434 J	0.00146 J	0.00406 J	< 0.000678	0.0015 J	0.005
P-7	5/5/2016	0.5	< 0.000733	< 0.000733	0.000804 J	0.00303 J	0.00452 J	< 0.000733	0.00446 J	0.00797	0.00607 J	0.0045 J	0.00374 J	0.00609 J	0.00138 J	0.00536 J	0.000834 J	0.00214 J	0.007
		1.5	< 0.000683	< 0.000683	< 0.000683	< 0.000683	0.000687 J	< 0.000683	0.00309 J	0.000713 J	0.000802 J	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
DG-1	8/18/2016	0.5	0.0395	0.0921	0.194	0.96	1.01	0.0429	0.282	0.423	1.18	1.56	1.16	1.3	0.532	1.02	0.302	0.818	2.253
		1.5	0.0411 J	0.066	0.61	1.42	2.43	0.181	0.113	1.14	2.26	1.72	1.34	1.6	0.568	1.29	0.312	1.04	2.500
		4	0.0308 J	0.673	0.621	1.51	2.91	0.122	0.14	0.547	3.28	2.54	2.72	2.42	0.973	2.11	0.43	1.22	3.724
		6	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	0.00288 J	0.000714 J	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	0.001
		8	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.00226	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	0.001
DG-2	8/18/2016	0.5	0.0174 J	0.0801	0.152	0.172	0.498	0.0549	0.0366 J	0.334	0.568	0.286	0.325	0.295	0.0899	0.261	0.0482	0.141	0.422
		1.5	0.00181 J	0.00328 J	0.0104	0.00449 J	0.0242	0.00711 J	0.00927 J	0.0311	0.0203	0.00855	0.0114	0.00974	0.00265 J	0.0112	0.00153 J	0.00342 J	0.013
		4	< 0.000686	< 0.000686	< 0.000686	< 0.000686	0.00108 J	< 0.000686	0.00347 J	0.00169 J	0.00109 J	< 0.000696	0.000932 J	0.000753 J	< 0.000686	< 0.000686	< 0.000686	< 0.000686	0.001
		6	< 0.000665	< 0.000665	0.00229 J	0.00226 J	0.00763	< 0.000665	0.00306 J	0.00524 J	0.0071	0.00381 J	0.00424 J	0.00395 J	0.00171 J	0.00467 J	0.000667 J	0.00166 J	0.006
		8	< 0.000659	< 0.000659	0.00209 J	0.00218 J	0.00854	0.00125 J	< 0.00220	0.00458 J	0.00650 J	0.0033 J	0.00368 J	0.00367 J	0.00149 J	0.00261 J	0.000678 J	0.00152 J	0.005
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 6: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
DG-3	8/18/2016	0.5	**0.00127 J**	**0.00249 J**	**0.0119**	**0.0325**	**0.083**	**0.00514 J**	**0.00756 J**	**0.036**	**0.0663**	**0.0471**	**0.0381**	**0.0553**	**0.0164**	**0.0444**	**0.00869**	**0.0266**	**0.070**
		1.5	**0.00121 J**	**0.00299 J**	**0.00648 J**	**0.00406 J**	**0.0184**	**0.00428 J**	**0.00487 J**	**0.0235**	**0.016**	**0.00713 J**	**0.00905**	**0.00847**	**0.00232 J**	**0.0108**	**0.00134 J**	**0.00319 J**	**0.011**
		4	< 0.000667	< 0.000667	< 0.000667	**0.000845 J**	**0.00340 J**	< 0.000667	**0.00273 J**	**0.00132 J**	**0.00297 J**	**0.00176 J**	**0.00234 J**	**0.00201 J**	< 0.000667	**0.00196 J**	< 0.00667	**0.000732 J**	**0.006**
		6	< 0.000664	< 0.000664	< 0.000664	**0.000665 J**	< 0.000664	< 0.000664	< 0.00221	**0.000792 J**	**0.000954 J**	< 0.000664	**0.000673 J**	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	**0.001**
		8	< 0.000675	< 0.000675	< 0.000675	**0.00123 J**	**0.00184 J**	< 0.000675	< 0.00225	**0.00151 J**	**0.00231 J**	**0.00104 J**	**0.00137 J**	**0.00117 J**	< 0.000675	**0.00127 J**	< 0.000675	**0.000751 J**	**0.002**
DG-4	8/18/2016	0.5	< 0.00125	< 0.00125	**0.00181 J**	**0.00250 J**	**0.00221 J**	**0.00187 J**	< 0.00416	**0.00325 J**	**0.00286 J**	**0.00194 J**	**0.00211 J**	**0.00232 J**	< 0.00125	**0.00181 J**	**0.00182 J**	**0.00146 J**	**0.004**
		1.5	< 0.000626	< 0.000626	**0.00161 J**	**0.00276 J**	**0.00722**	**0.000842 J**	**0.00344 J**	**0.00217**	**0.00766**	**0.00576 J**	**0.00575 J**	**0.00588 J**	**0.00189 J**	**0.00464 J**	**0.000992 J**	**0.00229 J**	**0.008**
		4	< 0.000688	< 0.000688	**0.00138 J**	< 0.000688	**0.00200 J**	**0.00187 J**	**0.00751 J**	**0.00355 J**	**0.00179 J**	**0.000804 J**	**0.00142 J**	< 0.000688	< 0.000688	**0.000967 J**	< 0.000688	< 0.000688	**0.001**
		6	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.00228	**0.000866 J**	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	**0.001**
		8	< 0.000678	< 0.000678	< 0.000678	**0.00156 J**	< 0.000678	< 0.000678	**0.00246 J**	**0.00137 J**	**0.000970 J**	**0.000722 J**	< 0.000678	**0.00131 J**	< 0.000678	< 0.000678	**0.000797 J**	< 0.000678	**0.002**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 **16**	13 **13**	2.8 **2.8**	2.5 **2.5**	60 **60**	8.9 **8.9**	0.033 **0.033**	11 **11**	85 **85**	0.016 **0.29**	0.16 **2.9**	0.16 **2.9**	1.6 **2.6**	3.8 **3.8**	0.016 **0.29**	0.16 **2.9**	**0.016 / 0.29***
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 **16**	13 **13**	2.8 **2.8**	2.5 **2.5**	60 **60**	8.9 **8.9**	0.033 **0.033**	11 **11**	85 **85**	0.016 **0.29**	0.16 **2.9**	0.16 **2.9**	1.6 **2.6**	3.8 **3.8**	0.016 **0.29**	0.16 **2.9**	**0.016 / 0.29***
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 **45,000**	--	18,000 **230,000**	--	2,400 **30,000**	2,400 **30,000**	3.8 **17**	--	1,800 **23,000**	0.016 **0.29**	0.16 **2.9**	0.16 **2.9**	1.6 **29**	16 **290**	0.016 **0.29**	0.16 **2.9**	**0.016 / 0.29***
																		DTSC PAH Study (2009) [3] *Northern California 95th Percentile BaP Equivalent*	**0.9**

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m).

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated November 2015) **<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015, revised Nov 2015>**. The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

3 = ***DTSC Advisory - Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process*** **(July 1, 2009)**: Page 8, *Establishing a Practical Target to Guide Soil Excavation/Remediation:* A value of 0.9 milligrams per kilogram (mg/Kg) in BaP equivalents can be used as a pragmatic target for guiding soil excavation/remediation. This value corresponds to upper bounds of the ambient data sets. Experience at various MGP site has shown that removal/remediation of soil areas and hotspots exceeding 0.9 mg/Kg BaP equivalents is a reasonably conservative guide for the main phase of excavation/remediation activities.

Benzo(a)pyrene Equivalent = Sum of detection values for; Benzo(a)pyrene, Benzo(a)anthracene x 0.1, Benzo(b)fluoranthene x 0.1, Benzo[k]fluoranthene x 0.1,Chrysene x 0.01, Dibenzo[a,h]anthracene , and Indeno[1,2,3-cd]pyrene x 0.1

*** =** There is no ESL value for B(a)P equivelent. Results compared against screening values for Benzo(a)pyrene for reference only.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

J3 = Laboratory reports that the associated batch QC was outside the established quality control range for precision.

J5 = Laboratory reports that the sample matrix interfered with the ability to make any accurate determination; spike value is high.

B = Laboratory reports that the analyte is found in the associated blank.

^ = Method Detection Limit and Practical Quantitation Limit raised after sample was diluted. Dilutions were necessary due to elevated analyte concentrations or matrix interferences.

BOLD = Analytical result for BaP Equivalent exceeds the CA DTSC PAH 2009 Study Limit. Refer to note 3 above.

BOLD = Analytical result above Commercial ESL.

Table 7: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B-1	5/3/2016	0.5	--	--	--	--	--	--	--	--	16.1	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	15.1	--	--	--	--	--	--	--	--	--	--	--
B-2	5/3/2016	0.5	--	--	--	--	--	--	--	--	< 0.202	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	5.22	--	--	--	--	--	--	--	--	--	--	--
B-3	5/4/2016	0.5	< 0.789	< 0.684	26.3	< 0.0736	< 0.0736	1.4	2.63	38.7	1.26	--	--	0.0658	< 0.168	0.765	< 0.778	< 0.295	< 0.684	11.9	9.75 B	0.387
		1.5	1.01 J	4.71	247	0.398	0.206 J	15.7	4.68	7.08	11.4	--	--	0.0238	0.87	17.4	< 0.525	< 0.300	< 0.696	22	22.2	< 0.0418
		4	< 0.848	1.39 J	121	0.321	0.215 J	18.4	6.75	12.2	4.97	--	--	0.0104 J	< 0.181	15.7	< 0.836	< 0.316	< 0.735	27.4	31.4	--
B-4	5/3/2016	0.5	< 0.784	< 0.679	38.7	< 0.0732	< 0.0732	1.58	3.66	56.9	1.07	--	--	0.0486	< 0.167	0.998 J	< 0.773	< 0.293	< 0.679	14.9	12.5 B	0.120 J
		1.5	< 0.797	2.91	290	0.264	0.151 J	11.5	3.5	5	6.99	--	--	0.0588	0.483 J	13.2	< 0.787	< 0.298	< 0.691	16.2	18.3	0.434
B-5	5/3/2016	0.5	--	--	--	--	--	--	--	--	0.834	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	5.01	--	--	--	--	--	--	--	--	--	--	--
		4	< 0.850	2.7	118	0.442	0.267 J	27.6	8.17	15.3	6.77	--	--	0.0222 J	0.302 J	25.2	< 0.839	< 0.318	< 0.737	36.5	44.7	0.105 J
		10	< 0.827	1.29 J	1.6	0.438	0.308 J	50.4	6.3	14.7	11.9	--	--	0.0332	< 0.176	38.5	1.61 J	< 0.309	2.02 J	25.2	37.4	< 0.0430
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.135 J
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0932 J
B-6	5/3/2016	0.5	< 0.836	4.51	206	0.39	0.146 J	17.2	4.46	9.34	8.63	--	--	0.0524	1.41	18.5	< 0.825	< 0.312	< 0.724	23.4	29.4	0.671
		1.5	< 0.951	3.97	148	0.588	0.321 J	26.2	11.9	20.8	10.4	--	--	0.0494	< 0.203	41.5	< 0.939	< 0.355	< 0.825	37.6	61.4	0.518
B-7	5/3/2016	0.5	< 0.772	< 0.669	33.7	< 0.0720	< 0.0720	2.08	3.47	43.7	0.936	--	--	0.0714	0.213 J	0.929 J	< 0.762	< 0.288	< 0.669	14.6	11.5 B	0.157 J
		1.5	< 0.905	5.48	273	0.586	0.642	17.7	11	148	356	6.08	< 0.450	0.163	0.568 J	30.3	1.03 J	< 0.338	< 0.784	28.3	151	5.09
		4	< 0.818	4.56	126	0.509	0.296 J	27.5	5.42	12.4	7.34	--	--	0.0437	< 0.175	21.8	< 0.807	< 0.305	< 0.709	32.4	44.7	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 21
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Table 7: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B-8	5/3/2016	0.5	--	--	--	--	--	--	--	--	< 0.195	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**8.47**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**7.66**	--	--	--	--	--	--	--	--	--	--	--
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33
		17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.318
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0445
		23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0479
B-9	8/18/2016	0.5	--	--	--	--	--	--	--	--	**2.27**	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**10.3**	--	--	--	--	--	--	--	--	--	--	--
B-10	5/3/2016	0.5	--	--	--	--	--	--	--	--	**35.9**	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**23.2**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**6.77**	--	--	--	--	--	--	--	--	--	--	--
B-11	5/4/2016	0.5	< 0.786	< 0.681	**39.3**	< 0.0734	< 0.0734	**1.63**	**3.55**	**40.7**	**0.968**	--	--	**0.0598**	< 0.168	**0.999 J**	< 0.775	< 0.293	< 0.681	**19.6**	**13.5**	< 0.0409
		1.5	< 0.893	**5.02**	**389**	**0.473**	**0.825**	**30.4**	**9.87**	**49.1**	206	**11.4**	< 0.450	**0.125**	**0.503 J**	**36.3**	< 0.881	< 0.333	< 0.774	**34.6**	**235**	1.11
		4	< 0.854	**2.48**	**143**	**0.393**	**0.228 J**	**30.1**	**5.29**	**12.8**	**6.43**	--	--	**0.00944 J**	**0.263 J**	**18.6**	< 0.843	< 0.319	< 0.740	**34.1**	**40.3**	1.58
		10	< 0.816	**2.89**	**137**	**0.331**	**0.242 J**	**36.8**	**7.72**	**6.78**	**3.79**	--	--	**0.0415**	**0.195 J**	**47**	<0.805	< 0.305	< 0.708	**20.6**	**22.1**	1.35
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.338
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.228 J
		24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0468
		28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0451
Laboratory *Reported Detection Limits (RDL):*			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 **7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 **7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 **7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			31 / 470	0.68 / 3.0 **7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Table 7: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B-12	5/3/2016	0.5	2.67	4.79	429	0.259	2.07	28.6	8.92	68.2	376	< 0.0171	--	5.08	0.698	28.8	< 0.827	0.566 J	< 0.726	39.3	413	< 0.0436
		1.5	< 0.886	5.12	145	0.589	0.344 J	31	12.6	22.9	63	0.31	--	0.0697	0.6	42.2	1.26 J	< 0.331	< 0.767	42.5	75.5	0.0781 J
		4	< 0.837	2.16 J	134	0.417	0.323 J	27.6	8.42	15.2	6.46	--	--	0.0121 J	0.436 J	23.9	< 0.826	< 0.313	< 0.726	36.9	42.9	--
B-13	5/3/2016	0.5	--	--	--	--	--	--	--	--	0.293 J	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	10.1	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	6.36	--	--	--	--	--	--	--	--	--	--	--
B-14	5/3/2016	0.5	--	--	--	--	--	--	--	--	3.87	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	12.3	--	--	--	--	--	--	--	--	--	--	--
		4	< 0.827	2.09 J	113	0.377	0.241 J	22.8	6.08	13.2	5.94	--	--	0.0114 J	< 0.176	18.1	< 0.816	< 0.309	< 0.717	30.5	34.5	0.0456 J
		10	0.866 J	4	151	0.44	0.313 J	214	21.4	15.7	4.46	--	--	0.03	0.985	161	< 0.839	< 0.317	< 0.737	37.7	44.6	0.0495 J
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0745 J
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0424
B-15	5/3/2016	0.5	< 0.899	< 0.779	78.4	< 0.0839	< 0.0839	6.69	11	68.5	< 0.228	--	--	0.0881	< 0.192	3.51	< 0.887	< 0.336	< 0.779	85.6	47.8	0.0598 J
		1.5	< 0.909	6.29	212	0.752	0.291 J	51.4	11.3	23.1	9.44	--	--	0.0376	0.832	52.5	< 0.897	< 0.339	< 0.788	66.6	78.4	< 0.0473
		4	< 0.864	4.24	182	0.587	0.702	58.4	17.1	18.8	6.64	--	--	0.0130 J	0.964	49.8	1.29 J	< 0.323	< 0.749	60.5	69.6	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Table 7: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
P-1	5/5/2016	0.5	< 0.776	< 0.672	29.7	< 0.0723	< 0.0723	1.76	2.88	24.5	0.412 J	--	--	0.0561	< 0.165	0.959 J	< 0.765	< 0.289	< 0.672	13.5	9.73	< 0.0403
		1.5	< 0.901	5.39	245	0.504	0.561 J	28.6	10.5	31.1	123	4.48	--	0.279	0.498 J	37.7	< 0.889	< 0.337	< 0.781	36.5	202	0.665
P-2	5/5/2016	0.5	< 0.789	< 0.684	44.2	< 0.0736	0.0761 J	2.43	4.1	58.9	0.746	--	--	0.0438	< 0.168	1.57 J	< 0.778	< 0.295	< 0.684	19.3	12.7	< 0.0410
		1.5	< 0.903	4.51	214	0.443	1.8	22.7	6.96	66.9	211	0.29	--	1.53	< 0.193	26.4	< 0.891	< 0.337	< 0.783	26.5	565	11.3
	8/18/2016	4	--	--	--	--	--	--	--	--	17.3	--	--	--	--	--	--	--	--	--	--	--
		6	--	--	--	--	--	--	--	--	6.83	--	--	--	--	--	--	--	--	--	--	--
		8	--	--	--	--	--	--	--	--	6.27	--	--	--	--	--	--	--	--	--	--	--
P-3	5/5/2016	0.5	< 0.786	< 0.681	29.2	< 0.0734	< 0.0734	2.1	4.86	61.2	0.352 J	--	--	0.139	< 0.168	1.33 J	< 0.776	< 0.294	< 0.681	17.8	11.6	< 0.0409
		1.5	< 0.964	5.6	149	0.663	0.282 J	35.2	12	25.3	10.9	--	--	0.0543	0.667	46	< 0.952	< 0.360	< 0.836	46.8	75.8	< 0.0502
P-4	5/5/2016	0.5	< 0.889	4.38	142	0.502	0.384 J	26.5	11.4	31.1	43.9	--	--	0.125	0.328 J	35.3	< 0.877	< 0.332	< 0.770	38.2	94.8	< 0.0462
		1.5	< 0.848	3.94	131	0.538	0.329 J	26.5	13.3	19.8	9.81	--	--	0.0363	0.249 J	39.7	< 0.836	< 0.316	< 0.735	35.6	62.7	0.0493 J
P-7	5/5/2016	0.5	< 0.916	4.22	127	0.525	0.277 J	24.7	11.7	21.5	15.8	--	--	0.0452	< 0.195	39.2	< 0.903	< 0.342	< 0.794	33.9	61.2	< 0.0476
		1.5	< 0.854	1.93 J	110	0.344	0.228 J	18	8.3	12.7	5.52	--	--	0.0188 J	< 0.182	17.4	< 0.843	< 0.319	< 0.740	28	29.9	< 0.0444
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Table 7: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
DG-1	8/18/2016	0.5	--	--	--	--	--	--	--	--	7.4	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	7.06	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	83.4	--	--	--	--	--	--	--	--	--	--	--
DG-2	8/18/2016	0.5	--	--	--	--	--	--	--	--	194	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	18.8	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	8.1	--	--	--	--	--	--	--	--	--	--	--
DG-3	8/18/2016	0.5	--	--	--	--	--	--	--	--	182	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	15.5	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	8.25	--	--	--	--	--	--	--	--	--	--	--
DG-4	8/18/2016	0.5	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	1.56	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	9.4	--	--	--	--	--	--	--	--	--	--	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Notes

1 = **Environmental Screening Levels (ESLs):** from Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final, February 2016). The ESLs are intended to provide quantitative guidance on whether remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m), Groundwater IS a current or potential Source of Drinking Water.

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated May 2016), and the *User's Guide* (November 2015). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

* = Analysis of the 95% Upper Confidence Limit for arsenic in 16 shallow soil samples that were collected to establish background concentrations for metals in the Watsonville area yields a concentration of 7.6 mg/kg. Analysis of the 95% Upper Confidence Limit for arsenic collected from 9 on-site shallow soil samples yields a concentration of 6.3 mg/kg (see Appendix F of this report for reference and 95% UCL analysis). The data confirms **that the on-site concentrations of arsenic fall within the range of naturally occurring background concentrations for this area of Watsonville.**

**= Chromium (Total) has no threshold so Chromium III threshold has been placed instead. (Chromium (VI) thresholds for RSL = 0.3 / 6.3 ; (Residential / Commercial)

***= A 2003 background assessment for metals in shallow soil was completed for the Watsonville area by Uribe & Associates: *Remedial Investigation Report, Watsonville 2 Former Manufactured Gas Plant Site, Pacific Gas and Electric Company, GC Yard 11, Walker Street, Watsonville, California,* September 4, 2003. Analysis of the 95% Upper Confidence Limit for arsenic in 14 shallow soil samples that were collected to establish background concentrations for metals in the Watsonville area yields a concentration of 7.48 mg/kg. Analysis of the 95% Upper Confidence Limit for arsenic collected from on site soil samples at depths of 0.5, 1.5 and 4 feet bgs yielded concentrations of 4.30, 5.20, and 3.66 mg/kg, respectively (see Appendix X of this report for details). The data confirms that the on-site concentrations of arsenic fall within the range of naturally occurring background concentrations for this area of Watsonville.

STLC = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

B = Laboratory reports that the same analyte is found in the associated blank.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

^ = Method Detection Limit and Practical Quantitation Limit raised after sample was diluted. Dilutions were necessary due to elevated analyte concentrations or matrix interferences.

BOLD = Analytical result above commercial ESL, RSL, or HERO Note 3 values (whichever is the most conservative).

-- = Not analyzed for

Table 8: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			Laboratory Analytical Results							
			Hydrocarbon Ranges			Volatile Organic Compounds (VOC's by EPA 8260)				
Sample Identification	Sample Date	Sample Depth (feet, bgs)	Gasoline Range C5-C12	Diesel Range C12-C22	*Motor Oil Range C22-C40	Benzene	Toluene	Ethyl-benzene	Xylene (total)	Ammonia as N By Method 350.1
B-1	5/3/2016	1.5	--	--	--	--	--	--	--	< 1.85 P
		4	--	--	--	--	--	--	--	< 1.76 J6
B-3	5/4/2016	0.5	< 0.175	< 15.5	208.6	< 0.000631	< 0.000789	< 0.000579	0.00249 J	--
		1.5	< 0.178	12.2	59.6	< 0.000642	< 0.000803	< 0.000589	< 0.00246	--
B-4	5/3/2016	0.5	< 0.173	< 0.766	4.43	< 0.000627	< 0.000784	< 0.000575	< 0.00240	--
		1.5	< 0.176	9.71	40.9	< 0.000638	< 0.000797	< 0.000585	< 0.00244	< 1.67
		4	--	--	--	--	--	--	--	2.34 J
B-5	5/3/2016	4	< 0.188	1.77 J	22.59	< 0.000680	< 0.000850	< 0.000624	< 0.00261	--
		10	< 0.183	< 0.808	2.27 J	< 0.000661	< 0.000827	< 0.000606	< 0.00254	3.12 J
		15	< 0.192	2.12 J	7.19	< 0.000693	< 0.000866	< 0.000635	< 0.00266	8.49
		20	< 0.207	2.35 J	1.89 J	< 0.000749	< 0.000936	< 0.000686	< 0.00287	64.3
B-6	5/3/2016	0.5	< 0.185	6.21	42.7	0.00168 J	0.00181 J	< 0.000613	< 0.00256	--
		1.5	< 0.211	6.3	15.05	< 0.000761	0.00105 J	< 0.000698	< 0.00292	--
B-7	5/3/2016	0.5	< 0.171	< 7.54	93.8	< 0.000618	< 0.000772	< 0.000566	< 0.00237	--
		1.5	< 0.200	928	3,300	< 0.000724	< 0.000905	< 0.000664	< 0.00278	< 1.89
		4	--	--	--	--	--	--	--	2.15 J
B-8	5/3/2016	10	--	--	--	--	--	--	--	3.69 J
		15	3.14	346	479	< 0.000691	< 0.000864	< 0.000634	0.00890 J	--
		17	0.618	1,850	1,665	< 0.000707	< 0.000884	< 0.000648	0.00439 J	161
		20	< 0.189	29.5	13.7	< 0.000684	< 0.000855	< 0.000627	< 0.00262	110
		23	< 0.204	12.1	4.92 J	< 0.000736	< 0.000920	< 0.000675	< 0.00282	--
Reported Detection Limit (RDL)			0.1	4	8	0.0005	0.005	0.0005	0.0015	5
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			100 / 500	230 / 570	5,100	0.044	2.9	1.4	2.3	--
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)			500	570	5,100	0.044	2.9	1.4	2.3	--
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3			--	--	--	0.33 / 1.4	1,100 / 5,400	--	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] (Residential / Commercial)			--	--	--	1.2 / 5.1	4,900 / 47,000	5.8 / 25	580 / 2,500	--

Table 8: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			*Laboratory Analytical Results*							
			Hydrocarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8260)*				
Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
B-9	5/3/2016 & 8/18/2016	*0.5*	--	< 152	**2,860**	--	--	--	--	**--**
		1.5	--	**4.26**	**3.41 J**	--	--	--	--	**15.3**
		4	--	**4,980**	**12,350**	--	--	--	--	**4.06 J**
		6	--	**358**	**1,231**	--	--	--	--	--
		8	--	**234**	**409**	--	--	--	--	--
B-10	5/3/2016	*1.5*	--	--	--	--	--	--	--	**9.79**
		4	--	--	--	--	--	--	--	< 1.73 P
B-11	5/4/2016	*0.5*	< 0.174	**1.43 J**	**16.83**	< 0.000629	< 0.000786	< 0.000576	< 0.00241	--
		1.5	< 0.198	**191 J**	**1,022**	< 0.000715	< 0.000893	< 0.000655	< 0.00274	< 1.87
		4	< 0.189	**1.49 J**	< 3.02	< 0.000683	< 0.000854	< 0.000626	< 0.00262	**5.87 J6**
		10	< 0.181	**2.13 J**	**1.68 J**	< 0.000653	< 0.000816	< 0.000599	< 0.00250	< 1.71
		15	< 0.193	**4.86**	**2.21 J**	< 0.000699	< 0.000874	< 0.000641	< 0.00268	**45.4**
		20	< 0.203	**7.73**	**2.99 J**	< 0.000734	< 0.000917	< 0.000673	< 0.00281	**62.3**
		24	< 0.199	**9.39**	**3.76 J**	< 0.000719	< 0.000899	< 0.000660	< 0.00276	--
		28	< 0.192	< 0.848	< 3.08	< 0.000694	< 0.000868	< 0.000637	< 0.00266	--
B-12	5/3/2016	*0.5*	< 0.185	< 40.9	**495**	< 0.000670	< 0.000838	< 0.000614	< 0.00257	--
		1.5	< 0.196	**2.96 J**	**15.26**	< 0.000708	< 0.000886	< 0.000649	< 0.00272	--
B-14	5/3/2016	*4*	< 0.183	**2.02 J**	**5.89 J**	< 0.000661	< 0.000827	< 0.000606	< 0.00254 **B**	--
		10	< 0.188	< 0.831	< 3.02	< 0.000680	< 0.000850	< 0.000624	< 0.00261 **B**	--
		15	< 0.195	< 0.862	< 3.12	< 0.000705	< 0.000882	< 0.000647	< 0.00270 **B**	--
		20	< 0.181	< 0.797	< 2.90	< 0.000653	< 0.000816	< 0.000598	< 0.00250 **B**	--
B-15	5/3/2016	*0.5*	< 0.199	< 0.879	**14.11**	< 0.000719	< 0.000899	< 0.000660	< 0.00276 **B**	--
		1.5	< 0.201	**1.20 J**	**5.81 J**	< 0.000727	**0.00102 J, B**	< 0.000667	< 0.00279 **B**	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			**100 / 500**	**230 / 570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)			**500**	**570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
DTSC - Human and Ecological Risk Office (HERO) **Human Health Risk Assessment - Note 3**			--	--	--	***0.33 / 1.4***	***1,100 / 5,400***	--	--	--
USEPA Region 9 ***Regional Screening Levels (RSLs) [2]*** **(Residential / Commercial)**			--	--	--	***1.2 / 5.1***	***4,900 / 47,000***	***5.8 / 25***	***580 / 2,500***	--

Table 8: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			*Laboratory Analytical Results*							
			Hydrocarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8260)*				
Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
P-1	5/5/2016	*0.5*	< 0.172	< 0.757	< 2.74	--	--	--	--	--
		1.5	< 0.199	159	607	--	--	--	--	--
P-2	5/5/2016	*0.5*	0.224 J	2.37 J	2.13 J	--	--	--	--	--
		1.5	< 0.200	2,260	6,980	--	--	--	--	--
	8/18/2016	*4*	--	4,130	8,060	--	--	--	--	--
		6	--	706	899.3	--	--	--	--	--
		8	--	2,730	2,109	--	--	--	--	--
		12	--	2,210	1,305	--	--	--	--	--
		15.5	--	394	268.9	--	--	--	--	--
		18	--	2,220	1,341	--	--	--	--	--
P-3	5/5/2016	*0.5*	< 0.174	1.74 J	< 2.78	--	--	--	--	--
		1.5	< 0.213	5.22	2.61 J	--	--	--	--	--
P-4	5/5/2016	*0.5*	< 0.197	14.3	48.8	--	--	--	--	--
		1.5	< 0.188	7.63	20.33	--	--	--	--	--
P-7	5/5/2016	*0.5*	< 0.203	5.14	6.89 J	--	--	--	--	--
		1.5	< 0.189	1.73 J	< 3.02	--	--	--	--	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for <u>SHALLOW</u> Soils (< 10 ft) [1]: (Residential / Commercial)			100 / 500	230 / 570	5,100	0.044	2.9	1.4	2.3	--
Environmental Screening Levels for <u>DEEP</u> Soils (> 10 ft) [1]: (Residential / Commercial)			500	570	5,100	0.044	2.9	1.4	2.3	--
DTSC - Human and Ecological Risk Office (HERO) **Human Health Risk Assessment - Note 3**			--	--	--	*0.33 / 1.4*	*1,100 / 5,400*	--	--	--
USEPA Region 9 ***Regional Screening Levels (RSLs)*** [2] **(Residential / Commercial)**			--	--	--	*1.2 / 5.1*	*4,900 / 47,000*	*5.8 / 25*	*580 / 2,500*	--

Table 8: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

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Soil Sampling Information			*Laboratory Analytical Results*							
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Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
DG-1	8/18/2016	*0.5*	--	58.8	577	--	--	--	--	--
		1.5	--	105	570	--	--	--	--	--
		4	--	208	1,022	--	--	--	--	--
		6	--	1.09 J	1.60 J	--	--	--	--	--
		8	--	2.53 J	2.88 J	--	--	--	--	--
DG-2	8/18/2016	*0.5*	--	76	568	--	--	--	--	--
		1.5	--	5.14	7.80 J	--	--	--	--	--
		4	--	2.84 J	2.84 J	--	--	--	--	--
		6	--	8.24	93.3	--	--	--	--	--
		8	--	5.66	55.7	--	--	--	--	--
DG-3	8/18/2016	*0.5*	--	10.4	27.88	--	--	--	--	--
		1.5	--	7.94	17.6	--	--	--	--	--
		4	--	3.72 J	3.73 J	--	--	--	--	--
		6	--	3.05 J	15.93 B	--	--	--	--	--
		8	--	4.72	30.8 B	--	--	--	--	--
DG-4	8/18/2016	*0.5*	--	< 7.62	69.1 J	--	--	--	--	--
		1.5	--	4.21	3.47 J	--	--	--	--	--
		4	--	3.04 J	4.95 J	--	--	--	--	--
		6	--	8.32	20.87 B	--	--	--	--	--
		8	--	2.67 J	34.09	--	--	--	--	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for <u>SHALLOW</u> Soils (< 10 ft) [(1)]: (Residential / Commercial)			**100 / 500**	**230 / 570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
Environmental Screening Levels for <u>DEEP</u> Soils (> 10 ft) [(1)]: (Residential / Commercial)			**500**	**570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
***DTSC - Human and Ecological Risk Office (HERO)* Human Health Risk Assessment - Note 3**			--	--	--	***0.33 / 1.4***	***1,100 / 5,400***	--	--	--
USEPA Region 9 *Regional Screening Levels (RSLs)* [(2)] (Residential / Commercial)			--	--	--	***1.2 / 5.1***	***4,900 / 47,000***	***5.8 / 25***	***580 / 2,500***	--

Notes:

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m).

Residential / Commercial = **Screening levels for Residential or Commercial land uses:** screening limit concentration are presented in BROWN for Residential land uses and in Green for Commercial/Industrial land uses. One number indicates the screening level is the same for both Residential and Commercial.

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated November 2015), and the *User's Guide* (November 2015). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

BOLD = Analytical result above commercial ESL, RSL, or HERO Note 3 values (whichever is the most conservative).

bgs = below ground surface. **ND =** Not detected at or above the lab's practical quantitation limit.

*** =** C22-C32 and C32-C40 ranges combined for Motor Oil Hydrocarbon Range results.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

J6 = Laboratory reports that the sample matrix interfered with the ability to make any accurate determination; spike value is low.

P = Laboratory reports that the RPD value not applicable for sample concentrations less than 5 times the reporting limit.

B = Laboratory reports that the analyte is found in the associated blank.

T= Laboratory reports TPH value due to significant contribution from hydrocarbons heavier then requested fuel with the C5-C12 range quantified as Gasoline.

APPENDIX A

SITE DESCRIPTION & SUMMARY OF PREVIOUSLY COMPLETED SOIL & GROUNDWATER ASSESSMENT

25 East Fifth Street, Watsonville, CA

SITE DESCRIPTION & BACKGROUND

The subject property is located in a commercially zoned area near the corner of Main Street and East Fifth Street in the city Watsonville, California (see Site Map, Figure 1). The Site consists of one warehouse structure (currently being leased by Watsonville Cyclery and Tile & Marble Outlet), a parking area and limited landscaping (see Site Map, Figure 2).

LOCAL HYDROGEOLOGIC SETTING

The Site is located on flood plain deposits, which consists of unconsolidated, fine-grained sand, silt, and clay. Underlying these flood deposits are terrace deposits consisting of semi-consolidated, moderately to poorly sorted silt, sand, silty clay, and gravel. Nearly twenty-five years of water level gauging data collected from the adjacent chemical release investigation site (618 Main Street, Watsonville) indicates groundwater levels have fluctuated widely from approximately 16 to 33 feet bgs[12].

HISTORICAL BACKGROUND

In 2010, Weber, Hayes and Associates (WHA) completed a *Preliminary Assessment of Potential Historic Land Use Impacts* for the Site[13]. Historical maps and regulatory documents revealed that the Site was previously used as a Manufactured Gas Plant (MGP) from 1871 to 1908. The Site was part of a larger parcel, which housed the Watsonville-1 MGP, Watsonville-2 MGP, and later owned and subdivided by Coast Counties Gas & Electric Company in 1931. Subsequently, the Site involved a variety of automotive uses including sales, storage, and repair businesses. As noted, the commercial Site currently contains a commercial warehouse and a paved parking lot.

Research of previous investigations at the adjacent commercial zoned restaurant parcel to the west (618 Main Street, Jalisco Restaurant) has documented evidence of soil and groundwater contamination that is associated with the same manufactured gas plant that operated on the subject Site. The adjacent site characterization and cleanup activities have been ongoing since approximately 1986 and investigation is currently under the direction of the California Department of Toxic Substances Control (DTSC). Additional

[12]: Terra Pacific Group: April 2015 Groundwater and Soil Gas Monitoring Report – Former Watsonville-1 Manufactured Gas Plant, Dated June 20, 2015

[13]: WHA: *Preliminary Assessment of Potential Historic Land Use Impacts*, 25 East Fifth Street, Watsonville, dated December 10, 2009.

details, including electronic copies of previous reports can be obtained at the State GeoTracker database website[14].

SUMMARY OF PREVIOUSLY COMPLETED PRELIMINARY SOIL AND GROUNDWATER ASSESSMENT (2010)

The results of a previously completed *Preliminary Soil and Groundwater Assessment*[15] have revealed the following:

Soil Results (see Figure 3 & Tables 1 & 2):

Drilling observations from collected soil cores indicate there is approximately 3-4 feet of non-native fill materials across the Site (fill sand/gravels/base rock). Based on these observations, 4-point composite samples were obtained from the fill (at a depth of 1 feet bgs) and immediately beneath the fill (at a depth of 4 feet bgs) to assess potential impacts. Laboratory results indicate the shallow soils consistently contained elevated levels of Polynuclear Aromatic Hydrocarbon (PAHs) compounds at both sampling elevations (i.e., 1 foot and 4 feet bgs). In addition to the detection of PAHs, there were also some low-level detections of motor oil range total petroleum hydrocarbons.

Deeper soils (to 30 feet bgs) were examined at four (4) exploratory boring locations on the Site. Soil discoloration and chemical odors were observed only in the soil core collected at DP-7, positioned just south of the former MGP's infrastructure (see Figure 3). "Black oily gobs" and strong hydrocarbon odor were observed to be limited to a relatively thin lens at 22 to 23 feet bgs, just above first encountered groundwater at 24 feet bgs. No other obvious soil impacts were observed in any of the other seven shallow or deeper borings. Laboratory-analyzed soil samples were collected from DP-7 at elevations above (@ 20 ft), within (@ 22 ft), and below (@ 24 ft) the lens of dark oily material. The results show that PAH and motor oil range total petroleum hydrocarbons was limited to the visually impacted lens, at concentrations exceeding regulatory threshold limits.

Field observations noted 3-4 feet of fill materials in the majority of the exploratory borings. Laboratory results of shallow soil testing from 1) within the fill soils, and 2) in native soils immediately below the fill materials, indicate both zones are impacted with concentrations of "aged" petroleum hydrocarbons and PAHs in soil that exceed regulatory screening levels. It appears that the upper fill materials are less impacted than the lower native soils (see Tables 1 and 2). Note: there were no obvious chemical odors or soil discoloration noted in shallow soils during soil coring operations.

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[14]: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLT3S1091318

[15] WHA report: Preliminary Soil and Groundwater Assessment, 25 East Fifth Street, Watsonville, CA, dated July 29, 2010

These types of contaminant compounds (i.e., PAH and TPH) have also been detected in the adjoining parcel restaurant parcel to the west (618 Main Street), which shared the same MGP footprint. This adjacent site has been undergoing characterization and cleanup activities since approximately 1986.

Groundwater Results (see Figure 3 & Table 3):

Grab groundwater samples were collected and analyzed from the 4 deeper exploratory borings. None of the tested groundwater contained elevated concentrations of chemicals of potential concern that exceeded regulatory Water Quality Goals established by the California Regional Water Quality Control Board, Central Coast Region (Water Board). The laboratory results did note, however, a trace detection of Total Petroleum Hydrocarbons in the range of gasoline (TPH-gasoline) in the groundwater sample collected from the aforementioned soil-impacted boring (DP-7). Specifically the State-certified laboratory detected 150 µg/L of weathered TPH-gasoline (see Figure 4 and Table 3). The Water Quality Goal for TPH is 1,000 µg/L. None of the four collected groundwater samples contained concentrations of chemicals of potential concern exceeding established regulatory Water Quality Goals.

SUMMARY OF PREVIOUSLY COMPLETED ADDITIONAL SITE ASSESSMENT (2016)

The previously completed *Additional Site Assessment* (*ASA*)[16] was designed to provide sufficient characterization of subsurface conditions with the goal of quantifying potential human health risks for commercial land use, and ultimately to propose a plan that effectively separates any residual soil/soil vapor impacts from current and future tenants leasing the property.

COMPLETED SCOPE OF CHARACTERIZATION SAMPLING

The scope of work completed for the *ASA* included:

- ***Soil Characterization (see Figures 2 through 5):*** Installation of fifteen (15) shallow (i.e., 4-feet deep) soil borings throughout the Site to provide sufficient vertical and lateral definition of shallow soil chemical impacts previously detected beneath the Site (B-1 through B-15). Five (5) of these borings extended to depths of 20 to 30 feet below the ground surface (bgs) to collect data on deeper soil chemical impacts (B-3, B-5, B-8, B-11, and B-14). Five (5) shallow (i.e., 0.5 and 1.5 feet deep) soil samples were also collected from native soils within all tree well / planter areas (P-1 through P-4 and P-7). In addition, following receipt of initial soil sample analytical results, we installed four (4) "data gap" soil borings (DG-1 through DG-4) to depths of 8 feet bgs and advanced borings B-9 and P-2 to depths of 8 and 18 feet, respectively, in order to provide better vertical and lateral definition of detected soil impacts.

[16] WHA report: *Results of Additional Site Assessment*, dated November 23, 2016

- ***Groundwater Characterization (see Figure 12):*** Collected grab groundwater samples from five (5) locations throughout the Site (GW-1 through GW-5) in order to provide additional data on previously detected low-level chemical impacts to groundwater.
- ***Soil Vapor Characterization (see Figure 13):*** Installed and sampled five (5) permanent dual-depth (i.e., 5 and 15 feet bgs) soil vapor sample points (SV-1 through SV-5) to assess potential soil vapor intrusion concerns (see Figure 13).

EVALUATION OF COLLECTED SOIL, GROUNDWATER AND SOIL VAPOR MEDIA

When making human/ecological health and safety risk management decisions, the Santa Cruz County Environmental Health Services Agency (SCC-EHS) defers to the most conservative of multiple screening thresholds (concentrations) established by various State and Federal guidelines. Risk-based screening thresholds vary based on land use (i.e. residential vs. commercial / industrial land-use scenarios). At a minimum, the SCC-EHS requires evaluation of sample media with residential and/or commercial/industrial thresholds, specifically: 1) the Water Board's Tier 1 Environmental Screening Levels (ESLs), 2) the Federal USEPA Region 9 Regional Screening Levels (RSLs), and 3) the State DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment "Note 3" screening values.

In addition, soil vapor sample analytical results were compared with the *Risk Based Soil Gas Screening Levels (RBSLs)* developed for the adjacent Jalisco Restaurant property. Although specific vapor intrusion risk model inputs used to develop the RBSLs for soil vapor at the Jalisco Restaurant property likely vary somewhat from Site specific conditions, these RBSLs provide first blush order of magnitude information regarding potential risks for the commercial receptors at the Site.

RESULTS OF ADDITIONAL SITE ASSESSMENT

On May 3 through 6, 2016, soil borings B-1 through B-15, P-1 through P-4 and P-7 were installed and soil samples were collected for laboratory analysis in accordance with the approved *Work Plan*. Grab groundwater samples GW-1 through GW-5 were also obtained during this mobilization, and permanent dual depth soil vapor sample points SV-1 through SV-5 were installed. Soil vapor sampling was conducted on May 11 and 12, 2016. In addition, on August 18, 2016, data gap soil borings DG-1 through DG-4 were installed and soil samples were collected for laboratory analysis. Previous sample locations B-9 and P-2 were also advanced to deeper depths during the August 18 mobilization to obtain deeper soil samples for laboratory analysis.

Soil Characterization

Selected soil analysis and analytical results are presented on Tables 1 through 3 and Figures 2 through 5. In general, the extensive soil characterization identified relatively shallow (i.e., approximately 2-4 feet below grade) polynuclear aromatic hydrocarbons (PAHs), and to a much lesser extent Total Petroleum

Hydrocarbons as diesel/motor oil (TPH-d/mo) and/or lead concentrations exceeding applicable commercial screening thresholds which correlate with the historic MGP infrastructure footprint (i.e., central to northwestern portion of the parking lot), with deeper PAH and TPH-d/mo soil impacts that appear to originate in the vicinity of boring P-2 (adjacent to the former MGP generator room) as evidenced by black soil discoloration and associated strong hydrocarbon-like odors persisting from approximately 6.5 feet to 15 feet below the ground surface (bgs). The impacts observed at boring P-2 appear to migrate laterally and deeper to borings B-8, B-11 and DP-7 (DP-7 installed in 2010) as evidenced by a lens of soil discoloration/odor at progressively deeper depths to the west-southwest of boring P-2 (see Figure 7; Geologic Cross Sections). Boring B-9 (near impacted boring P-2) also exhibited deeper PAH impacts to at least 8 feet bgs. The most significant soil impacts are observed at borings B-9 and P-2.

The well-defined areal extent of soil impacts within the parking lot is approximately 5,000 square feet (see Figure 11).

Groundwater Characterization

Grab groundwater sample analysis and analytical results are presented on Tables 4 and 5 and Figure 12. Concentrations of PAHs (including naphthalene), TPH-diesel and cyanide (GW-3 only) exceeding conservative groundwater ESLs were limited to borings GW-1 and GW-3 (along the western property line with Jalisco Restaurant), with only a slight exceedance of naphthalene detected in upgradinet boring GW-2. Similar order of magnitude groundwater concentrations detected in the Jalisco Restaurant property monitoring well network correlate with these detections, indicating a relatively small, low-concentration groundwater plume.

We note that nearly 25 years of groundwater monitoring at the hydraulically downgradient Jalisco Restaurant property has confirmed that the dissolved plume is stable and not migrating. Semi-annual grab groundwater sampling is currently being conducted to confirm this.

Soil Vapor Characterization

Soil vapor sample analysis and analytical results are presented on Table 6 and Figure 13. VOC sample analytical results revealed no exceedance above applicable commercial screening thresholds, and were several orders of magnitude below the *Risk Based Soil Gas Screening Levels* (RBSLs) developed for the adjacent Jalisco Restaurant property, with the exception of 1,2-Dibromoethane (a.k.a EDB) detected at a concentration of 99 µg/m^3 in sample SV-3 at 10 feet below grade, which is above the California DTSC Modified Soil Gas Screening level ("near-source") set at 20 µg/m^3. The sample collected at 5 feet bgs at this location was non-detect for this compound.

Based on these initial results there does not appear to be a soil vapor intrusion risk for the Site. Semi-annual sampling is currently being conducted to confirm this.

Tables and Figures

Preliminary Soil and Groundwater Assessment,

Weber, Hayes and Associates, dated July 29, 2010

Table 1: Soil Sample Analytical Results - June 29, 2010
Polynuclear Aromatic Hydrocarbons
Phase II Environmental Site Assessment
25 East Fifth Street, Watsonville, California

Sample Identification	*Sample Type*	*Sample Depth (ft, bgs)*	***Polynuclear Aromatic Hydrocarbons (PAHs)*** *ALL ANALYTICAL RESULTS ARE IN PARTS PER MILLION (ppm, mg/kg)*																	
			Naphthalene	2-Methyl naphthalene	1-Methyl naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,I) perylene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(a) pyrene	Indeno(1,2,3-cd) pyrene	Dibenzo(a,h) anthracene	Benzo(a)pyrene Equivalent [2]
DP-7	*discrete*	20.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 0.032	< 0.065	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	0.037
		22'	**150**	**100**	**86**	**38**	15	**68**	**85**	**52**	50	43	13	**29**	20	**29**	**7.5**	**17**	**17**	**9.3**	**33.05**
		24'	0.29	0.13	**0.27**	0.16	0.068	0.33	0.32	0.26	0.29	0.25	0.075	0.18	0.12	0.17	0.045	0.10	0.091	0.049	0.190
DP-(1,2,3,4)	*composite*	1'	**0.11**	0.049	0.039	ND	ND	0.039	0.059	0.033	0.063	0.059	0.089	0.048	< 0.065	0.10	< 0.032	**0.054**	0.089	0.038	0.109
	composite	4'	J 0.043	J 0.037	J 0.029	0.15	J 0.030	J 0.053	0.51	0.41	3.2	2.8	1.5	**2.3**	1.7	**3.2**	**0.95**	**1.6**	**1.9**	**0.54**	**2.802**
DP-(5,6,7,8)	*composite*	1'	< 0.06	J 0.051	< 0.04	< 0.04	< 0.04	J 0.046	< 0.05	< 0.06	< 0.06	< 0.05	0.35	< 0.08	< 0.05	J 0.084	< 0.03	J **0.064**	< 0.03	J **0.12**	0.102
	composite	4'	< 0.06	J 0.12	J 0.099	0.25	J 0.083	J 0.089	0.15	0.33	3.0	3.8	2.9	**4.1**	J 3.0	**5.9**	**1.2**	**3.4**	**3.2**	**0.94**	**5.475**
Practical Quantitation Limit (PQL)			*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0657*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	*0.0327*	--
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			*1.2 / 1.2*	*0.25 / 0.25*	*0.25 / 0.25*	*13 / 13*	*16 / 16*	*8.9 / 8.9*	*11 / 11*	*2.8 / 2.8*	*40 / 40*	*85 / 85*	*27 / 27*	*0.38 / 1.3*	*3.8 / 13*	*0.38 / 1.3*	*0.38 / 1.3*	*0.038 / 0.13*	*0.38 / 1.3*	*0.11 / 0.38*	*0.038 / 0.13 **
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)											*60 / 60*										
USEPA Region 9 *Regional Screening Levels (RSLs)* [3] (Residential / Commercial)			*3.8 / 17*	--	--	--	*360 / 4,500*	*240 / 3,000*	--	*1,800 / 23,000*	*240 / 3,000*	*180 / 2,300*	--	*0.16 / 2.9*	*16 / 290*	*0.16 / 2.9*	*1.6 / 29*	*0.016 / 0.29*	*0.16 / 2.9*	*0.016 / 0.29*	*0.016 / 0.29**
***DTSC - Human and Ecological Risk Office (HERO)* Human Health Risk Assessment - Note 3**			--	--	--	--	--	--	--	--	--	--	--	--	*3.9 / 13*	--	*0.39 / 1.3*	--	--	--	--
																				DTSC PAH Study (2009) [4] *Northern California 95th Percentile BaP Equivalent*	*0.9*

FOOTNOTES & NOTES:

1: **Environmental Screening Levels (ESLs):** from California Regional Water Quality Control Board - San Francisco Bay Region guidance document: *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final, November 2007, Revised May 2008)* . The ESLs are intended to provide guidance on whether or not remediation of detected contamination is warranted. The ESLs used for this table were obtained from *Table A. Shallow Soils (<3m) & Table C. Deep Soils (>3m), Groundwater IS a current or potential Source of Drinking Water,* the above referenced document. The ESL document catogorizes TPH as either gasoline, middle distillates, or residual fuels. "Middle distillates" are considered to include diesel fuel, kerosene, stoddard solvent, heating fuel, and jet fuel, whereas "residual fuels" include fuel oil (bunker fuel), lubricating oils (motor oil, oil and grease, waste oils) and asphalts.

Residential / Commercial = **ESLs for Residential or Commercial land uses:** ESL screening limit concentraction are presented in BROWN for Residential land uses and in Green for Commercial/Industrial land uses. One number indicated the ESL is the same for both Residential and Commercial.

2: Seven of the PAHs are recognized to by the US EPA to cause cancer. The most potent carcinogen of these seven is benzo[a]pyrene. The toxicity of each of the other six PAHs is compared to that of benzo[a]pyrene, giving a toxicity-equivalent factor. This factor describes how carcinogenic it is relative to benzo[a]pyrene. In calculating benzo[a]pyrene-equivalent (BaP-equiv) concentrations, the concentration of each PAH is multiplied by its toxicity equivalent factor. The resulting weighted concentrations are summed to calculate the BaP-equiv carcinogenic PAH value.

3: **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated January 2015), and the *User's Guide* (November 2014). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

4: **DTSC Advisory - Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process (July 1, 2009):** Page 8, Establishing a Practical Target to Guide Soil Excavation/Remediation: A value of 0.9 milligrams per kilogram (mg/Kg) in BaP equivalents can be used as a pragmatic target for guiding soil excavation/remediation. This value corresponds to upper bounds of the ambient data sets. Experience at various MGP site has shown that removal/remediation of soil areas and hotspots exceeding 0.9 mg/Kg BaP equivalents is a reasonably conservative guide for the main phase of excavation/remediation activities.

*** =** There is no screening value for B(a)P equivelent. Results compared against screening values for Benzo(a)pyrene for reference only.

-- : Sample(s) not analyzed for this constituent and/or method because the soil sample immediately above it was either non detect for the same compound or was below the residential ESL value established at the time of the investigation.

BOLD BLUE FONT = Indicates soil sample concentration exceeds the most conservative of all the screening levels (ESLs).

J : Reporting limits increased due to the nature of the sample matrix (dark color extract). Values detected between the MDL and RL should be considered as estimated and would be flagged with a "J" qualifier.

Table 2: Soil Sample Analytical Results - June 29, 2010

Total Petroleum Hydrocarbons, Volatile Organic Compounds and Metals

Phase II Environmental Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			Laboratory Analytical Results												
			Total Petroleum Hydrocarbons			Volatile Organic Compounds (VOC's by EPA 8260)						Metals			
Sample Identification	Sample Type (discrete or composite)	Sample Depth (feet, bgs)	Extractables (w/ silica gel cleanup)		Gasoline	Benzene	Toluene	Ethyl-benzene	Xylene (total)	MTBE	8010 Solvents	Arsenic (As)	Lead (Pb)	Hexavalent Chromium (Cr VI)	Cyanide (CN)
			Motor Oil	Diesel											
DP-7	discrete	20.5'	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
		22'	730**	1,100**	1,100*	< 0.15	< 0.098	1.3	17.8	< 0.26	ND	3.3	4.1	ND	ND
		24'	6.4**	7.4**	1.0[T]	ND	ND	ND	ND	ND	--	--	--	--	--
DP-(1,2,3,4)	composite	1'	21	ND	--	--	--	--	--	--	--	ND	1.9	ND	ND
	composite	4'	120[A]	25[A]	--	--	--	--	--	--	--	4.1	8.9	ND	ND
DP-(5,6,7,8)	composite	1'	180	< 3.0	--	--	--	--	--	--	--	ND	ND	ND	ND
	composite	4'	73[A]	20[A]	--	--	--	--	--	--	--	3.7	7.0	ND	--
Practical Quantitation Limit (PQL)			4.0	2.0	0.10	0.01			0.015	0.01	varies	1.7	1.0	0.1	75
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [(1)]: (Residential / Commercial)			100 / 500	100 / 110	100 / 500	0.044	2.9	3.3	2.3	0.023	varies	0.39 / 1.6	80 / 320	8	0.0036
Environmental Screening Levels for DEEP Soils (> 10 ft) [(1)]: (Residential / Commercial)			500 / 1,000	110	500 / 770									21 / 110	
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3			--	--	--	0.33 / 1.4	1100 / 5,400	--	--	--	--	0.11 / 0.42	--	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [(2)] (Residential / Commercial)			--	--	--	1.2 / 5.1	490 / 4,700	5.8 / 25	65 / 280	--	varies	0.68 / 3.0	400 / 800	0.3 / 6.3	--

Notes:

1 = **Environmental Screening Levels (ESLs):** from California Regional Water Quality Control Board - San Francisco Bay Region guidance document: *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater (interim Final, November 2007, Revised Dec. 2013)* . The ESLs are intended to provide guidance on whether or not remediation of detected contamination is warranted. The ESLs used for this table were obtained from *Table A. Shallow Soils (<3m) & Table C. Deep Soil (>3m), Groundwater IS a current or potential Source of Drinking Water,* the above referenced document.

Residential / Commercial = **Screening levels for Residential or Commercial land uses:** screening limit concentration are presented in BROWN for Residential land uses and in Green for Commercial/Industrial land uses. One number indicates the screening level is the same for both Residential and Commercial.

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated January 2015), and the *User's Guide* (November 2014). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

BOLD BLUE FONT = Indicates soil sample concentration exceeds the most conservative of all the screening levels (ESLs).

bgs = below ground surface. **ND =** Not detected at or above the lab's practical quantitation limit.

*** =** Laboratory reports not typical gasoline pattern. TPH-Gasoline results includes significant contribution from heavy end hydrocarbons within the C5-C12 range quantified as Gasoline (possibly aged gasoline).

**** =** Laboratory reports not typical of Diesel and motor oil standard pattern (unknown discrete hydrocarbon peaks present).

T = Laboratory reports TPH value due to significant contribution from hydrocarbons heavier then requested fuel with the C5-C12 range quantified as Gasoline.

A = Laboratory reports not typical of Diesel and motor oil standard pattern (possibly fuel within the motor oil quantification range with discrete hydrocarbon peaks present).

Table 3: Grab Groundwater Analytical Results - June 29, 2010

Phase II Environmental Site Assessment

25 East Fifth Street, Watsonville, California

All groundwater sample results are in parts per billion (ug/L).

Groundwater Sampling Information			*Laboratory Analytical Results*									
			Total Petroleum Hydrocarbons			*Volatile Organic Compounds (VOC's by EPA 8260)*						*Polynuclear Aromatic Hydrocarbons (PAHs)*
Sample ID #	** First Encountered Groundwater (feet, TOC)*	*Temporary Screen Interval (feet, bgs)*	*Diesel*	*Motor Oil*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	*MTBE*	*8010 Solvents*	
			(Micro-extraction)									
DP-1	**30'**	**25 - 30**	ND	(a)	ND	ND	ND	ND	ND	ND	ND	ND
DP-2	**28'**	**23 - 28**	ND	(a)	ND	ND	ND	ND	ND	ND	ND	ND
DP-5	**25.5'**	**20.5 - 25.5**	ND	(a)	ND	ND	ND	ND	ND	ND	ND	ND
DP-7	**24'**	**19 - 24**	ND	(a)	**150**[X]	ND	ND	ND	4.4	ND	ND	ND
Laboratory Practical Quantitation Limit (PQLs):			*100*	*200*	*50*	*0.5*			*1.5*	*0.5*	*varies*	*4.2*
Maximum Contaminant Levels (MCLs) [(1)]			--	--	--	**1**	**150**	**300**	**1750**	**5**	--	--
Water Quality Goals (WQG)[(2)] Central Coast Region:			***1,000 (as Total Petroleum Hydrocarbons)***			***1***	***150***	***300***	***1,750***	***5***	***varies***	***Not Established***

NOTES:

WQG = **W**ater **Q**uality **G**oals: Goals establised by the CRWQCB Central Coast Region based on Maximum Contaminant Limits (Department of Health Services) or taste & odor threshold limits.
BOLD results indicate detected concentrations are above WQG's Threshold limits.

1 = **Maximum Contaminant Levels (MCLs)**: These are the drinking water standards established in Title 22 of the California Code of Regulations.

2 = **Central Coast Regional Water Quality Control Board Basin Plan - Water Quality Goals:** These are the maximum groundwater concentration levels allowed by the CCRWQCB for a site to be considered a low risk to groundwater resources.

ND = Not detected at or above the lab's practical quantitation limit.

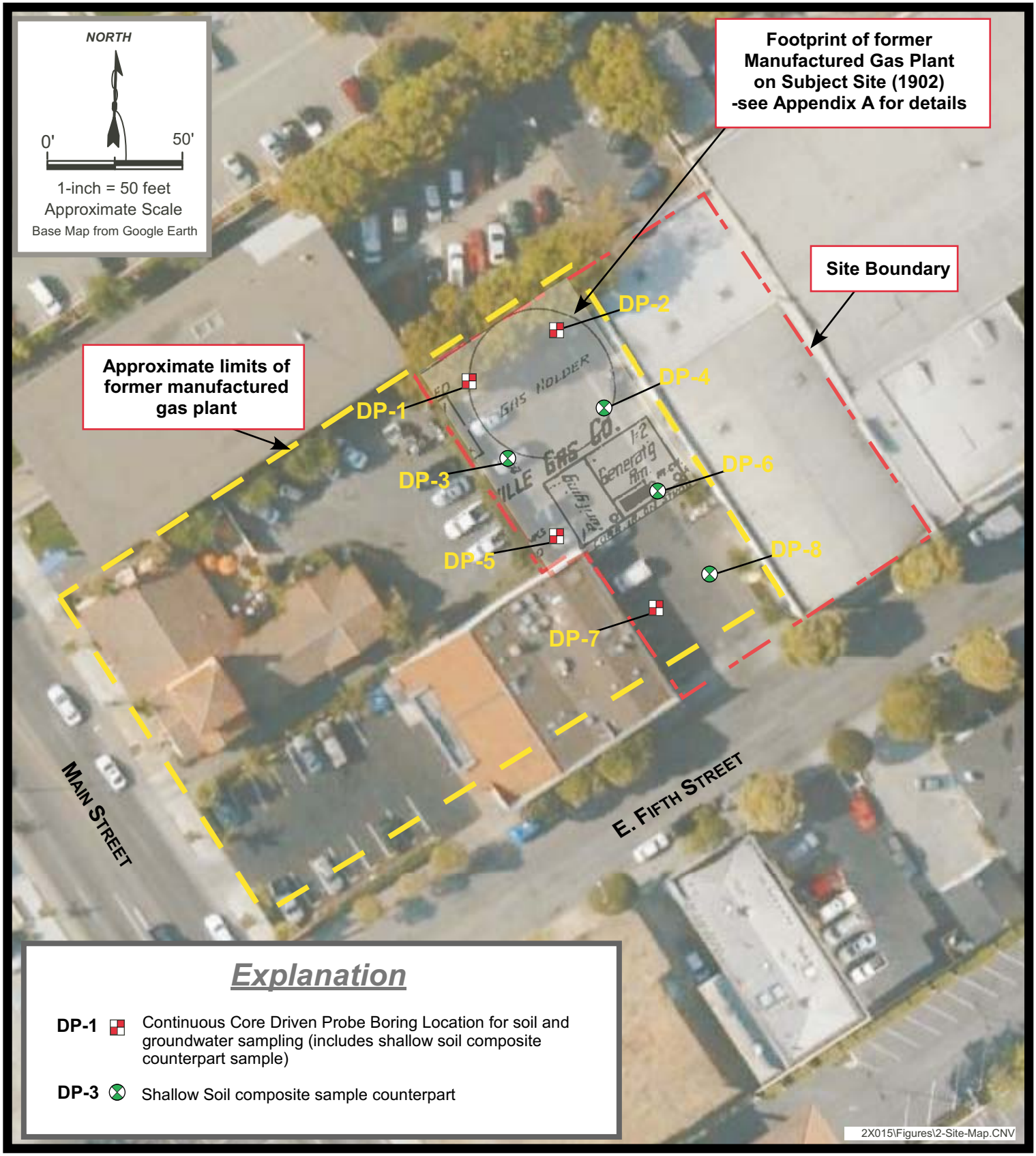
bgs = below ground surface

*** =** Depth to groundwater encountered during drilling.

MTBE = Methyl-tert-Butyl-Ether

X = Laboratory reports TPH value due to heavy end hydrocarbons with range of C5-C12 quantified as gasoline (possibly aged gasoline).

(a) = Micro-Extraction -No TPH as Motor Oil pattern present at 200 ug/L.



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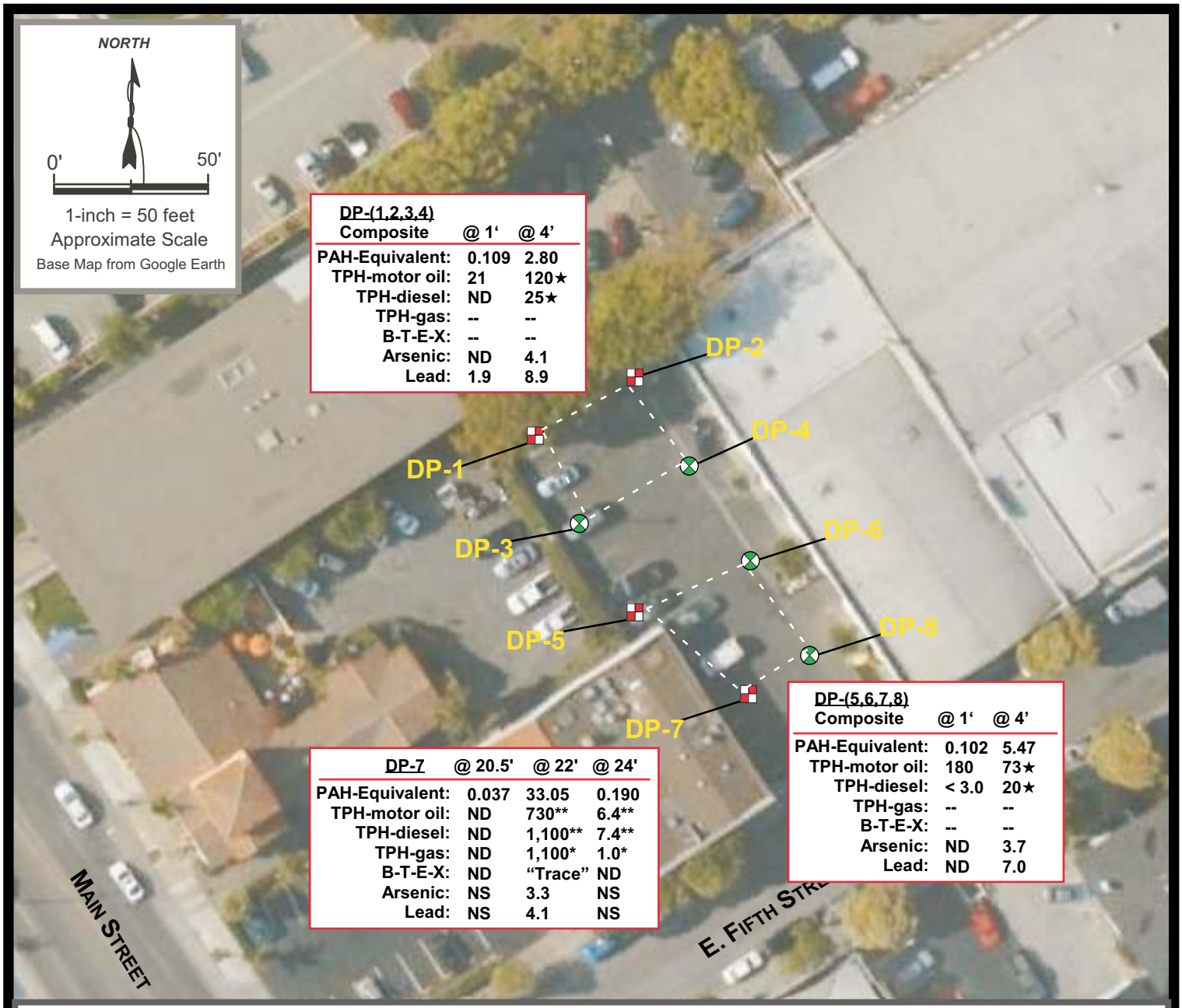
Site Map showing Drilling Locations
Oneto Propety
25 East Fifth Street, Watsonville, California

Figure 2
Job # 2X015



Explanation

DP-7	@ 20.5'	@ 22'	@ 24'
PAH-Equivalent:	0.037	33.05	0.190
TPH-mo:	ND	730**	6.4**
TPH-d:	ND	1,100**	7.4**
TPH-g:	ND	1,100*	1.0*
B-T-E-X:	ND	"Trace"	ND
Arsenic:	NS	3.3	NS
Lead:	NS	4.1	NS

Continuous Core Driven Probe Boring Locations, designation and soil analytical results (June 29, 2010)

DP-3 Shallow Soil composite sample counterpart

ND = Not detected at or above the laboratory detection limit.
< X= Compound not detected, however laboratory detection limit was elevated due to sample dilution.
*= TPH result due to significant heavier hydrocarbons (possibly aged gasoline or kerosene)
**= Not typical of Diesel & Motor oil standard pattern (unknown discrete hydrocarbon peaks present).
★ = Not typical of Diesel & Motor oil standard pattern (possibly fuel within the motor oil quantification range with discrete hydrocarbon peaks present).

All soil sample results are in parts per million (mg/kg, ppm)
Soil samples were analyzed for the following constituents

1) PAH-Equivalent = Polynuclear Aromatic Hydrocarbon (PAH) Toxicity Value - "benzo(a)pyrene equivalent" -See Table 1 for details
2) TPH-mo =Total Petroleum Hydrocarbons as Motor Oil
3) TPH-d =Total Petroleum Hydrocarbons as Diesel
4) TPH-g=Total Petroleum Hydrocarbons as Gasoline
5) BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
6) MTBE = Methyl Tert Butyl Ether & Methylene Chloride

2X015\Figures\3-Soil-Sample-Results.CNV

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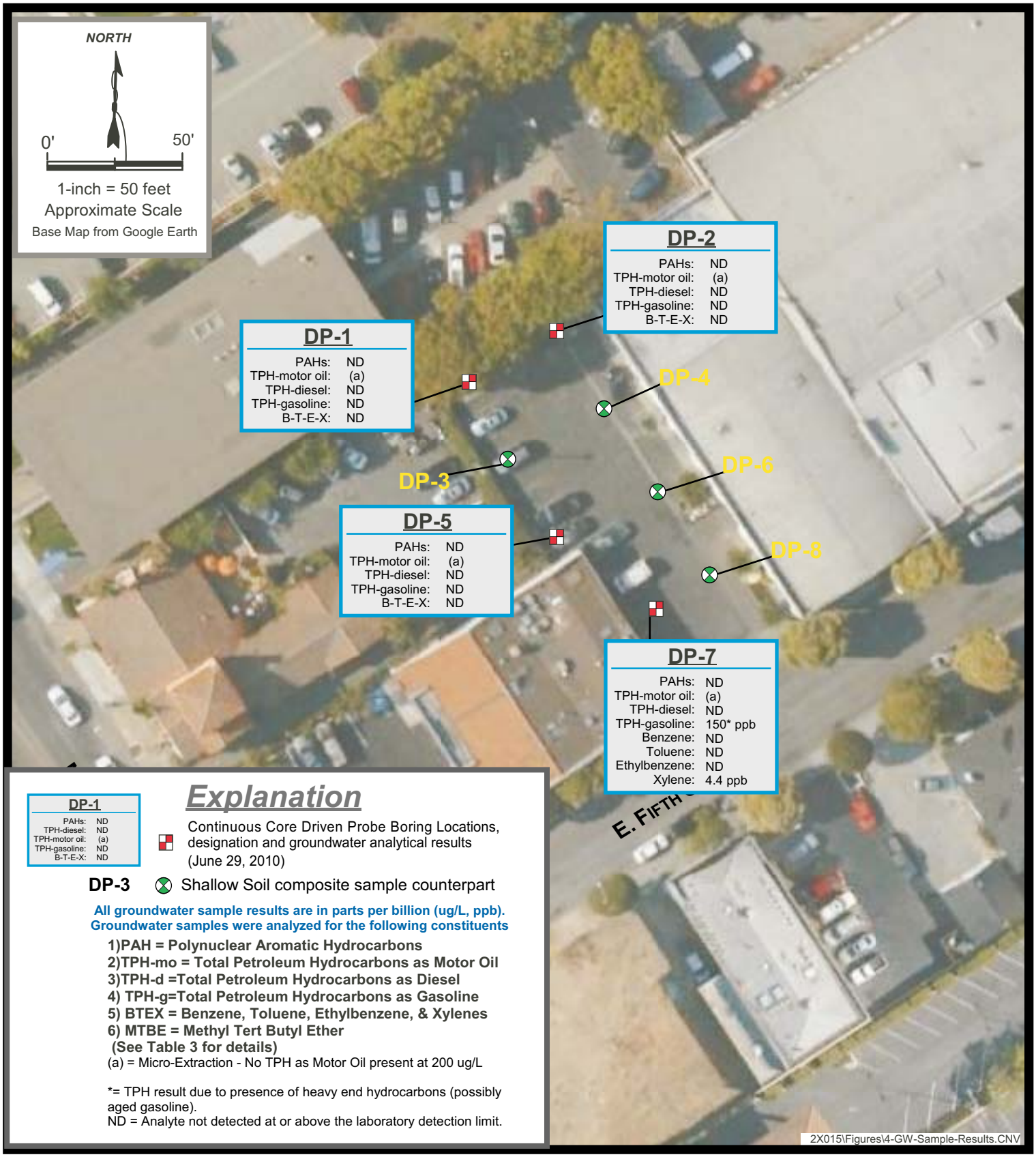
Soil Sample Analytical Results
June 29, 2010
Oneto Propety
25 East Fifth Street, Watsonville, California

Figure 3
Job # 2X015



Explanation

DP-1
PAHs: ND
TPH-diesel: ND
TPH-motor oil: (a)
TPH-gasoline: ND
B-T-E-X: ND

Continuous Core Driven Probe Boring Locations, designation and groundwater analytical results (June 29, 2010)

DP-3 Shallow Soil composite sample counterpart

All groundwater sample results are in parts per billion (ug/L, ppb).
Groundwater samples were analyzed for the following constituents

1)PAH = Polynuclear Aromatic Hydrocarbons
2)TPH-mo = Total Petroleum Hydrocarbons as Motor Oil
3)TPH-d =Total Petroleum Hydrocarbons as Diesel
4) TPH-g=Total Petroleum Hydrocarbons as Gasoline
5) BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
6) MTBE = Methyl Tert Butyl Ether
(See Table 3 for details)

(a) = Micro-Extraction - No TPH as Motor Oil present at 200 ug/L

*= TPH result due to presence of heavy end hydrocarbons (possibly aged gasoline).
ND = Analyte not detected at or above the laboratory detection limit.

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Groundwater Sample Analytical Results

June 29, 2010
Oneto Propety
25 East Fifth Street, Watsonville, California

Figure 4
Job # 2X015

Tables and Figures

Additional Site Assessment

Weber, Hayes and Associates, dated November 23, 2016

FIGURE 2
Project 2X404

SITE MAP WITH B(a)P EQUIVALENT SOIL SAMPLE ANALYTICAL RESULTS - MAY & AUGUST 2016 ADDITIONAL SITE ASSESSMENT

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: JUNE 2016

FILE:2X404\REPORT\2016-ASA\FIGURES\SOIL BAP

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EXPLANATION OF SYMBOLS

Soil Sample Locations (WHA, 2016)

- **DG-1** Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs) (Note: proposed samples P-5 & P-6 were not collected as the planter box is installed on top of the asphalt parking lot with no native soils encountered)

Former Watsonville-1 MGP Site Existing Sample Locations

- Groundwater Monitoring Well (Terra Pacific Group)
- Soil Vapor Well (Terra Pacific Group)

N

0' 30'

APPROXIMATE SCALE
BASE MAP GENERATED FROM HTTP://GIS.CO.SANTA-CRUZ.CA.US

Parcel Boundary
APN: 081-151-39

B-1	
Depth:	BaP EQV:
0.5'	28.626
1.5'	0.101
4'	0.005

B-2	
Depth:	BaP EQV:
0.5'	0.008
1.5'	0.020
4'	0.001

B-3	
Depth:	BaP EQV:
0.5'	0.014
1.5'	0.028
4'	0.004
10'	0.001
15'	0.001
20'	0.001

B-4	
Depth:	BaP EQV:
0.5'	0.002
1.5'	0.258
4'	0.001

B-5	
Depth:	BaP EQV:
0.5'	0.017
1.5'	0.190
4'	0.002
10'	0.001
15'	0.001
20'	0.001

B-6	
Depth:	BaP EQV:
0.5'	0.070
1.5'	0.178
4'	0.001

B-7	
Depth:	BaP EQV:
0.5'	0.002
1.5'	16.768
4'	0.001

B-8	
Depth:	BaP EQV:
0.5'	0.001
1.5'	5.299
4'	0.001
10'	0.002
15'	0.197
17'	10.662
20'	0.010
23'	0.001

B-9	
Depth:	BaP EQV:
0.5'	0.039
1.5'	89.894
4'	37.983
6'	4.200
8'	1.703

B-10	
Depth:	BaP EQV:
0.5'	0.493
1.5'	14.013
4'	0.002

B-11	
Depth:	BaP EQV:
0.5'	0.003
1.5'	4.782
4'	0.002
10'	0.001
15'	0.001
20'	0.001
24'	0.001
28'	0.001

B-12	
Depth:	BaP EQV:
0.5'	0.016
1.5'	0.011
4'	0.001

B-13	
Depth:	BaP EQV:
0.5'	0.016
1.5'	0.001
4'	0.001

B-14	
Depth:	BaP EQV:
0.5'	0.160
1.5'	0.003
4'	0.001
10'	0.001
15'	0.001
20'	0.001

B-15	
Depth:	BaP EQV:
0.5'	0.001
1.5'	0.001
4'	0.001

DG-1	
Depth:	BaP EQV:
0.5'	2.253
1.5'	2.500
4'	3.724
6'	0.001
8'	0.001

DG-2	
Depth:	BaP EQV:
0.5'	0.422
1.5'	0.013
4'	0.001
6'	0.006
8'	0.005

DG-3	
Depth:	BaP EQV:
0.5'	0.070
1.5'	0.011
4'	0.006
6'	0.001
8'	0.002

DG-4	
Depth:	BaP EQV:
0.5'	0.004
1.5'	0.008
4'	0.001
6'	0.001
8'	0.002

P-1	
Depth:	BaP EQV:
0.5'	0.001
1.5'	0.006

P-2	
Depth:	BaP EQV:
0.5'	0.001
1.5'	18.156
4'	30.274
6'	4.856
8'	5.488
12'	2.226
15.5'	0.345
18'	3.098

P-3	
Depth:	BaP EQV:
0.5'	0.002
1.5'	0.002

P-4	
Depth:	BaP EQV:
0.5'	0.071
1.5'	0.005

P-7	
Depth:	BaP EQV:
0.5'	0.007
1.5'	0.001

P-5

P-6

Tile & Marble Outlet

Baker Bros. Appliance

Watsonville Cyclery

Chase Bank

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

La Rosa Supermercado

Laundromat

Residence

Former Gas Holder

Former Retorts, & Purifier/Scrubber

Generator Room

Purifier

Former Above Ground Crude Oil Tanks

MW-WAT1-1 MW-WAT1-2 MW-WAT1-3 MW-WAT1-4 MW-WAT1-5 MW-WAT1-6 MW-WAT1-7

SG-1A SG-1B SG-2A SG-2B SG-2C SG-3A SG-4A SG-5A SG-5B SG-6A SG-8 SG-9 SG-10

MAIN STREET

EAST FIFTH STREET

B(a)P Equivalent Concentrations in Soil (mg/kg) (see Table 1 for details)

Highlighted concentration indicates result for BaP Equivalent exceeds the CA DTSC PAH 2009 Study Limit of 0.9 mg/kg

Explanation of Symbols

Soil Sample Locations (WHA, 2016)

DG-1 Data Gap Soil Sample (to at least 8 feet bgs)

B-1 Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)

B-3 Shallow & Deeper Soil Sample (to at least 20 feet bgs)

P-1 Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs) (Note: proposed samples P-5 & P-6 were not collected as the planter box is installed on top of the asphalt parking lot with no native soils encountered)

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

B-5

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	0.834	--
1.5'	--	5.01	--
4'	2.7	6.77	0.105 J
10'	1.29 J	11.9	<0.0430
15'	--	--	0.135 J
20'	--	--	0.0932 J

B-3

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.684	1.26	0.387
1.5'	4.71	11.4	<0.0418
4'	1.39 J	4.97	--

B-6

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	4.51	8.63	0.671
1.5'	3.97	10.4	0.518

P-1

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.672	0.412 J	<0.0403
1.5'	5.39	123	0.665

B-2

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	<0.202	--
1.5'	--	5.22	--

DG-1

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	7.4	--
1.5'	--	7.06	--
4'	--	83.4	--

B-1

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	16.1	--
1.5'	--	15.1	--

DG-2

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	194	--
1.5'	--	18.8	--
4'	--	8.1	--

B-4

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.679	1.07	0.120 J
1.5'	2.91	6.99	0.434

B-9

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	2.27	--
1.5'	--	1.5	--
4'	--	10.3	--

B-7

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.699	0.936	0.157
1.5'	5.48	356	5.09
4'	4.56	7.34	--

DG-3

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	182	--
1.5'	--	15.5	--
4'	--	8.25	--

B-8

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	<0.195	--
1.5'	--	8.47	--
4'	--	7.66	--
15'	--	--	0.33
17'	--	--	0.318
20'	--	--	<0.0445
23'	--	--	<0.0479

P-2

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.684	0.746	<0.0410
1.5'	4.51	211	11.3
4'	--	17.3	--
6'	--	6.83	--
8'	--	6.27	--

B-11

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.681	0.968	<0.049
1.5'	5.02	206	1.11
4'	2.48	6.43	1.58
10'	2.89	3.79	1.35
15'	--	--	0.338
20'	--	--	0.228 J
24'	--	--	<0.0468
28'	--	--	<0.0451

B-10

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	35.9	--
1.5'	--	23.2	--
4'	--	6.77	--

B-12

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	4.79	376	<0.0436
1.5'	5.12	63	0.0781 J
4'	2.16 J	6.46	--

P-4

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	4.38	43.9	<0.0462
1.5'	3.94	9.81	0.0493 J

DG-4

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	1.3	--
1.5'	--	1.56	--
4'	--	9.4	--

P-3

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.681	0.352 J	<0.0409
1.5'	5.6	10.9	<0.0502

B-14

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	3.87	--
1.5'	--	12.3	--
4'	2.09 J	5.94	0.0456 J
10'	4	4.46	0.0495 J
15'	--	--	0.0745 J
20'	--	--	<0.0424

B-15

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	<0.779	<0.228	0.0598 J
1.5'	6.29	9.44	<0.0473
4'	4.24	6.64	--

P-7

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	4.22	15.8	<0.0476
1.5'	1.93 J	5.52	<0.0444

B-13

Depth:	Arsenic:	Lead:	Cyanide:
0.5'	--	0.293 J	--
1.5'	--	10.1	--
4'	--	6.36	--

Parcel Boundary
APN: 081-151-39

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us
0' 30'

Tile & Marble Outlet

Baker Bros. Appliance

Former Gas Holder

Former Retorts, & Purifier/Scrubber

Generator Room

Purifier

Chase Bank

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

La Rosa Supermercado

Laundromat

Residence

Main Street

East Fifth Street

SG-9A, SG-9, SG-4A, SG-6A, SG-5A, SG-5B, SG-2C, SG-2B, SG-2A, SG-1B, SG-3A, MW-WAT1-3, MW-WAT1-4, MW-WAT1-7, MW-WAT1-5, SG-8, P-5, P-6

Metal Concentrations in Soil (mg/kg)
(see Table 2 for details)

Note: Only Arsenic, Cyanide, & Lead concentrations shown. All other metal concentrations were below Commercial Screening Thresholds.

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Arsenic: Analysis of the 95% Upper Confidence Limit for arsenic in 14 shallow soil samples that were collected to establish background concentrations for metals in the Watsonville area yields a concentration of 7.48 mg/kg.

Figure 3
Project 2X404

Site Map with Metals Soil Sample Analytical Results May & August 2016 Additional Site Assessment

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File:2x404\Report\2016-ASA\Figures\Soil Metal

Date:June 2016

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Explanation of Symbols

Soil Sample Locations (WHA, 2016)

- **DG-1** — Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** — Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** — Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** — Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs) (Note: proposed samples P-5 & P-6 were not collected as the planter box is installed on top of the asphalt parking lot with no native soils encountered)

Former Watsonville-1 MGP Site Existing Sample Locations

- Groundwater Monitoring Well (Terra Pacific Group)
- Soil Vapor Well (Terra Pacific Group)

B-8

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
10′	--	--	3.69 J
15′	346	479	--
17′	1,850	1,665	161
20′	29.5	13.7	110
23′	12.1	4.92 J	--

B-6

Depth:	Diesel Range:	Motor Oil Range:
0.5′	6.21	42.7
1.5′	6.3	15.05

B-3

Depth:	Diesel Range:	Motor Oil Range:
0.5′	<15.5	208.6
1.5′	12.2	59.6

B-1

Depth:	A (as N):
1.5′	<1.85 P
4′	<1.76 J6

DG-1

Depth:	Diesel Range:	Motor Oil Range:
0.5′	58.8	577
1.5′	105	570
4′	208	1,022
6′	1.09 J	1.60 J
8′	2.53 J	2.88 J

P-1

Depth:	Diesel Range:	Motor Oil Range:
0.5′	<0.757	<2.74
1.5′	159	607

B-9

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
0.5′	ND	2,860	--
1.5′	4.26	3.41 J	15.3
4′	4,980	12,350	4.06 J
6′	358	1,231	--
8′	234	409	--

B-4

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
0.5′	<0.766	4.43	--
1.5′	9.71	40.9	<1.67
4′	--	--	2.34 J

DG-2

Depth:	Diesel Range:	Motor Oil Range:
0.5′	76	568
1.5′	5.14	7.80 J
4′	2.84 J	2.84 J
6′	8.24	93.3
8′	5.66	55.7

DG-3

Depth:	Diesel Range:	Motor Oil Range:
0.5′	10.4	27.88
1.5′	7.94	17.6
4′	3.72 J	3.73 J
6′	3.05 J	15.93
8′	4.72	30.8

B-5

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
4′	1.77 J	22.59	--
10′	<0.808	2.27 J	3.12 J
15′	2.12 J	7.19	8.49
20′	2.35 J	1.89 J	64.3

DG-4

Depth:	Diesel Range:	Motor Oil Range:
0.5′	ND	69.1 J
1.5′	4.21	3.47 J
4′	3.04 J	4.95 J
6′	8.32	20.87
8′	2.67 J	34.09

P-2

Depth:	Diesel Range:	Motor Oil Range:
0.5′	2.37 J	2.13 J
1.5′	2,260	6,980
4′	4,130	8,060
6′	706	899.3
8′	2,730	2,109
12′	2,210	1,305
15.5′	394	268.9
18′	2,220	1,341

B-7

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
0.5′	<7.54	93.8	--
1.5′	928	3,300	<1.89
4′	--	--	2.15 J

B-10

Depth:	A (as N):
1.5′	9.79
4′	<1.73 P

P-3

Depth:	Diesel Range:	Motor Oil Range:
0.5′	1.74 J	<2.78
1.5′	5.22	2.61 J

P-4

Depth:	Diesel Range:	Motor Oil Range:
0.5′	14.3	48.8
1.5′	7.63	20.33

B-11

Depth:	Diesel Range:	Motor Oil Range:	A (as N):
0.5′	1.43 J	16.83	--
1.5′	191 J	1,022	<1.87
4′	1.49 J	<3.02	5.87 J6
10′	2.13 J	1.68 J	<1.71
15′	4.86	2.21 J	45.4
20′	7.73	2.99 J	62.3
24′	9.39	3.76 J	--
28′	<0.848	<3.08	--

B-12

Depth:	Diesel Range:	Motor Oil Range:
0.5′	<40.9	495
1.5′	2.96 J	15.26

B-15

Depth:	Diesel Range:	Motor Oil Range:
0.5′	<0.879	14.11
1.5′	1.20 J	5.81 J

P-7

Depth:	Diesel Range:	Motor Oil Range:
0.5′	5.14	6.89 J
1.5′	1.73 J	<3.02

B-14

Depth:	Diesel Range:	Motor Oil Range:
4′	2.02 J	5.89 J
10′	<0.831	<3.02
15′	<0.862	<3.12
20′	<0.797	<2.90

TPH and Ammonia (as Nitrogen) Concentrations in Soil (mg/kg)
(see Table 3 for details)

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Parcel Boundary
APN: 081-151-39

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us
0′ 30′

Chase Bank
Former Gas Holder
Former Retorts, & Purifier/Scrubber
Generator Room
Purifier
Former Above Ground Crude Oil Tanks
Tile & Marble Outlet
Baker Bros. Appliance
Watsonville Cyclery
Jalisco Restaurant
Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC
La Rosa Supercemercado
Residence
Laundromat
Main Street
East Fifth Street

Figure 4
Project 2X404

Site Map with TPH & A (as N) Soil Sample Analytical Results - May & August 2016 Additional Site Assessment

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File:2x404\Report\2016-ASA\Figures\Soil TPH & A as N

Date:June 2016

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Explanation of Symbols

Soil Sample Locations (WHA, 2016)

- **DG-1** — Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** — Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** — Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** — Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs) (Note: proposed samples P-5 & P-6 were not collected as the planter box is installed on top of the asphalt parking lot with no native soils encountered)

Former Watsonville-1 MGP Site Existing Sample Locations

- Groundwater Monitoring Well (Terra Pacific Group)
- Soil Vapor Well (Terra Pacific Group)

Parcel Boundary
APN: 081-151-39

N

0' 30'

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

B-1

Depth:	BaP EQV:
0.5'	28.626
1.5'	0.101
4'	0.005

B-8

Depth:	BaP EQV:	Diesel Range:
0.5'	0.001	--
1.5'	5.299	--
4'	0.001	--
10'	0.002	--
15'	0.197	346
17'	10.662	1,850
20'	0.010	29.5
23'	0.001	12.1

DG-1

Depth:	BaP EQV:	Lead:
0.5'	2.253	7.4
1.5'	2.500	7.06
4'	3.724	83.4
6'	0.001	--
8'	0.001	--

DG-2

Depth:	Lead:
0.5'	194
1.5'	18.8
4'	8.1

B-9

Depth:	BaP EQV:	Diesel Range:	Motor Oil Range:
0.5'	0.039	ND	2,860
1.5'	89.894	4.26	3.41 J
4'	37.983	4,980	12,350
6'	4.200	358	1,231
8'	1.703	234	409

DG-3

Depth:	Lead:
0.5'	182
1.5'	15.5
4'	8.25

P-2

Depth:	BaP EQV:	Lead:	Diesel Range:	Motor Oil Range:
0.5'	0.001	0.746	2.37 J	2.13 J
1.5'	18.156	211	2,260	6,980
4'	30.274	17.3	4,130	8,060
6'	4.856	6.83	706	899.3
8'	5.488	6.27	2,730	2,109
12'	2.226	--	2,210	1,305
15.5'	0.345	--	394	268.9
18'	3.098	--	2,220	1,341

B-7

Depth:	BaP EQV:	Lead:	Diesel Range:
0.5'	0.002	0.936	<7.54
1.5'	16.768	356	928
4'	0.001	7.34	--

B-10

Depth:	BaP EQV:
0.5'	0.493
1.5'	14.013
4'	0.002

B-12

Depth:	Lead:
0.5'	376
1.5'	63
4'	6.46

B-11

Depth:	BaP EQV:	Lead:
0.5'	0.003	0.968
1.5'	4.782	206
4'	0.002	6.43
10'	0.001	3.79
15'	0.001	--
20'	0.001	--
24'	0.001	--
28'	0.001	--

Tile & Marble Outlet
Baker Bros. Appliance
Watsonville Cyclery
Chase Bank
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Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC
La Rosa Supermercado
Residence
Laundromat
Former Gas Holder
Former Retorts, & Purifier/Scrubber
Generator Room
Purifier
Former Above Ground Crude Oil Tanks
B-1 B-2 B-3 B-4 B-5 B-6 P-1 P-2 P-3 P-4 P-5 P-6 P-7 DG-4 B-13 B-14 B-15
MW-WAT1-1 MW-WAT1-2 MW-WAT1-3 MW-WAT1-4 MW-WAT1-5 MW-WAT1-6 MW-WAT1-7
SG-1A SG-1B SG-2A SG-2B SG-2C SG-3A SG-4A SG-5A SG-5B SG-6A SG-8 SG-9 SG-9A SG-10

East Fifth Street
Main Street

Concentrations in Soil (mg/kg) (see Tables 1, 2, & 3 for details)

Note: Only Concentrations with exceedances above applicable screening threshold values are presented in this figure.

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Although most samples yielded concentrations of **cyanide** exceeding the very low-level commercial screening threshold protective of potential leaching impacts to groundwater, none exceeded the direct exposure threshold.

Figure 5

Site Map with Soil Sample Analytical Results Exceeding Commercial Screening Levels - May & August 2016 Additional Site Assessment

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File:2X404\Report\2016-ASA\Figures\Soil Esceedances

Date: June 2016

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Explanation of Symbols

On-Site Sample Locations (WHA, 2016)

- Shallow Soil Sample (4 feet bgs)
- Shallow & Deeper Soil Sample (20 to 30 feet bgs)
- Data Gap Soil Sample (8 to 18 feet bgs)
- Grab Groundwater Sample (30 to 34 feet bgs)
- Multi-Depth Soil Vapor Well (5 and 10 feet bgs)
- Tree Well/Planter Shallow Soil Sample (1.5 to 8 feet bgs)

On-Site Previous Sample Locations (WHA, June 2010)

- Soil and Groundwater Sample
- Shallow Soil Composite Sample Counterpart

A — A' Geologic Cross-section Transect

Former Watsonville-1 MGP Site Existing Sample Locations

- Groundwater Monitoring Well (Terra Pacific Group)
- Soil Vapor Sample (Terra Pacific Group)

Parcel Boundary
APN: 081-151-39

N

0' 30'

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

Baker Bros. Appliance

Tile & Marble Outlet

Watsonville Cyclery

Chase Bank

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

La Rosa Supermercado

Residence

Laundromat

Former Gas Holder

Former Retorts, & Purifier/Scrubber

Generator Room

Purifier

Former Above Ground Crude Oil Tanks

B-1, B-2, B-3, B-4 / GW-1, B-5, B-6 / GW-2, B-7 / GW-3, B-8, B-9, B-10, B-11 / GW-4, B-12, B-13, B-14, B-15

DP-1, DP-2, DP-3, DP-4, DP-5, DP-6, DP-7, DP-8

DG-1, DG-2, DG-3, DG-4

SV-1, SV-2, SV-3, SV-4, SV-5

P-1, P-2, P-3, P-4, P-7

GW-5

MW-WAT1-1, MW-WAT1-2, MW-WAT1-3, MW-WAT1-4, MW-WAT1-5, MW-WAT1-6, MW-WAT1-7

SG-1A, SG-1B, SG-2A, SG-2B, SG-2C, SG-3A, SG-4A, SG-5A, SG-5B, SG-6A, SG-8, SG-9, SG-9A, SG-10

A, A', B, B', C, C'

MAIN STREET

EAST FIFTH STREET

FIGURE 6
Project 2X404

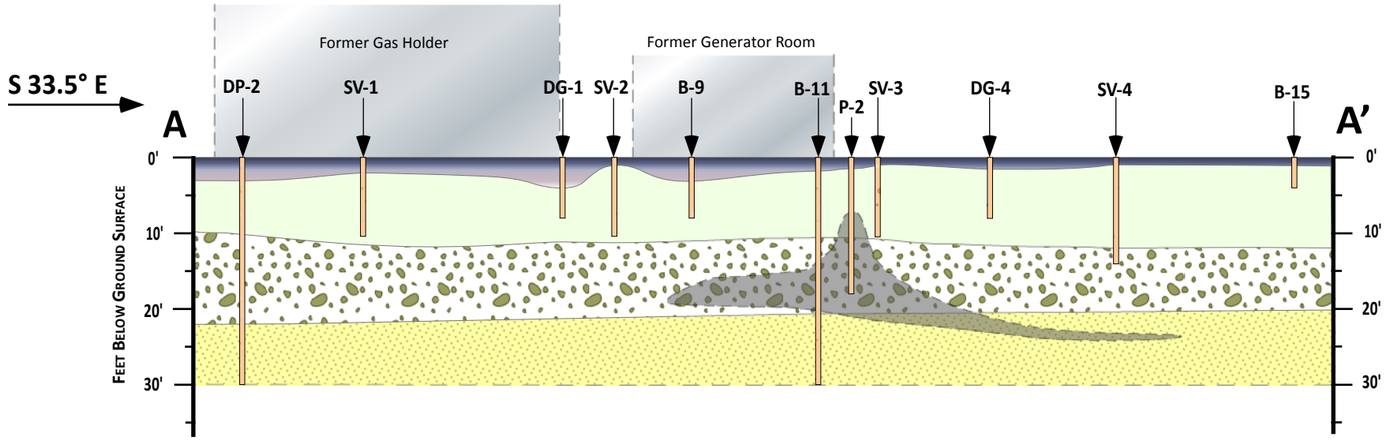
SITE MAP WITH GEOLOGIC CROSS SECTION TRANSECT LINES A-A', B-B' AND C-C'

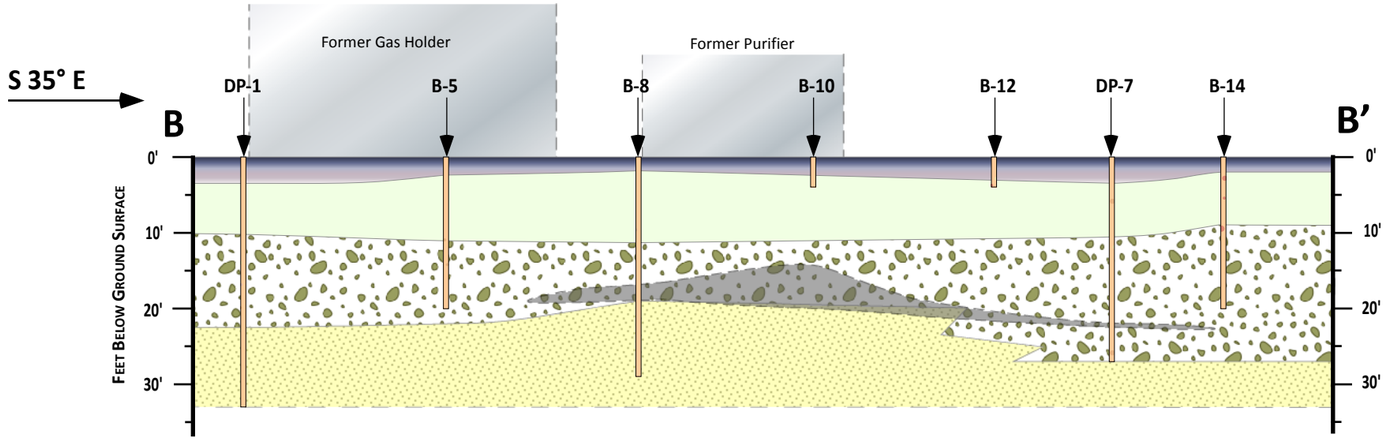
SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

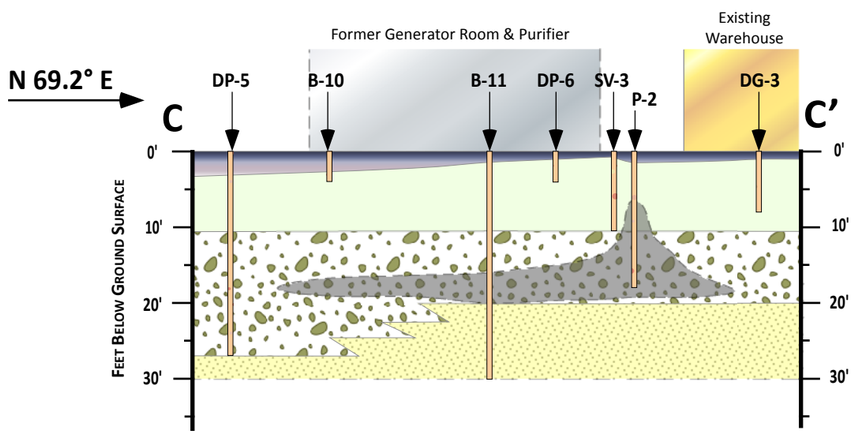
DATE: SEPTEMBER 2016

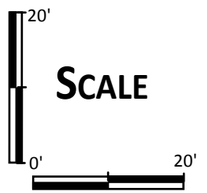
FILE: 2X404.ONETO-WATSONVILLE\REPORT\2016-ASA\FIGURES

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com









Horizontal Scale = 1 inch = 20 feet
Vertical Scale = 1 inch = 20 feet
(No vertical exaggeration)

Explanation

Non-Native Fill and Base Rock

Moderate Permeability Silty Sands (~10-30% silt fines) and Clayey Sands (~10-20% clay fines)

Moderate Permeability Gravelly Well Graded Sands with up to ~15-25% gravels, ~10-15% silt to clay fines

Higher Permeability Poorly Graded Sands with up to ~5-10% silt fines

Observed soil discoloration and associated hydrocarbon odor (partially interpreted and projected onto cross section based some borings that may not be shown on cross section)

Soil Boring Location

DP-1 Soil Boring Installed June 2010

B-11 Soil Boring Installed May 2016

P-2 Soil Boring Installed in planter box May & Aug. 2016

DG-1 Soil Boring Installed Aug. 2016

SV-1 Soil Vapor Well boring Installed May 2016

Notes:
Similar lithology has been related across areas between boring locations.

Most borings have been projected onto line of section - see Geologic Cross Section Transects details.

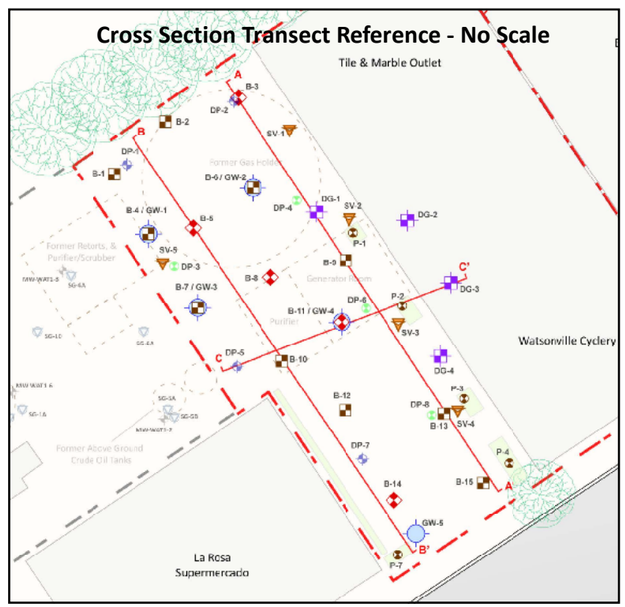


Figure 7

Project 2X404

Geologic Cross Sections A-A', B-B', and C-C'

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File: 2x404.Oneto-watsonville\Report\2016-ASA\Figures

Date: September 2016

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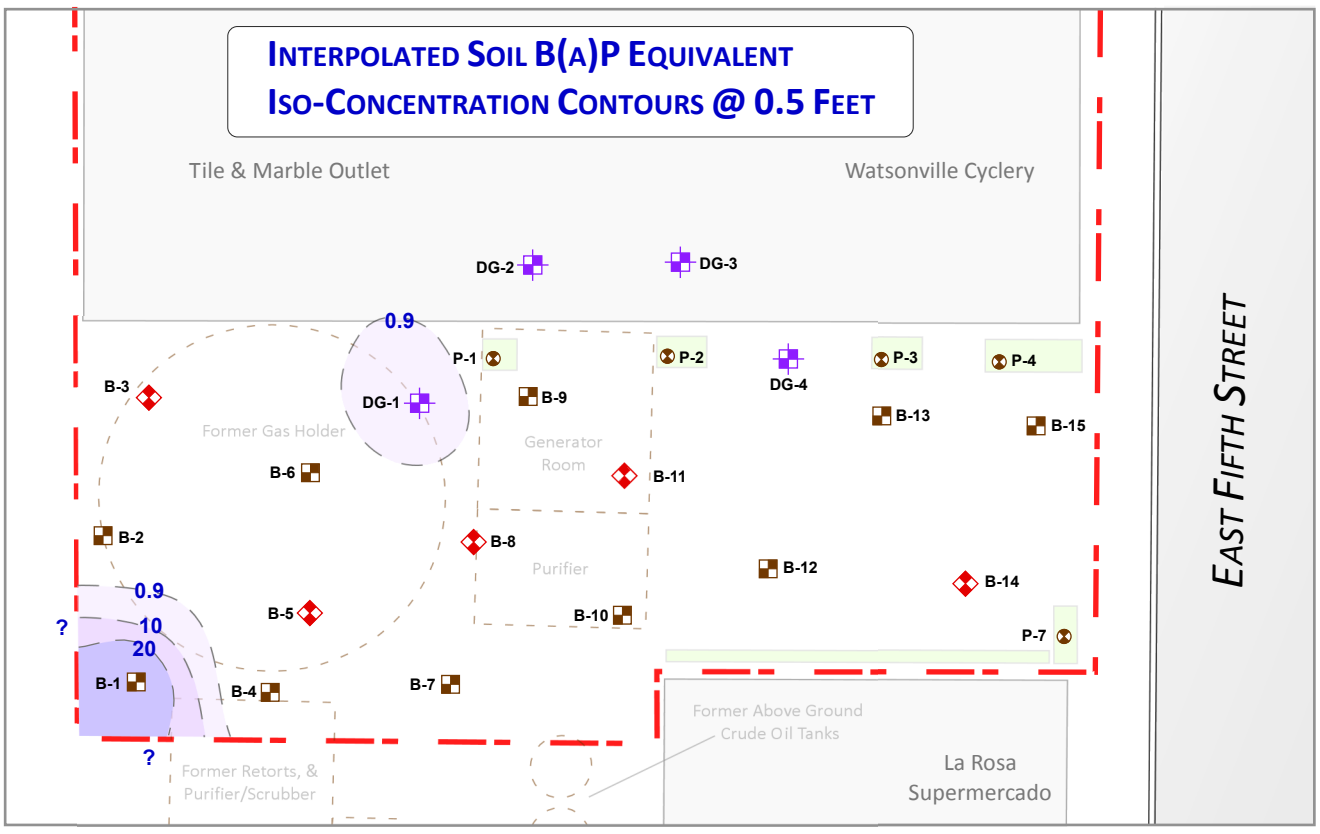
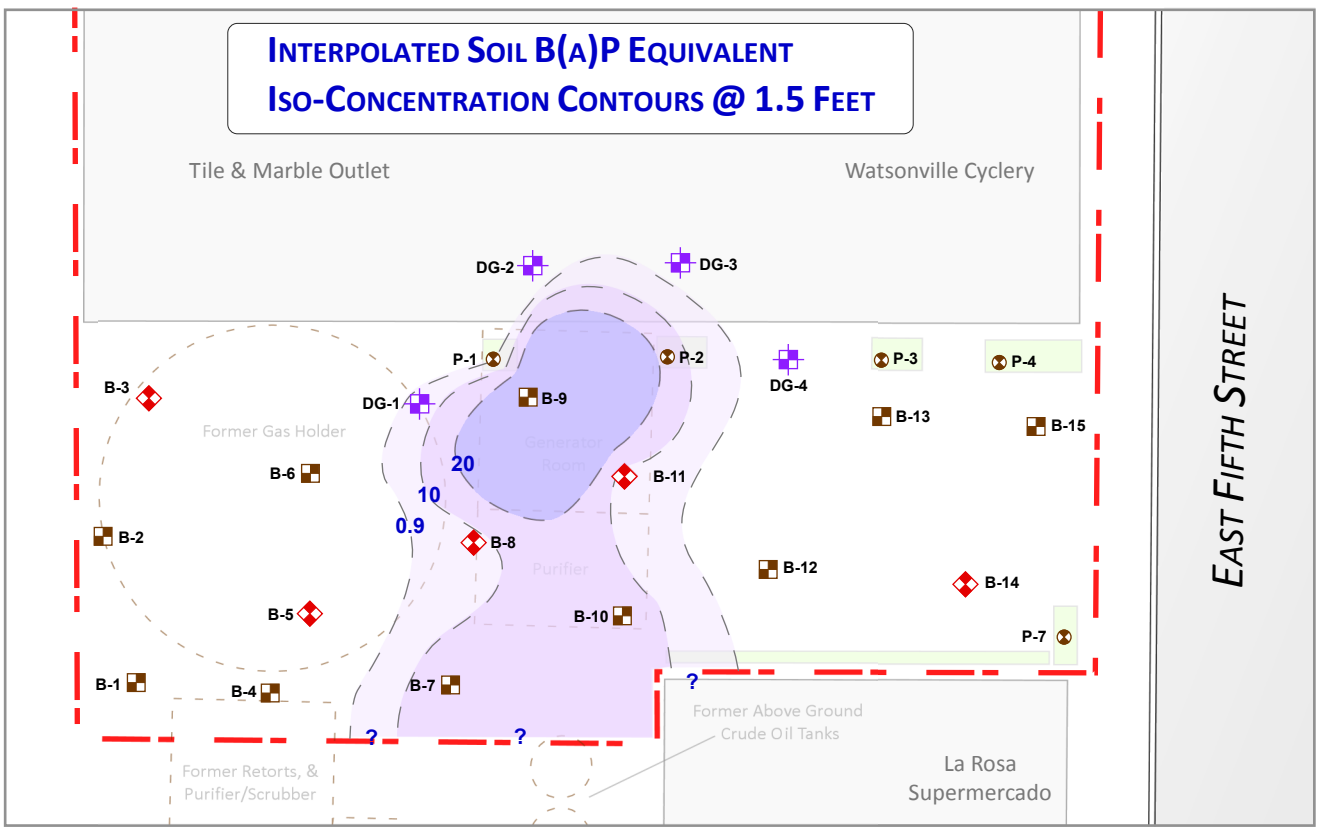
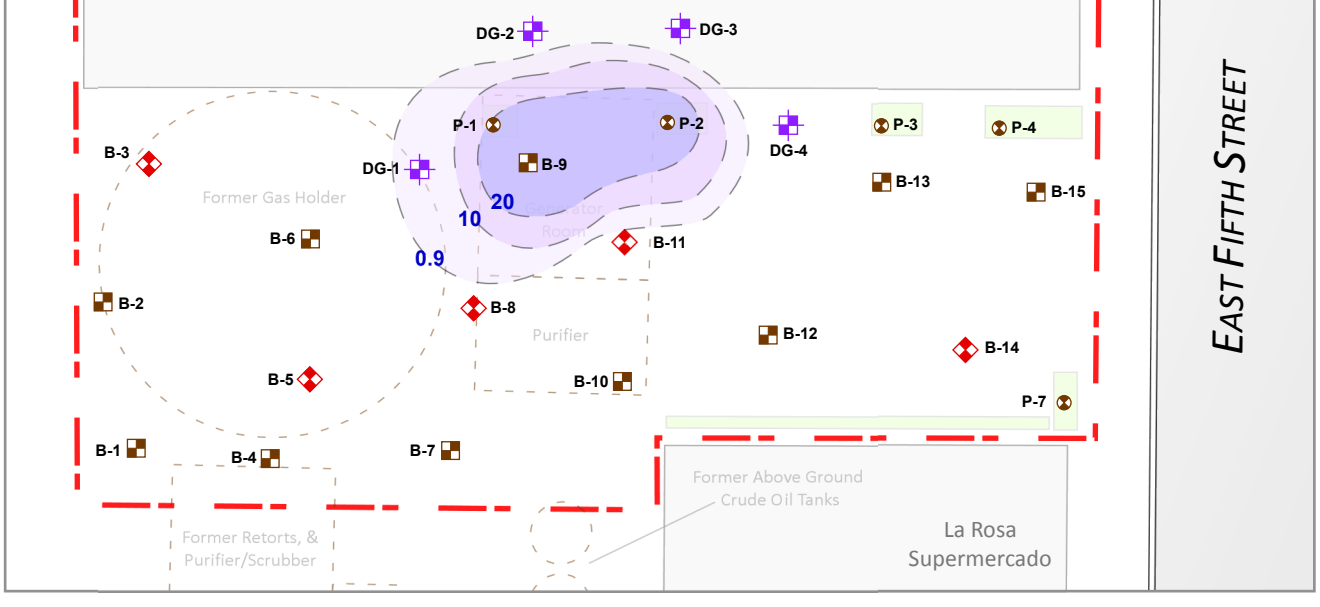
Interpolated Soil B(a)P Equivalent Iso-Concentration Contours @ 0.5 Feet

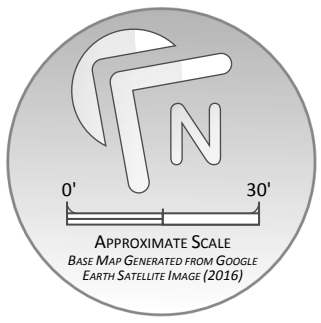


Interpolated Soil B(a)P Equivalent Iso-Concentration Contours @ 1.5 Feet



Interpolated Soil B(a)P Equivalent Iso-Concentration Contours @ 4 Feet



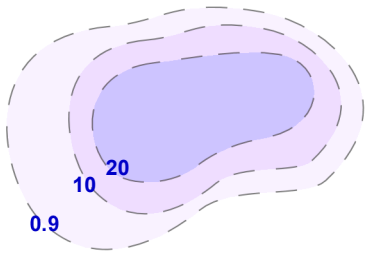


Explanation of Symbols

Soil Sample Locations (WHA, 2016)

- **DG-1** — Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** — Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** — Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** — Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)

Interpolated B(a)P Equivalent Iso-Concentration Contours in Soil (0.9, 10 & 20 mg/kg) (see Table 1 for details)



Only concentration shown for BaP Equivalent concentrations that exceeds the CA DTSC PAH 2009 Study Limit of 0.9 mg/kg

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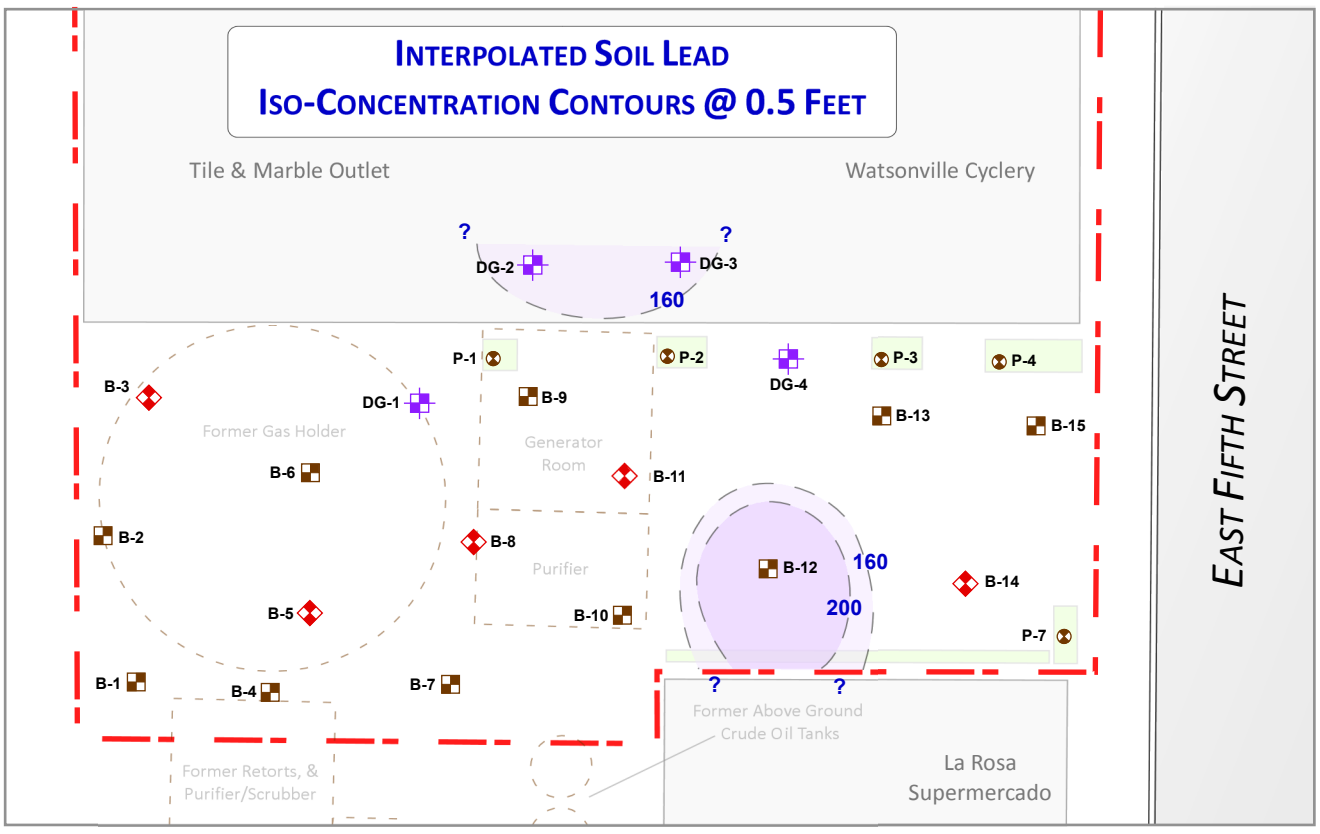
Interpolated Soil B(a)P Equivalent Iso-Concentration Contours
May & August 2016 Additional Site Assessment
Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

Date: Sept. 2016

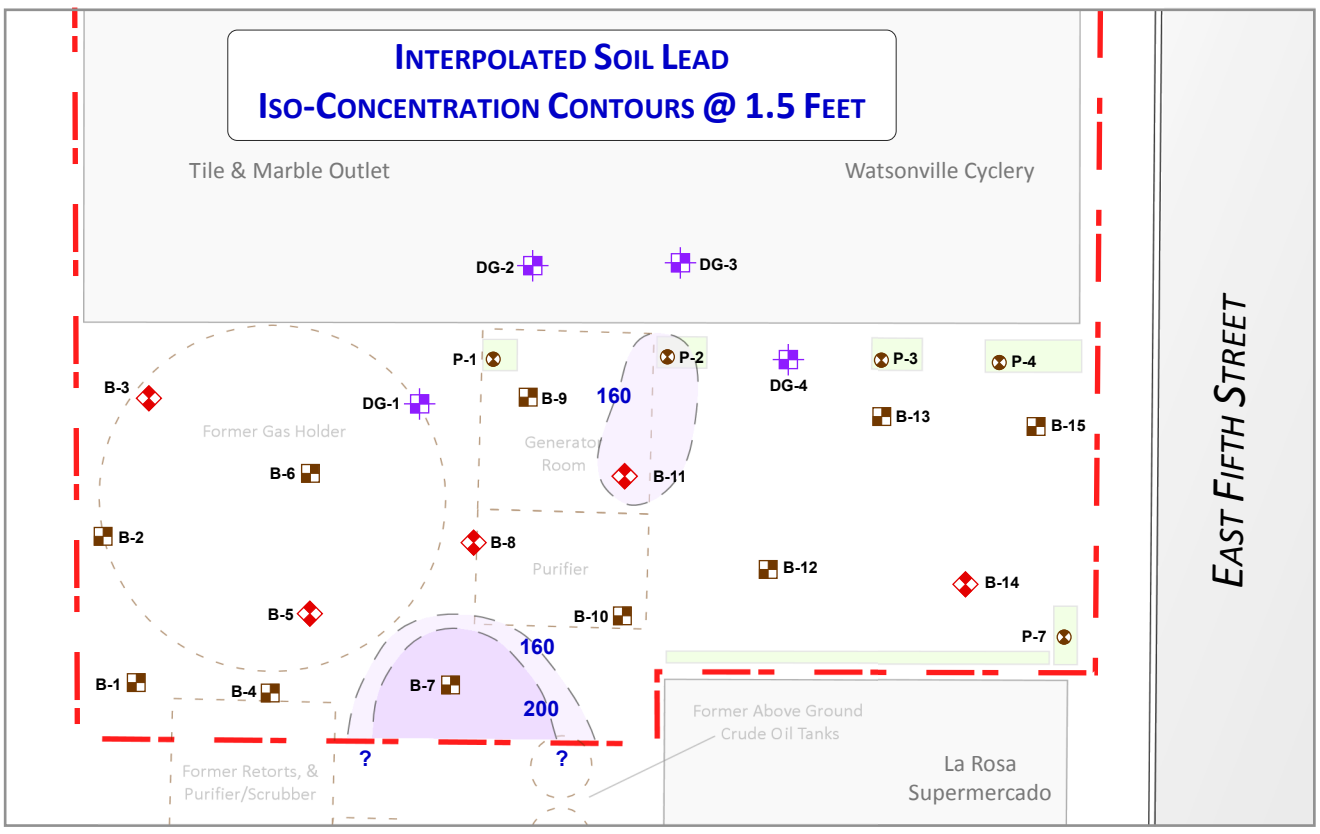
File:2x404\Report\2016-ASA\Figures\

Figure 8
Project 2X404

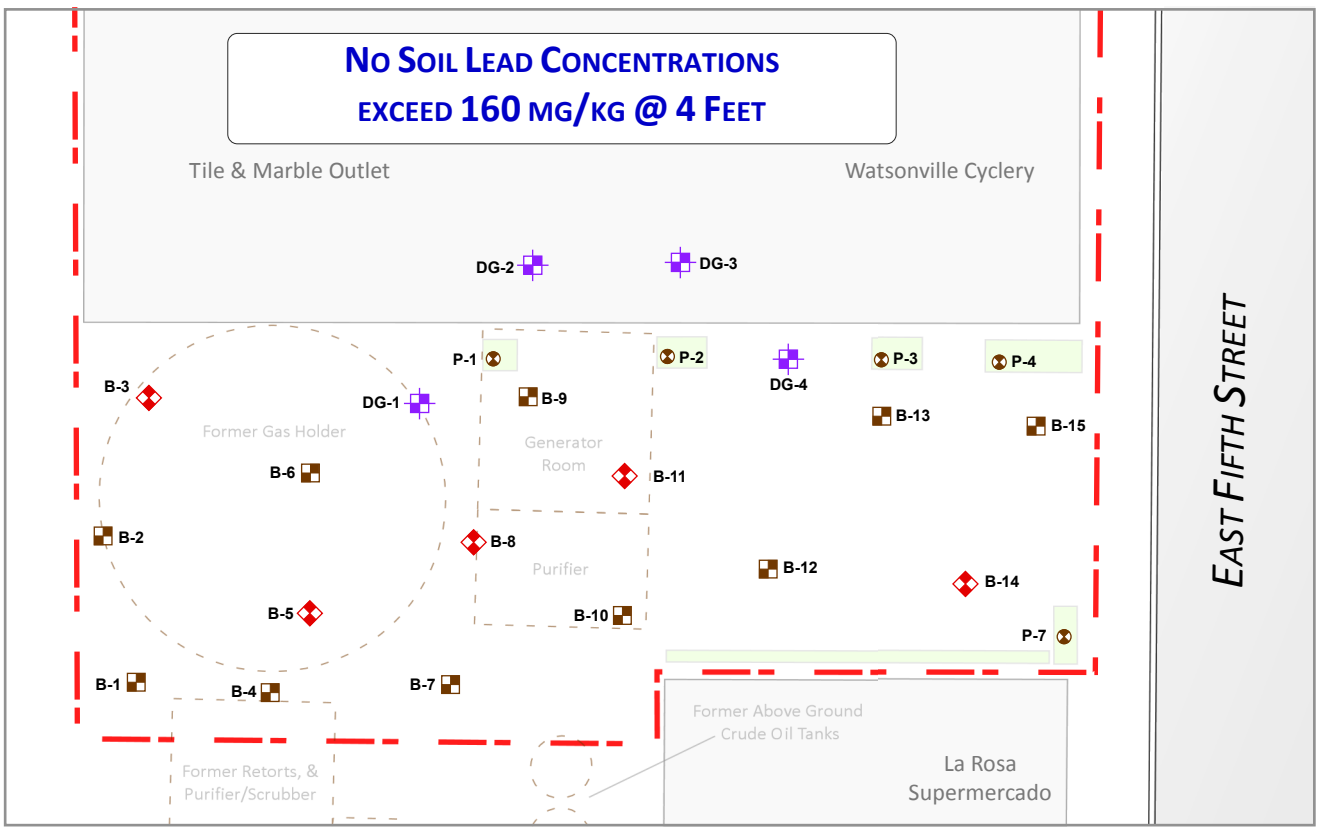
Interpolated Soil Lead Iso-Concentration Contours @ 0.5 Feet

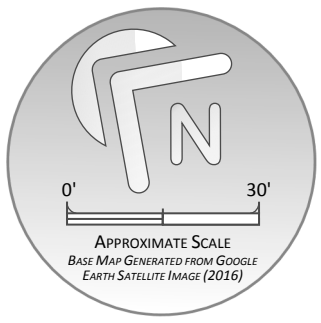


Interpolated Soil Lead Iso-Concentration Contours @ 1.5 Feet



No Soil Lead Concentrations exceed 160 mg/kg @ 4 Feet



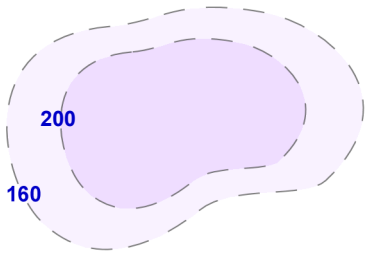


Explanation of Symbols

Soil Sample Locations (WHA, 2016)

- **DG-1** — Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** — Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** — Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** — Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)

Interpolated Lead Iso-Concentration Contours in Soil (160 & 200 mg/kg) (see Table 2 for details)



Only concentration shown for Lead that exceed the Commercial Environmental Screening Level of 160 mg/kg

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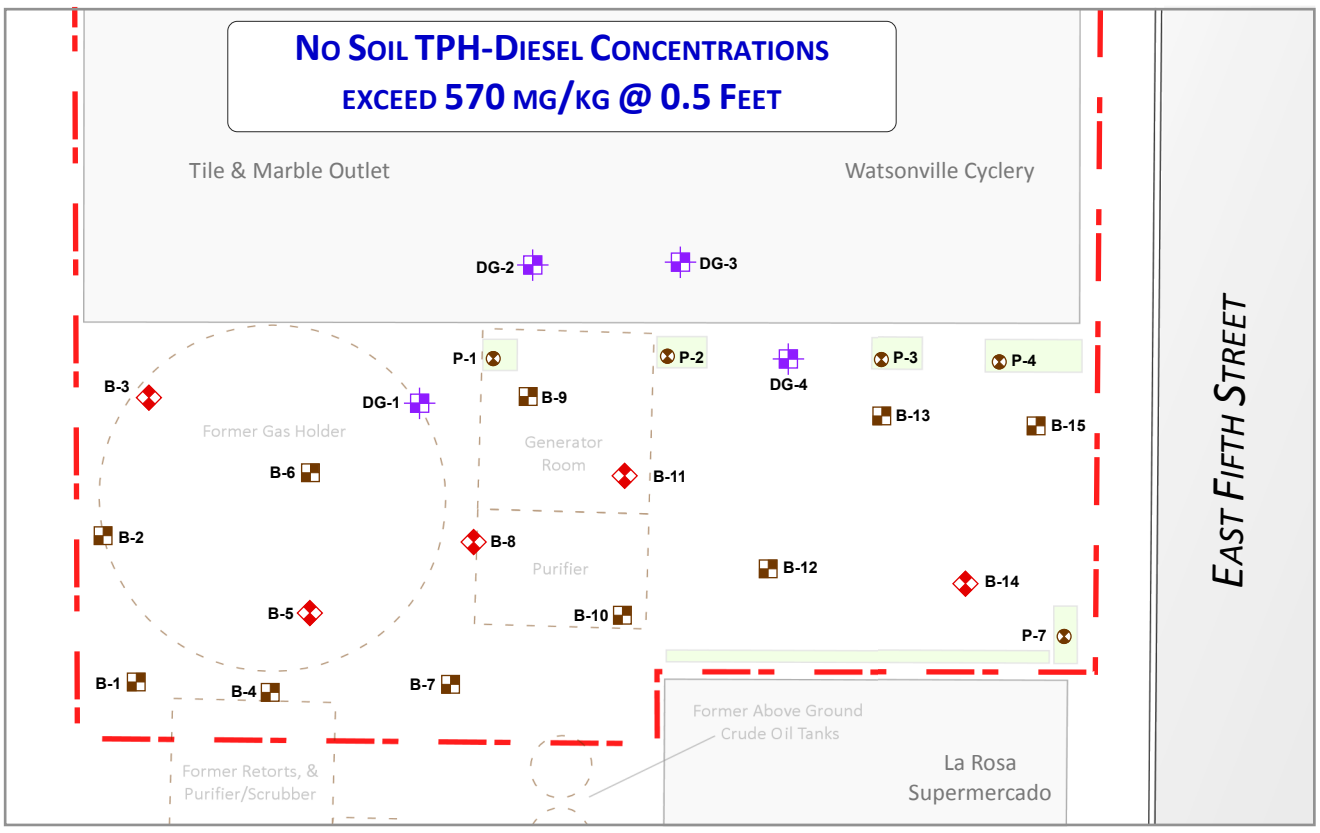
Interpolated Soil Lead Iso-Concentration Contours
May & August 2016 Additional Site Assessment
Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

Date: Sept. 2016

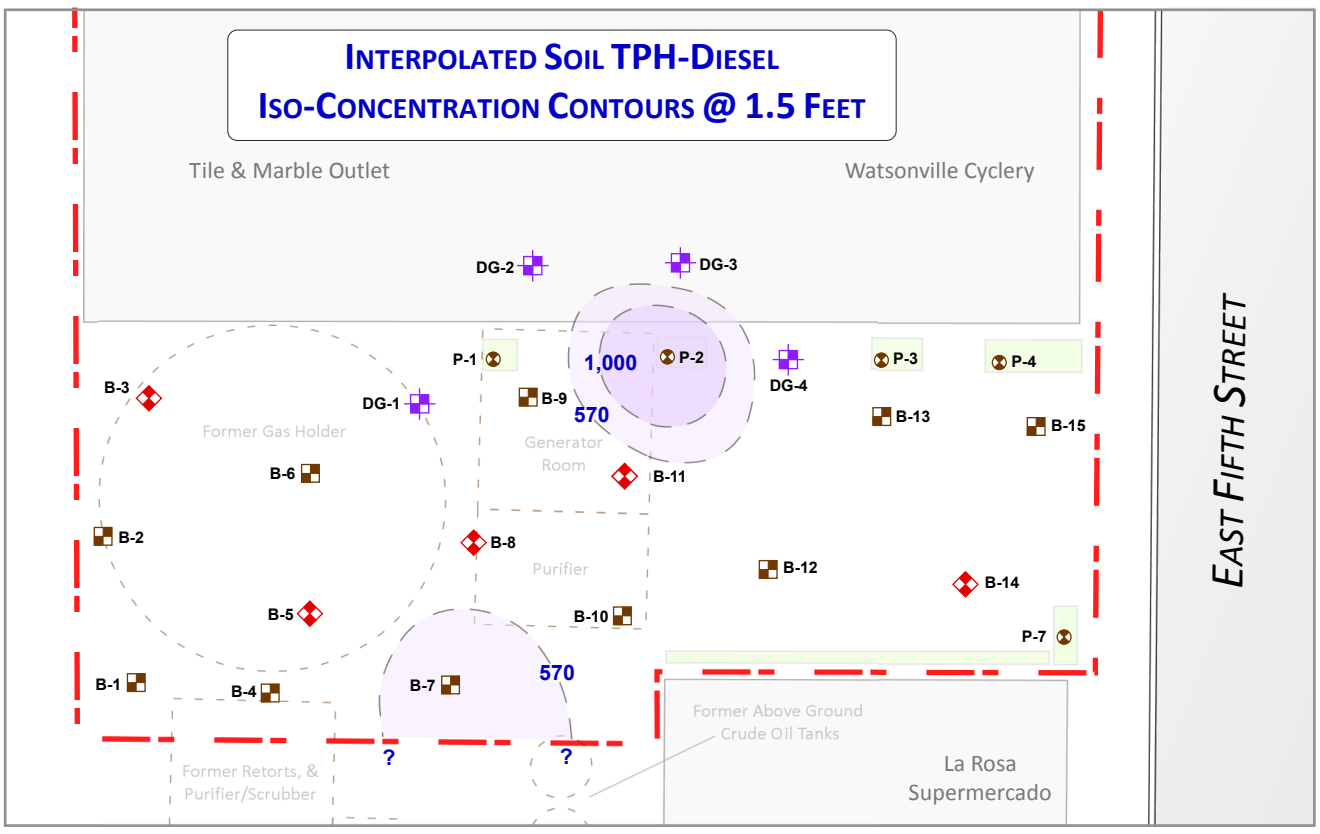
File:2x404\Report\2016-ASA\Figures\

Figure 9
Project 2X404

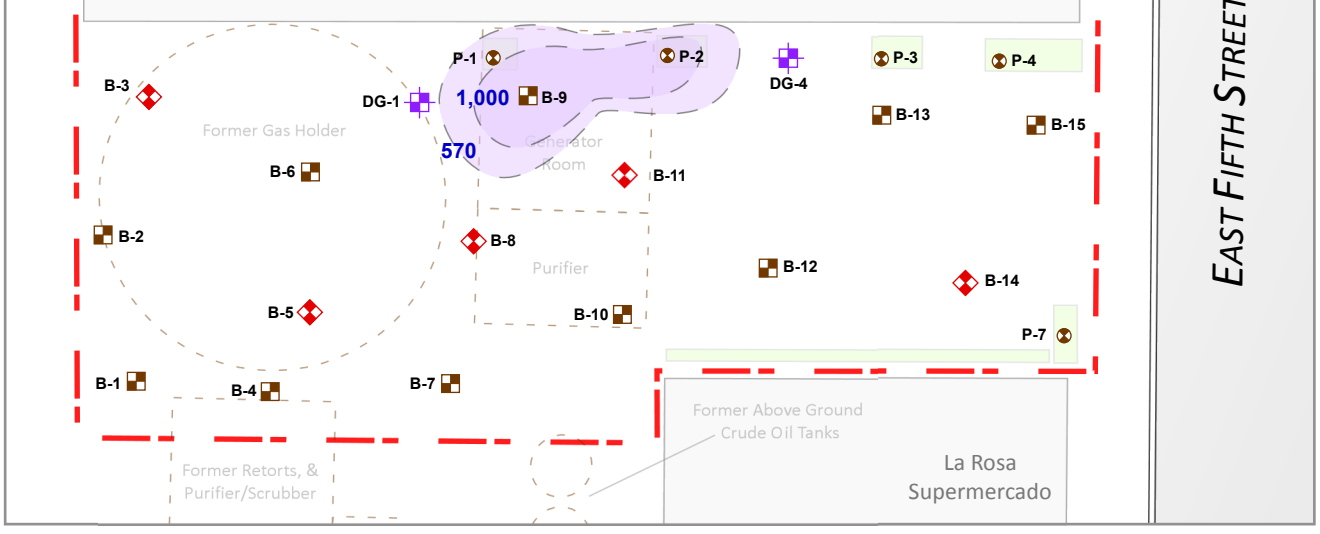
No Soil TPH-Diesel Concentrations exceed 570 mg/kg @ 0.5 Feet

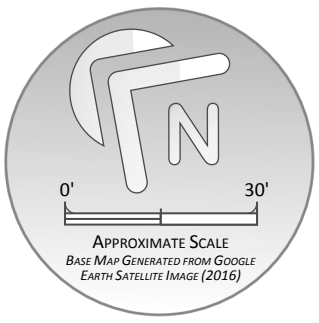


Interpolated Soil TPH-Diesel Iso-Concentration Contours @ 1.5 Feet



Interpolated Soil TPH-Diesel Iso-Concentration Contours @ 4 Feet



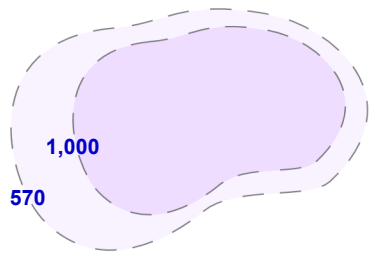


Explanation of Symbols

Soil Sample Locations (WHA, 2016)

- **DG-1** — Data Gap Soil Sample (to at least 8 feet bgs)
- **B-1** — Shallow Soil Sample (0.5, 1.5 & 4 feet bgs)
- **B-3** — Shallow & Deeper Soil Sample (to at least 20 feet bgs)
- **P-1** — Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)

Interpolated TPH-Diesel Iso-Concentration Contours in Soil (570 & 1,000 mg/kg) (see Table 2 for details)



Only concentration shown for TPH-diesel that exceed the Commercial Environmental Screening Level of 570 mg/kg

Some elevated TPH-motor oil exceeding the Commercial Environmental Screening Level of 5,100 mg/kg is co-located with elevated TPH-diesel presented on this figure (see Table 3 for details)

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Interpolated Soil TPH-Diesel Iso-Concentration Contours
May & August 2016 Additional Site Assessment
Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

Date: Sept. 2016

File:2x404\Report\2016-ASA\Figures\

Figure 10
Project 2X404

Explanation of Symbols

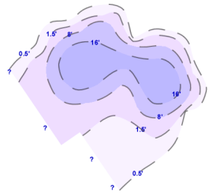
Soil Sample Locations (WHA, 2016)

DG-1 Data Gap Soil Sample (to at least 8 feet bgs)

B-1 Shallow Soil Sample (0.5, 1.5 & 4 feet bgs; B-9 to 18 feet bgs)

B-3 Shallow & Deeper Soil Sample (to at least 20 feet bgs)

P-1 Tree Well/Planter Shallow Soil Sample (0.5 and 1.5 feet into native soil, P-2 to 18 feet bgs)



Interpolated depth of soil impacts exceeding commercial screening thresholds (0.5, 1.5, 8, & 16 foot depth of impacts contours are presented).

NOTES: Soil impacts above commercial screening thresholds likely extend deeper at borings P-2 and B-9.

2010 soil boring DP-7 (not shown on this figure) exhibited elevated concentrations of PAHs at 23 to 24 feet bgs.

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

B-1

Depth:	BaP EQV:
0.5'	28.626
1.5'	0.101
4'	0.005

B-8

Depth:	BaP EQV:	Diesel Range:
0.5'	0.001	--
1.5'	5.299	--
4'	0.001	--
10'	0.002	--
15'	0.197	346
17'	10.662	1,850
20'	0.010	29.5
23'	0.001	12.1

DG-1

Depth:	BaP EQV:	Lead:
0.5'	2.253	7.4
1.5'	2.500	7.06
4'	3.724	83.4
6'	0.001	--
8'	0.001	--

DG-2

Depth:	Lead:
0.5'	194
1.5'	18.8
4'	8.1

B-9

Depth:	BaP EQV:	Diesel Range:	Motor Oil Range:
0.5'	0.039	ND	2,860
1.5'	89.894	4.26	3.41 J
4'	37.983	4,980	12,350
6'	4.200	358	1,231
8'	1.703	234	409

DG-3

Depth:	Lead:
0.5'	182
1.5'	15.5
4'	8.25

P-2

Depth:	BaP EQV:	Lead:	Diesel Range:	Motor Oil Range:
0.5'	0.001	0.746	2.37 J	2.13 J
1.5'	18.156	211	2,260	6,980
4'	30.274	17.3	4,130	8,060
6'	4.856	6.83	706	899.3
8'	5.488	6.27	2,730	2,109
12'	2.226	--	2,210	1,305
15.5'	0.345	--	394	268.9
18'	3.098	--	2,220	1,341

B-7

Depth:	BaP EQV:	Lead:	Diesel Range:
0.5'	0.002	0.936	<7.54
1.5'	16.768	356	928
4'	0.001	7.34	--

B-10

Depth:	BaP EQV:
0.5'	0.493
1.5'	14.013
4'	0.002

B-12

Depth:	Lead:
0.5'	376
1.5'	63
4'	6.46

B-11

Depth:	BaP EQV:	Lead:
0.5'	0.003	0.968
1.5'	4.782	206
4'	0.002	6.43
10'	0.001	3.79
15'	0.001	--
20'	0.001	--
24'	0.001	--
28'	0.001	--

Concentrations in Soil (mg/kg)
(see Tables 1, 2, & 3 for details)

Note: Only Concentrations with exceedances above applicable screening threshold values are presented in this figure.

Highlighted concentration indicates result exceeds the most conservative commercial threshold value (ESL, RSL, or HERO Note 3).

Although most samples yielded concentrations of **cyanide** exceeding the very low-level commercial screening threshold protective of potential leaching impacts to groundwater, none exceeded the direct exposure threshold.

Parcel Boundary
APN: 081-151-39

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us
0' 30'

Tile & Marble Outlet
Baker Bros. Appliance
Watsonville Cyclery
Jalisco Restaurant
La Rosa Supermercado
Residence
Laundromat
Former Gas Holder
Former Retorts, & Purifier/Scrubber
Former Above Ground Crude Oil Tanks
Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

East Fifth Street
Main Street

Figure 11
Project 2X404

Site Map Showing Interpolated Depths of Soil Impacts Exceeding Commercial Screening Thresholds for B(a)P, Lead and/or TPH

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File:2x404\Report\2016-ASA\Figures\

Date:Sept. 2016

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Explanation of Symbols

On-Site Sample Locations (WHA, 2016)

GW-2 — Grab Groundwater Sample

DP-7 — Grab Groundwater Sample (June 29, 2010)

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

Approximate Limits of Groundwater Contaminant Plume Exceeding ESLs/MCLs

Parcel Boundary
APN: 081-151-39

N

0' 30'

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
(Based on groundwater monitoring conducted at Former Watsonville-1 Manufactured Gas Plant)

DP-2
Temporary Screen Interval: 23'-28'
Depth to Groundwater: 28'
No concentrations were detected that exceeded Environmental Screening Level Thresholds

DP-1
Temporary Screen Interval: 25'-30'
Depth to Groundwater: 30 '
No concentrations were detected that exceeded Environmental Screening Level Thresholds

GW-2
Temporary Screen Interval: 24'-34'
Depth to Groundwater: 27'

Naphthalene:	0.454
Ammonia (as N):	< 280

GW-1
Temporary Screen Interval: 22'-32'
Depth to Groundwater: 27.9'

Naphthalene:	9.27
Diesel Range C12-C22:	546
Ammonia (as N):	55,000

GW-3
Temporary Screen Interval: 24'-34'
Depth to Groundwater: 26.5'

Anthracene:	5.91
Fluorene:	7.35
Naphthalene:	34.7
Phenanthrene:	7.38
Pyrene:	3.11
Benzo[a]pyrene:	0.377
Benzo[a]anthracene:	0.733
Benzo[b]fluoranthene:	0.309
Benzo[k]fluoranthene:	0.159
Chrysene:	0.45
Dibenzo[a,h]anthracene:	0.0367 J
Indeno[1,2,3-cd]pyrene:	0.0886
Diesel Range C12-C22:	870
Cyanide:	237
Ammonia (as N):	6,400

GW-4
Temporary Screen Interval: 20'-30'
Depth to Groundwater: 26.6'

Ammonia (as N):	17,000

No concentrations were detected that exceeded Environmental Screening Level Threshold

GW-5
Temporary Screen Interval: 24'-34'
Depth to Groundwater: 22.5'

Ammonia (as N):	4,000

No concentrations were detected that exceeded Environmental Screening Level Threshold

DP-5
Temporary Screen Interval: 20.5'-25.5'
Depth to Groundwater: 25.5'
No concentrations were detected that exceeded Environmental Screening Level Thresholds

DP-7
Temporary Screen Interval: 19'-24'
Depth to Groundwater: 24'

Gasoline Range C5-C12:	150

Former Gas Holder
Former Retorts, & Purifier/Scrubber
Generator Room
Purifier
Former Gas Holder
Former Above Ground Crude Oil Tanks
MW-WAT1-1
MW-WAT1-2
MW-WAT1-3
MW-WAT1-4
MW-WAT1-5
MW-WAT1-6
MW-WAT1-7
SG-1A
SG-1B
SG-2A
SG-2B
SG-2C
SG-3A
SG-4A
SG-5A
SG-5B
SG-6A
SG-8
SG-9
SG-9A
SG-10

Chase Bank

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

Tile & Marble Outlet

Baker Bros. Appliance

Watsonville Cyclery

La Rosa Supermercado

Laundromat

Residence

MAIN STREET

EAST FIFTH STREET

Groundwater analytical results presented on Tables 4 & 5

Note: Only Concentrations with exceedances above Environmental Screening Levels are presented in this figure.

Note: Ammonia (as Nitrogen) has no established screening threshold

FIGURE 12
Project 2X404

SITE MAP WITH CURRENT & PREVIOUS GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: JUNE 2016

FILE: 2X404.ONETO-WATSONVILLE\REPORT\2016-ASA\FIGURES\GROUNDWATER

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Figure 13
Project 2X404

Site Map with Soil Vapor Sample Analytical Results
May 2016 Additional Site Assessment

Site: Commercially-Zoned Warehouse Property
Address: 25 East Fifth Street, Watsonville, CA

File: 2x404.Oneto-watsonville\Figures\2015

Date: January 2016

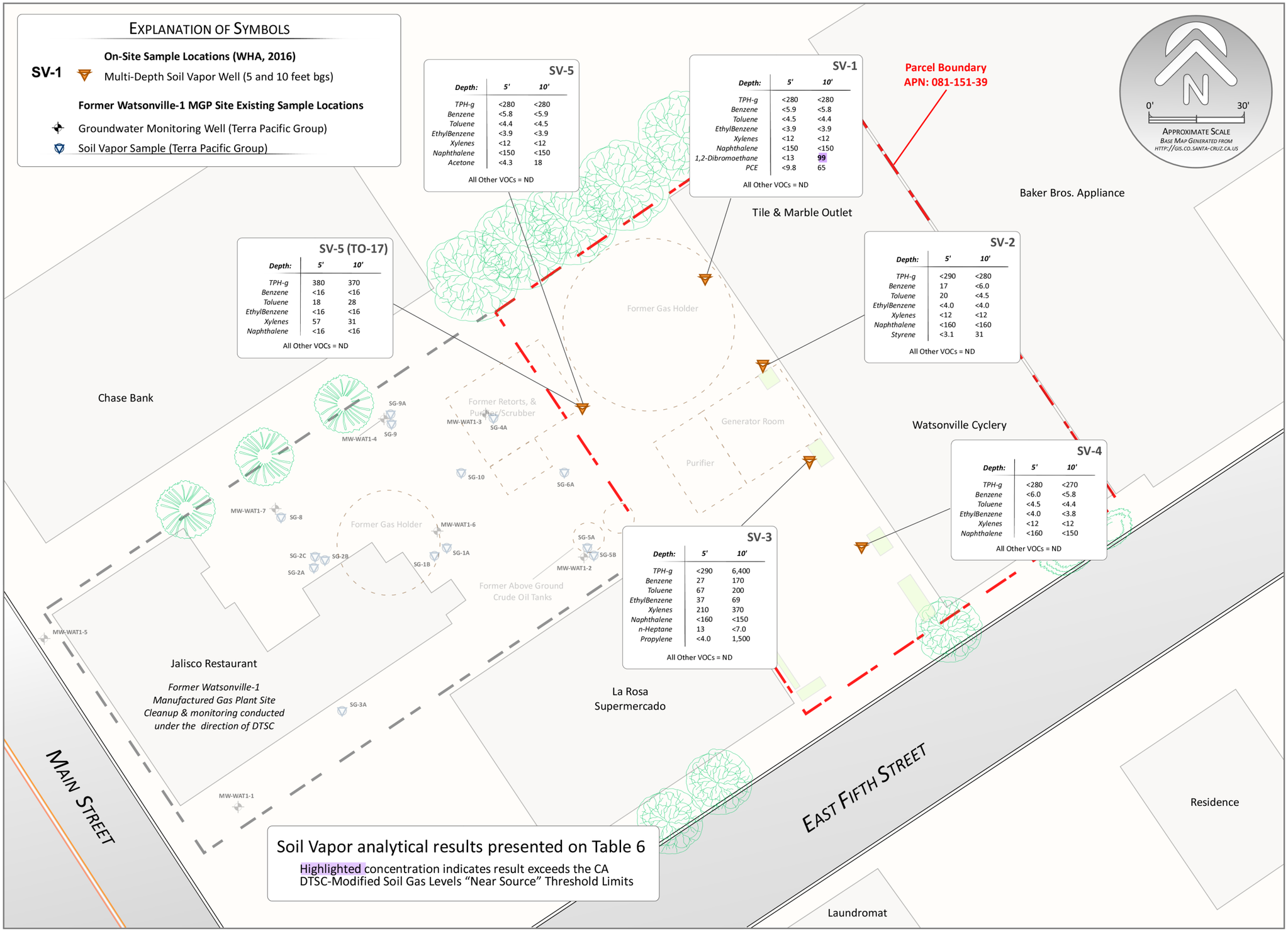

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Table 1: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-1	5/3/2016	0.5	1.96	4.7	19.5	6.87	53	7.47	7.21	56.7	48.2	19.4	26.5	22.2	6.47	22.1	2.86	6.28	28.626
		1.5	0.00152 J	0.00173 J	0.0133	0.0524	0.0587	0.00397 J	0.00688 J	0.0352	0.0747	0.0696	0.0536	0.0688	0.0247	0.0503	0.0126	0.038	0.101
		4	< 0.000674	< 0.000674	< 0.000674	0.00156 J	0.00155 J	< 0.000674	< 0.00225	0.00256 J	0.00191 J	0.00146 J	0.00157 J	0.00211 J	0.000698 J	0.00167 J	< 0.00674	0.00116 J	0.005
B-2	5/3/2016	0.5	< 0.000638	0.00165 J	0.00168 J	0.00278 J	0.00746 J	< 0.000638	< 0.00213	0.00246 J	0.00953	0.00568 J	0.00672	0.006 J	0.00199 J	0.00549 J	0.000967 J	0.0022 J	0.008
		1.5	< 0.000642	< 0.000642	0.00257 J	0.00701	0.0207	< 0.000642	0.00412 J	0.0126	0.0197	0.0135	0.0153	0.0175	0.00455 J	0.0156	0.00244 J	0.00591 J	0.020
		4	< 0.000687	< 0.000687	0.000733 J	< 0.000687	0.00206 J	< 0.000687	< 0.00229	0.00233 J	0.00225 J	0.000846 J	0.00136 J	0.000857 J	< 0.000687	0.000919 J	< 0.000687	< 0.000687	0.001
B-3	5/4/2016	0.5	< 0.00631	< 0.00631	< 0.00631	0.00758 J	0.0103 J	< 0.00631	< 0.0210	0.00897 J	0.0125 J	0.00856 J	0.00967 J	0.0107 J	< 0.00631	0.00787 J	< 0.00631	< 0.00631	0.014
		1.5	0.000810 J	0.00110 J	0.0112	0.00789	0.0367	0.00317 J	0.00727 J	0.0313	0.0426	0.0195	0.0253	0.0182	0.00536 J	0.0212	0.003 J	0.00641 J	0.028
		4	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.00226	< 0.000678	< 0.000678	< 0.00678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	< 0.000678	0.004
		10	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	0.00227 J	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	< 0.000679	0.001
		15	< 0.000687	< 0.000687	< 0.000687	0.000929 J	< 0.000687	< 0.000687	0.00758 J	0.000956 J	< 0.000687	0.000742 J	< 0.000687	0.00096 J	< 0.000687	< 0.000687	< 0.000687	0.000689 J	0.001
		20	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	0.00334 J	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	< 0.000685	0.001
B-4	5/3/2016	0.5	< 0.000627	< 0.000627	< 0.000627	0.00107 J	0.00160 J	< 0.000627	0.00311 J	0.000664 J	0.00217 J	0.00141 J	0.00151 J	0.0016 J	< 0.000627	0.00104 J	< 0.000627	0.000771 J	0.002
		1.5	0.00110 J	0.00324 J	0.0467	0.0699	0.27	0.00477 J	0.0198 J	0.109	0.291	0.169	0.216	0.199	0.067	0.19	0.0323	0.0666	0.258
		4	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	0.00270 J	0.00259 J	0.000719 J	< 0.000664	< 0.000664	0.000763 J	< 0.000664	0.000673 J	< 0.000664	< 0.000664	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* (1) Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* (1) Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* (2) Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 1: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-5	5/3/2016	0.5	< 0.000632	< 0.000632	**0.00360 J**	**0.00862**	**0.0194**	**0.00128 J**	**0.00356 J**	**0.0109**	**0.0257**	**0.0115**	**0.0104**	**0.0112**	**0.00475 J**	**0.00969**	**0.00189 J**	**0.00615 J**	**0.017**
		1.5	**0.000894 J**	**0.000661 J**	**0.0211**	**0.058**	**0.127**	**0.00309 J**	**0.0100 J**	**0.0397**	**0.129**	**0.126**	**0.128**	**0.152**	**0.0419**	**0.11**	**0.0257**	**0.0546**	**0.190**
		4	**0.000727 J**	< 0.000680	**0.000868 J**	**0.00147 J**	**0.00152 J**	< 0.000680	**0.00340 J**	**0.00545 J**	**0.00169 J**	**0.00132 J**	**0.00138 J**	**0.00218 J**	**0.000793 J**	**0.00181 J**	< 0.00068	**0.00119 J**	**0.002**
		10	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	**0.00336 J**	**0.00143 J**	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	**0.001**
		15	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	**0.00297 J**	**0.000768 J**	**0.000981 J**	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	< 0.000693	**0.001**
		20	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	**0.00532 J, B**	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	< 0.000749	**0.001**
B-6	5/3/2016	0.5	< 0.000669	**0.00102 J**	**0.0113**	**0.0274 J3**	**0.0566 J3 , J5**	**0.00227 J**	**0.0105 J, B**	**0.0196 J3, J5**	**0.0660 J3, J5**	**0.0471 J3, J5**	**0.0466 J3, J5**	**0.047 J3, J5**	**0.0184**	**0.0478 J3**	**0.00961 J3**	**0.0185 J3**	**0.070**
		1.5	**0.00143 J**	**0.00214 J**	**0.0191**	**0.0422**	**0.113**	**0.00523 J**	**0.0175 J, B**	**0.0346**	**0.15**	**0.124**	**0.129**	**0.13**	**0.0494**	**0.109**	**0.0177**	**0.0426**	**0.178**
		4	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	**0.00439 J, B**	**0.000703 J**	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	< 0.000684	**0.001**
B-7	5/3/2016	0.5	< 0.000618	< 0.000618	< 0.000618	**0.00136 J**	< 0.000618	< 0.000618	**0.0118 J, B**	< 0.000618	**0.000945 J**	**0.000794 J**	< 0.000618	**0.00118 J**	< 0.000618	**0.000652 J**	**0.000683 J**	< 0.000618	**0.002**
		1.5	**0.188 J**	**0.431**	**3.46**	**4.49**	**17.8**	**1**	**1.17 J, B**	**7.77**	**21.9**	**11.8**	**13.7**	**11**	**4.53**	**11.4**	**1.52**	**4.11**	**16.768**
		4	< 0.000655	< 0.000655	< 0.000655	< 0.000655	**0.00121 J**	< 0.000655	< 0.00218	**0.000923 J**	**0.00187 J**	< 0.000655	**0.00112 J**	**0.00189 J**	< 0.000655	**0.00287 J**	< 0.000655	< 0.000655	**0.001**
B-8	5/3/2016	0.5	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	**0.00242 J, B**	< 0.000617	< 0.000617	< 0.000617	**0.000657 J**	< 0.000617	< 0.000617	< 0.000617	< 0.000617	< 0.000617	**0.001**
		1.5	**0.0705 J**	**0.0842 J**	**1.56**	**1.2**	**6.83**	**0.32**	**0.123 J, B**	**2.67**	**7.53**	**3.69**	**5.2**	**3.58**	**1.47**	**4.22**	**0.436**	**1.06**	**5.299**
		4	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.00233	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	**0.001**
		10	< 0.000633	< 0.000633	**0.00162 J**	< 0.000633	**0.00350 J**	< 0.000633	**0.00267 J, B**	**0.00332 J**	**0.00454 J**	**0.00143 J**	**0.00196 J**	**0.00151 J**	**0.000711 J**	**0.00123 J**	< 0.000633	< 0.000633	**0.002**
		15	**0.273**	**0.0922**	**0.441**	**0.036**	**0.459**	**0.199**	**0.0115 J, B**	**1.01**	**0.508**	**0.138**	**0.22**	**0.127**	**0.0459**	**0.163**	**0.0146**	**0.0355**	**0.197**
		17	**8.42**	**6.14**	**21**	**1.74**	**27.4**	**26.5**	**138**	**45.4**	**27**	**7.44**	**12.7**	**6.54**	**3.04**	**8.91**	**0.736**	**1.69**	**10.662**
		20	**0.0221**	**0.0452**	**0.0876**	**0.000754 J**	**0.0487**	**0.0881**	**0.156**	**0.14**	**0.0542**	**0.00709**	**0.0177**	**0.00547 J**	**0.00357 J**	**0.00753**	< 0.000684	**0.000941 J**	**0.010**
		23	**0.0384**	**0.0366**	**0.00631 J**	< 0.000736	**0.00102 J**	**0.00797**	**0.0184 J, B**	**0.027**	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	< 0.000736	**0.001**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 1: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-9	5/3/2016	0.5	< 0.000619	< 0.000619	0.00209 J	0.0188	0.0258	< 0.000619	0.00389 J, B	0.00297 J	0.035	0.0284	0.0207	0.0243	0.0111	0.0195	0.0038 J	0.0141	0.039
		1.5	0.843 J	1.25 J	22.8	15.1	128	2.81	3.12 J, B	19.3	145	61	106	55.2	26.6	74.4	7.83	15.4	89.894
		4	0.783	0.464 J	7.73	7.51	69	1.23	0.440 J, B	1.95	76.6	25.3	43.8	26.9	11	31.5	3.45	7.48	37.983
	8/18/2016	6	0.0764	1.10	0.877	1.00	5.38	0.231	< 0.0226	1.15	7.66	2.81	4.2	2.8	1.19	2.99	0.442	0.989	4.200
		8	0.0498 J	0.0784	0.545	0.341	2.06	0.35	0.115 J	0.895	2.66	1.15	1.57	1.16	0.48	1.19	0.189	0.308	1.703
B-10	5/3/2016	0.5	0.00409 J	0.0132 J	0.083	0.21	0.657	0.0162 J	0.0277 J, B	0.34	0.881	0.352	0.34	0.318	0.103	0.315	0.0452	0.167	0.493
		1.5	0.0471 J	0.0987 J	1.24	3.03	9.82	0.226 J	0.364 J, B	0.97	11.5	9.4	13.5	11.1	3.97	10.8	1.34	3.08	14.013
		4	< 0.000662	< 0.000662	0.000837 J	0.00154 J	0.00195 J	< 0.000662	< 0.00221	0.00103 J	0.00256 J	0.00133 J	0.00158 J	0.00268 J	0.000946 J	0.00201 J	< 0.000662	0.00132 J	0.002
B-11	5/4/2016	0.5	< 0.000629	< 0.000629	0.000952 J	0.00136 J	0.00320 J	< 0.000629	< 0.00210	0.00217 J	0.00392 J	0.00203 J	0.00246 J	0.00227 J	0.000721 J	0.00227 J	< 0.000629	0.000803 J	0.003
		1.5	0.157	0.145	1.69	1.11	5.7	0.567	0.5	4.04	6.69	3.22	4.27	3.63	0.986	3.54	0.535	1.03	4.782
		4	< 0.000683	< 0.000683	< 0.000683	0.00108 J	0.00124 J	< 0.000683	< 0.00228	0.000703 J	0.00155 J	0.00139 J	0.00148 J	0.00175 J	< 0.000683	0.00108 J	< 0.000683	0.000865 J	0.002
		10	< 0.000653	< 0.000653	< 0.000653	< 0.000653	0.000891 J	0.00214 J	< 0.00218	0.00175 J	0.00117 J	< 0.000653	0.000973 J	< 0.000653	< 0.000653	0.000734 J	< 0.000653	< 0.000653	0.001
		15	0.0137	0.0269	0.0199	< 0.000699	0.00682 J	0.0364	0.00879 J	0.053	0.00564 J	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	< 0.000699	0.001
		20	0.00650 J	0.0176	0.00173 J	< 0.000734	< 0.000734	0.0124	0.0602	0.00363 J	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	< 0.000734	0.001
		24	0.0111	0.013	0.00708 J	< 0.000719	0.00571 J	0.0379	0.0116 J	0.0117	0.00654 J	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	0.001
		28	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.00231	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	< 0.000694	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
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USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

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Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
B-12	5/3/2016	0.5	< 0.00670	< 0.00670	< 0.00670	**0.0170 J**	**0.0102 J**	< 0.00670	< 0.0223	**0.00830 J**	**0.0150 J**	**0.0124 J**	**0.011 J**	**0.0166 J**	< 0.00067	**0.00914 J**	< 0.00067	**0.00739 J**	**0.016**
		1.5	< 0.000708	< 0.000708	**0.00140 J**	**0.00435 J**	**0.007 J**	< 0.000708	**0.00302 J**	**0.00510 J**	**0.00832**	**0.00765 J**	**0.00687 J**	**0.00871**	**0.00293 J**	**0.00735**	**0.00135 J**	**0.00352 J**	**0.011**
		4	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.000670	< 0.00223	< 0.000670	< 0.000670	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	**0.001**
B-13	5/3/2016	0.5	< 0.000620	< 0.000620	**0.00116 J**	**0.00994**	**0.0106**	< 0.000620	< 0.00207	**0.00166 J**	**0.0166**	**0.0109**	**0.0076**	**0.0113**	**0.00403 J**	**0.00781 J**	**0.00153 J**	**0.00699**	**0.016**
		1.5	< 0.000784	< 0.000784	< 0.000784	< 0.000784	**0.00154 J**	**0.00154 J**	< 0.00261	**0.00574 J**	**0.00156 J**	< 0.000784	**0.00124 J**	**0.000972 J**	< 0.000784	**0.00132 J**	< 0.000784	< 0.000784	**0.001**
		4	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.00225	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	< 0.000675	**0.001**
B-14	5/3/2016	0.5	< 0.0313	< 0.0313	**0.0543 J**	**0.0665 J**	**0.179 J**	< 0.0313	< 0.104	**0.136 J**	**0.215 J**	**0.11 J**	**0.144 J**	**0.115 J**	**0.0362 J**	**0.138 J**	< 0.0313	**0.0362 J**	**0.160**
		1.5	< 0.000731	< 0.000731	< 0.000731	**0.00487 J**	**0.00244 J**	< 0.000731	**0.00375 J**	**0.00634 J**	**0.00321 J**	**0.00206 J**	**0.00181 J**	**0.00313 J**	**0.000816 J**	**0.00355 J**	< 0.000731	**0.00164 J**	**0.003**
		4	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.00220	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	< 0.000661	**0.001**
		10	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.000680	< 0.00227	< 0.000680	< 0.000680	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068	**0.001**
		15	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.00235	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	< 0.000705	**0.001**
		20	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	**0.000902 J**	**0.00518 J**	**0.00122 J**	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	< 0.000653	**0.001**
B-15	5/3/2016	0.5	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	**0.00356 J**	**0.00207 J**	**0.000796 J**	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	< 0.000719	**0.001**
		1.5	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.00242	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	< 0.000727	**0.001**
		4	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	**0.00470 J**	**0.00102 J**	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	< 0.000691	**0.001**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board ***Environmental Screening Levels*** [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board ***Environmental Screening Levels*** [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 ***Regional Screening Levels (RSLs)*** [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 1: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
P-1	5/5/2016	0.5	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.000620	< 0.00207	< 0.000620	< 0.000620	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	< 0.00062	0.001
		1.5	< 0.000721	< 0.000721	0.00125 J	0.00198 J	0.00578 J	< 0.000721	0.00274 J	0.00160 J	0.00848	0.00464 J	0.00488 J	0.00529 J	0.00167 J	0.00427 J	< 0.000721	0.00149 J	0.006
P-2	5/5/2016	0.5	< 0.000631	< 0.000631	< 0.000631	< 0.000631	0.00102 J	< 0.000631	0.00215 J	0.000732 J	0.00150 J	0.000872 J	0.00108 J	0.001 J	< 0.000631	0.000784 J	< 0.000631	< 0.000631	0.001
		1.5	0.119 J	0.674	2.52	6.32	13.9	0.705	2.61	3.62	18.9	12.8	12.2	13.2	4.53	10.6	1.73	5.27	18.156
	8/18/2016	4	0.259	9.1	6.17	7.27	32.7	1.47	10	5.23	47.4	20.3	27.8	19.9	5.43	20.7	3.74	7.14	30.274
		6	0.134	2.39	2.69	1.07	8.34	0.693	0.683	4.19	7.54	3.3	5.25	3.43	1.04	4.24	0.439	1.03	4.856
		8	4.68	7.58	14.4	0.988	13.4	16	55.9	26.1	13.5	3.84	6.72	3.33	0.925	4.85	0.409	0.932	5.488
		12	2.32	2.51	6.46	0.385	5.88	8.12	34.6	11.9	5.14	1.58	2.63	1.31	0.467	1.88	0.152	0.346	2.226
		15.5	0.262	0.676	0.853	0.0801	0.684	1.01	3.59	1.52	0.778	0.235	0.399	0.221	0.0612	0.297	0.0318	0.071	0.345
		18	2.26	3.92	6.9	0.694	6.48	8.56	40.8	11.9	6.58	2.09	3.81	1.82	0.723	2.62	0.284	0.628	3.098
P-3	5/5/2016	0.5	< 0.000629	< 0.000629	< 0.000629	< 0.000629	0.00139 J	< 0.000629	< 0.00210	< 0.000629	0.00216 J	0.0013 J	0.00136 J	0.00154 J	< 0.000629	0.00097 J	< 0.000629	< 0.000629	0.002
		1.5	< 0.000772	< 0.000772	< 0.000772	< 0.000772	0.00147 J	< 0.000772	0.00388 J	0.00198 J	0.00218 J	0.000937 J	0.00129 J	0.00126 J	< 0.000772	0.00103 J	< 0.000772	< 0.000772	0.002
P-4	5/5/2016	0.5	< 0.000711	0.00123 J	0.00696 J	0.0223	0.0822	0.00172 J	0.00857 J	0.0296	0.0943	0.0494	0.0478	0.0583	0.0217	0.053	0.00645 J	0.0189	0.071
		1.5	< 0.000678	< 0.000678	< 0.000678	0.00209 J	0.00479 J	< 0.000678	0.00355 J	0.00432 J	0.00595 J	0.00329 J	0.00324 J	0.00434 J	0.00146 J	0.00406 J	< 0.000678	0.0015 J	0.005
P-7	5/5/2016	0.5	< 0.000733	< 0.000733	0.000804 J	0.00303 J	0.00452 J	< 0.000733	0.00446 J	0.00797	0.00607 J	0.0045 J	0.00374 J	0.00609 J	0.00138 J	0.00536 J	0.000834 J	0.00214 J	0.007
		1.5	< 0.000683	< 0.000683	< 0.000683	< 0.000683	0.000687 J	< 0.000683	0.00309 J	0.000713 J	0.000802 J	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	0.001
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

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Additional Site Assessment
25 East Fifth Street, Watsonville, CA

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Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
DG-1	8/18/2016	0.5	0.0395	0.0921	0.194	0.96	1.01	0.0429	0.282	0.423	1.18	1.56	1.16	1.3	0.532	1.02	0.302	0.818	2.253
		1.5	0.0411 J	0.066	0.61	1.42	2.43	0.181	0.113	1.14	2.26	1.72	1.34	1.6	0.568	1.29	0.312	1.04	2.500
		4	0.0308 J	0.673	0.621	1.51	2.91	0.122	0.14	0.547	3.28	2.54	2.72	2.42	0.973	2.11	0.43	1.22	3.724
		6	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	0.00288 J	0.000714 J	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	< 0.000682	0.001
		8	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.00226	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	< 0.000677	0.001
DG-2	8/18/2016	0.5	0.0174 J	0.0801	0.152	0.172	0.498	0.0549	0.0366 J	0.334	0.568	0.286	0.325	0.295	0.0899	0.261	0.0482	0.141	0.422
		1.5	0.00181 J	0.00328 J	0.0104	0.00449 J	0.0242	0.00711 J	0.00927 J	0.0311	0.0203	0.00855	0.0114	0.00974	0.00265 J	0.0112	0.00153 J	0.00342 J	0.013
		4	< 0.000686	< 0.000686	< 0.000686	< 0.000686	0.00108 J	< 0.000686	0.00347 J	0.00169 J	0.00109 J	< 0.000696	0.000932 J	0.000753 J	< 0.000686	< 0.000686	< 0.000686	< 0.000686	0.001
		6	< 0.000665	< 0.000665	0.00229 J	0.00226 J	0.00763	< 0.000665	0.00306 J	0.00524 J	0.0071	0.00381 J	0.00424 J	0.00395 J	0.00171 J	0.00467 J	0.000667 J	0.00166 J	0.006
		8	< 0.000659	< 0.000659	0.00209 J	0.00218 J	0.00854	0.00125 J	< 0.00220	0.00458 J	0.00650 J	0.0033 J	0.00368 J	0.00367 J	0.00149 J	0.00261 J	0.000678 J	0.00152 J	0.005
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*

Table 1: Soil - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C-SIM															Benzo[a]pyrene Equivalent
Sample ID	Sample Date	Depth (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i] perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo[a,h] anthracene	Indeno [1,2,3-cd] pyrene	
DG-3	8/18/2016	0.5	**0.00127 J**	**0.00249 J**	**0.0119**	**0.0325**	**0.083**	**0.00514 J**	**0.00756 J**	**0.036**	**0.0663**	**0.0471**	**0.0381**	**0.0553**	**0.0164**	**0.0444**	**0.00869**	**0.0266**	**0.070**
		1.5	**0.00121 J**	**0.00299 J**	**0.00648 J**	**0.00406 J**	**0.0184**	**0.00428 J**	**0.00487 J**	**0.0235**	**0.016**	**0.00713 J**	**0.00905**	**0.00847**	**0.00232 J**	**0.0108**	**0.00134 J**	**0.00319 J**	**0.011**
		4	< 0.000667	< 0.000667	< 0.000667	**0.000845 J**	**0.00340 J**	< 0.000667	**0.00273 J**	**0.00132 J**	**0.00297 J**	**0.00176 J**	**0.00234 J**	**0.00201 J**	< 0.000667	**0.00196 J**	< 0.00667	**0.000732 J**	**0.006**
		6	< 0.000664	< 0.000664	< 0.000664	**0.000665 J**	< 0.000664	< 0.000664	< 0.00221	**0.000792 J**	**0.000954 J**	< 0.000664	**0.000673 J**	< 0.000664	< 0.000664	< 0.000664	< 0.000664	< 0.000664	**0.001**
		8	< 0.000675	< 0.000675	< 0.000675	**0.00123 J**	**0.00184 J**	< 0.000675	< 0.00225	**0.00151 J**	**0.00231 J**	**0.00104 J**	**0.00137 J**	**0.00117 J**	< 0.000675	**0.00127 J**	< 0.000675	**0.000751 J**	**0.002**
DG-4	8/18/2016	0.5	< 0.00125	< 0.00125	**0.00181 J**	**0.00250 J**	**0.00221 J**	**0.00187 J**	< 0.00416	**0.00325 J**	**0.00286 J**	**0.00194 J**	**0.00211 J**	**0.00232 J**	< 0.00125	**0.00181 J**	**0.00182 J**	**0.00146 J**	**0.004**
		1.5	< 0.000626	< 0.000626	**0.00161 J**	**0.00276 J**	**0.00722**	**0.000842 J**	**0.00344 J**	**0.00217**	**0.00766**	**0.00576 J**	**0.00575 J**	**0.00588 J**	**0.00189 J**	**0.00464 J**	**0.000992 J**	**0.00229 J**	**0.008**
		4	< 0.000688	< 0.000688	**0.00138 J**	< 0.000688	**0.00200 J**	**0.00187 J**	**0.00751 J**	**0.00355 J**	**0.00179 J**	**0.000804 J**	**0.00142 J**	< 0.000688	< 0.000688	**0.000967 J**	< 0.000688	< 0.000688	**0.001**
		6	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.00228	**0.000866 J**	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	< 0.000683	**0.001**
		8	< 0.000678	< 0.000678	< 0.000678	**0.00156 J**	< 0.000678	< 0.000678	**0.00246 J**	**0.00137 J**	**0.000970 J**	**0.000722 J**	< 0.000678	**0.00131 J**	< 0.000678	< 0.000678	**0.000797 J**	< 0.000678	**0.002**
Reported Detection Limit (RDL) :			0.006	0.006	0.006	0.006	0.006	0.006	0.02	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	--
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Shallow Soils = < 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
Water Board *Environmental Screening Levels* [1] Residential / Commercial (Deep Soils > 9.8 ft)			16 16	13 13	2.8 2.8	2.5 2.5	60 60	8.9 8.9	0.033 0.033	11 11	85 85	0.016 0.29	0.16 2.9	0.16 2.9	1.6 2.6	3.8 3.8	0.016 0.29	0.16 2.9	0.016 / 0.29*
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			3,600 45,000	--	18,000 230,000	--	2,400 30,000	2,400 30,000	3.8 17	--	1,800 23,000	0.016 0.29	0.16 2.9	0.16 2.9	1.6 29	16 290	0.016 0.29	0.16 2.9	0.016 / 0.29*
																		DTSC PAH Study (2009) [3] *Northern California 95th Percentile BaP Equivalent*	**0.9**

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m).

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated November 2015) **<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015, revised Nov 2015>.** The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

3 = ***DTSC Advisory - Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process*** **(July 1, 2009)**: Page 8, *Establishing a Practical Target to Guide Soil Excavation/Remediation:* A value of 0.9 milligrams per kilogram (mg/Kg) in BaP equivalents can be used as a pragmatic target for guiding soil excavation/remediation. This value corresponds to upper bounds of the ambient data sets. Experience at various MGP site has shown that removal/remediation of soil areas and hotspots exceeding 0.9 mg/Kg BaP equivalents is a reasonably conservative guide for the main phase of excavation/remediation activities.

Benzo(a)pyrene Equivalent = Sum of detection values for; Benzo(a)pyrene, Benzo(a)anthracene x 0.1, Benzo(b)fluoranthene x 0.1, Benzo[k]fluoranthene x 0.1,Chrysene x 0.01, Dibenzo[a,h]anthracene , and Indeno[1,2,3-cd]pyrene x 0.1

*** =** There is no ESL value for B(a)P equivelent. Results compared against screening values for Benzo(a)pyrene for reference only.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

J3 = Laboratory reports that the associated batch QC was outside the established quality control range for precision.

J5 = Laboratory reports that the sample matrix interfered with the ability to make any accurate determination; spike value is high.

B = Laboratory reports that the analyte is found in the associated blank.

^ = Method Detection Limit and Practical Quantitation Limit raised after sample was diluted. Dilutions were necessary due to elevated analyte concentrations or matrix interferences.

BOLD = Analytical result for BaP Equivalent exceeds the CA DTSC PAH 2009 Study Limit. Refer to note 3 above.

BOLD = Analytical result above Commercial ESL.

Table 2: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B-1	5/3/2016	0.5	--	--	--	--	--	--	--	--	16.1	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	15.1	--	--	--	--	--	--	--	--	--	--	--
B-2	5/3/2016	0.5	--	--	--	--	--	--	--	--	< 0.202	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	5.22	--	--	--	--	--	--	--	--	--	--	--
B-3	5/4/2016	0.5	< 0.789	< 0.684	26.3	< 0.0736	< 0.0736	1.4	2.63	38.7	1.26	--	--	0.0658	< 0.168	0.765	< 0.778	< 0.295	< 0.684	11.9	9.75 B	0.387
		1.5	1.01 J	4.71	247	0.398	0.206 J	15.7	4.68	7.08	11.4	--	--	0.0238	0.87	17.4	< 0.525	< 0.300	< 0.696	22	22.2	< 0.0418
		4	< 0.848	1.39 J	121	0.321	0.215 J	18.4	6.75	12.2	4.97	--	--	0.0104 J	< 0.181	15.7	< 0.836	< 0.316	< 0.735	27.4	31.4	--
B-4	5/3/2016	0.5	< 0.784	< 0.679	38.7	< 0.0732	< 0.0732	1.58	3.66	56.9	1.07	--	--	0.0486	< 0.167	0.998 J	< 0.773	< 0.293	< 0.679	14.9	12.5 B	0.120 J
		1.5	< 0.797	2.91	290	0.264	0.151 J	11.5	3.5	5	6.99	--	--	0.0588	0.483 J	13.2	< 0.787	< 0.298	< 0.691	16.2	18.3	0.434
B-5	5/3/2016	0.5	--	--	--	--	--	--	--	--	0.834	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	5.01	--	--	--	--	--	--	--	--	--	--	--
		4	< 0.850	2.7	118	0.442	0.267 J	27.6	8.17	15.3	6.77	--	--	0.0222 J	0.302 J	25.2	< 0.839	< 0.318	< 0.737	36.5	44.7	0.105 J
		10	< 0.827	1.29 J	1.6	0.438	0.308 J	50.4	6.3	14.7	11.9	--	--	0.0332	< 0.176	38.5	1.61 J	< 0.309	2.02 J	25.2	37.4	< 0.0430
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.135 J
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0932 J
B-6	5/3/2016	0.5	< 0.836	4.51	206	0.39	0.146 J	17.2	4.46	9.34	8.63	--	--	0.0524	1.41	18.5	< 0.825	< 0.312	< 0.724	23.4	29.4	0.671
		1.5	< 0.951	3.97	148	0.588	0.321 J	26.2	11.9	20.8	10.4	--	--	0.0494	< 0.203	41.5	< 0.939	< 0.355	< 0.825	37.6	61.4	0.518
B-7	5/3/2016	0.5	< 0.772	< 0.669	33.7	< 0.0720	< 0.0720	2.08	3.47	43.7	0.936	--	--	0.0714	0.213 J	0.929 J	< 0.762	< 0.288	< 0.669	14.6	11.5 B	0.157 J
		1.5	< 0.905	5.48	273	0.586	0.642	17.7	11	148	356	6.08	< 0.450	0.163	0.568 J	30.3	1.03 J	< 0.338	< 0.784	28.3	151	5.09
		4	< 0.818	4.56	126	0.509	0.296 J	27.5	5.42	12.4	7.34	--	--	0.0437	< 0.175	21.8	< 0.807	< 0.305	< 0.709	32.4	44.7	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 21
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

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Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
B-8	5/3/2016	0.5	--	--	--	--	--	--	--	--	< 0.195	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**8.47**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**7.66**	--	--	--	--	--	--	--	--	--	--	--
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33
		17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.318
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0445
		23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0479
B-9	8/18/2016	0.5	--	--	--	--	--	--	--	--	**2.27**	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**10.3**	--	--	--	--	--	--	--	--	--	--	--
B-10	5/3/2016	0.5	--	--	--	--	--	--	--	--	**35.9**	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	**23.2**	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	**6.77**	--	--	--	--	--	--	--	--	--	--	--
B-11	5/4/2016	0.5	< 0.786	< 0.681	**39.3**	< 0.0734	< 0.0734	**1.63**	**3.55**	**40.7**	**0.968**	--	--	**0.0598**	< 0.168	**0.999 J**	< 0.775	< 0.293	< 0.681	**19.6**	**13.5**	< 0.0409
		1.5	< 0.893	**5.02**	**389**	**0.473**	**0.825**	**30.4**	**9.87**	**49.1**	206	**11.4**	< 0.450	**0.125**	**0.503 J**	**36.3**	< 0.881	< 0.333	< 0.774	**34.6**	**235**	1.11
		4	< 0.854	**2.48**	**143**	**0.393**	**0.228 J**	**30.1**	**5.29**	**12.8**	**6.43**	--	--	**0.00944 J**	**0.263 J**	**18.6**	< 0.843	< 0.319	< 0.740	**34.1**	**40.3**	1.58
		10	< 0.816	**2.89**	**137**	**0.331**	**0.242 J**	**36.8**	**7.72**	**6.78**	**3.79**	--	--	**0.0415**	**0.195 J**	**47**	<0.805	< 0.305	< 0.708	**20.6**	**22.1**	1.35
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.338
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.228 J
		24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0468
		28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0451
Laboratory *Reported Detection Limits (RDL):*			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 **7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 **7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 **7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] Residential / Commercial			31 / 470	0.68 / 3.0 **7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

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B-12	5/3/2016	0.5	2.67	4.79	429	0.259	2.07	28.6	8.92	68.2	376	< 0.0171	--	5.08	0.698	28.8	< 0.827	0.566 J	< 0.726	39.3	413	< 0.0436
		1.5	< 0.886	5.12	145	0.589	0.344 J	31	12.6	22.9	63	0.31	--	0.0697	0.6	42.2	1.26 J	< 0.331	< 0.767	42.5	75.5	0.0781 J
		4	< 0.837	2.16 J	134	0.417	0.323 J	27.6	8.42	15.2	6.46	--	--	0.0121 J	0.436 J	23.9	< 0.826	< 0.313	< 0.726	36.9	42.9	--
B-13	5/3/2016	0.5	--	--	--	--	--	--	--	--	0.293 J	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	10.1	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	6.36	--	--	--	--	--	--	--	--	--	--	--
B-14	5/3/2016	0.5	--	--	--	--	--	--	--	--	3.87	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	12.3	--	--	--	--	--	--	--	--	--	--	--
		4	< 0.827	2.09 J	113	0.377	0.241 J	22.8	6.08	13.2	5.94	--	--	0.0114 J	< 0.176	18.1	< 0.816	< 0.309	< 0.717	30.5	34.5	0.0456 J
		10	0.866 J	4	151	0.44	0.313 J	214	21.4	15.7	4.46	--	--	0.03	0.985	161	< 0.839	< 0.317	< 0.737	37.7	44.6	0.0495 J
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0745 J
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0424
B-15	5/3/2016	0.5	< 0.899	< 0.779	78.4	< 0.0839	< 0.0839	6.69	11	68.5	< 0.228	--	--	0.0881	< 0.192	3.51	< 0.887	< 0.336	< 0.779	85.6	47.8	0.0598 J
		1.5	< 0.909	6.29	212	0.752	0.291 J	51.4	11.3	23.1	9.44	--	--	0.0376	0.832	52.5	< 0.897	< 0.339	< 0.788	66.6	78.4	< 0.0473
		4	< 0.864	4.24	182	0.587	0.702	58.4	17.1	18.8	6.64	--	--	0.0130 J	0.964	49.8	1.29 J	< 0.323	< 0.749	60.5	69.6	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

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Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
P-1	5/5/2016	0.5	< 0.776	< 0.672	29.7	< 0.0723	< 0.0723	1.76	2.88	24.5	0.412 J	--	--	0.0561	< 0.165	0.959 J	< 0.765	< 0.289	< 0.672	13.5	9.73	< 0.0403
		1.5	< 0.901	5.39	245	0.504	0.561 J	28.6	10.5	31.1	123	4.48	--	0.279	0.498 J	37.7	< 0.889	< 0.337	< 0.781	36.5	202	0.665
P-2	5/5/2016	0.5	< 0.789	< 0.684	44.2	< 0.0736	0.0761 J	2.43	4.1	58.9	0.746	--	--	0.0438	< 0.168	1.57 J	< 0.778	< 0.295	< 0.684	19.3	12.7	< 0.0410
		1.5	< 0.903	4.51	214	0.443	1.8	22.7	6.96	66.9	211	0.29	--	1.53	< 0.193	26.4	< 0.891	< 0.337	< 0.783	26.5	565	11.3
	8/18/2016	4	--	--	--	--	--	--	--	--	17.3	--	--	--	--	--	--	--	--	--	--	--
		6	--	--	--	--	--	--	--	--	6.83	--	--	--	--	--	--	--	--	--	--	--
		8	--	--	--	--	--	--	--	--	6.27	--	--	--	--	--	--	--	--	--	--	--
P-3	5/5/2016	0.5	< 0.786	< 0.681	29.2	< 0.0734	< 0.0734	2.1	4.86	61.2	0.352 J	--	--	0.139	< 0.168	1.33 J	< 0.776	< 0.294	< 0.681	17.8	11.6	< 0.0409
		1.5	< 0.964	5.6	149	0.663	0.282 J	35.2	12	25.3	10.9	--	--	0.0543	0.667	46	< 0.952	< 0.360	< 0.836	46.8	75.8	< 0.0502
P-4	5/5/2016	0.5	< 0.889	4.38	142	0.502	0.384 J	26.5	11.4	31.1	43.9	--	--	0.125	0.328 J	35.3	< 0.877	< 0.332	< 0.770	38.2	94.8	< 0.0462
		1.5	< 0.848	3.94	131	0.538	0.329 J	26.5	13.3	19.8	9.81	--	--	0.0363	0.249 J	39.7	< 0.836	< 0.316	< 0.735	35.6	62.7	0.0493 J
P-7	5/5/2016	0.5	< 0.916	4.22	127	0.525	0.277 J	24.7	11.7	21.5	15.8	--	--	0.0452	< 0.195	39.2	< 0.903	< 0.342	< 0.794	33.9	61.2	< 0.0476
		1.5	< 0.854	1.93 J	110	0.344	0.228 J	18	8.3	12.7	5.52	--	--	0.0188 J	< 0.182	17.4	< 0.843	< 0.319	< 0.740	28	29.9	< 0.0444
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Table 2: Soil - Metal Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			CAM-17 Metals by EPA Method 6010 / 7470																		Cyanide by EPA Method 9012
Sample ID	Sample Date	Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC-soluble (mg/L)	Lead TCLP-soluble (mg/L)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
DG-1	8/18/2016	0.5	--	--	--	--	--	--	--	--	7.4	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	7.06	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	83.4	--	--	--	--	--	--	--	--	--	--	--
DG-2	8/18/2016	0.5	--	--	--	--	--	--	--	--	194	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	18.8	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	8.1	--	--	--	--	--	--	--	--	--	--	--
DG-3	8/18/2016	0.5	--	--	--	--	--	--	--	--	182	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	15.5	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	8.25	--	--	--	--	--	--	--	--	--	--	--
DG-4	8/18/2016	0.5	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--
		1.5	--	--	--	--	--	--	--	--	1.56	--	--	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	9.4	--	--	--	--	--	--	--	--	--	--	--
Laboratory Reported Detection Limits (RDL):			2	2	0.5	0.2	0.5	1	1	2	0.5	0.0171	0.45	0.02	0.5	2	2	1	2	2	5	0.25
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Shallow Soils = < 9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	2,900 / 2,900	40 / 40	39 / 41	--	23 / 27	3,100 / 14,000	80 / 160	--	--	13 / 42	390 / 1,700	820 / 86	390 / 1,700	390 / 1,700	0.78 / 3.4	600 / 600	23,000 / 100,000	0.0036 / 0.0036
Environmental Screening Levels (ESLs) [1] Residential / Commercial (Deep Soils >9.8 ft, Tier 1 Levels)			31 / 140	0.067 / 0.31 7.48***	15,000 / 220,000	150 / 2,200	39 / 580	--	23 / 250	3,100 / 47,000	80 / 160	--	--	13 / 190	390 / 5,800	820 / 11,000	390 / 5,800	390 / 5,800	0.78 / 12	14,000 / 600,000	23,000 / 350,000	0.0036 / 0.0036
																					ESLs - Direct Exposure Residential / Industrial	5.3 / 24
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3 Residential / Commercial			--	0.067 / 0.25 7.48***	--	15 / 210	5.2 / 7.3	36,000 / 170,000 **	--	--	80 / 320	--	--	1.0 / 4.5	--	--	--	390 / 1,500	--	390 / 1,000	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] Residential / Commercial			31 / 470	0.68 / 3.0 7.48***	15,000 / 220,000	160 / 2,300	71 / 980	120,000 / 1,800,000 **	23 / 350	3,100 / 47,000	400 / 800	--	--	11 / 46	390 / 5,800	--	390 / 5,800	390 / 5,800	--	390 / 5,800	23,000 / 350,000	2.7 / 150

Notes

1 = **Environmental Screening Levels (ESLs):** from Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final, February 2016). The ESLs are intended to provide quantitative guidance on whether remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m), Groundwater IS a current or potential Source of Drinking Water.

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated May 2016), and the *User's Guide* (November 2015). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

* = Analysis of the 95% Upper Confidence Limit for arsenic in 16 shallow soil samples that were collected to establish background concentrations for metals in the Watsonville area yields a concentration of 7.6 mg/kg. Analysis of the 95% Upper Confidence Limit for arsenic collected from 9 on-site shallow soil samples yields a concentration of 6.3 mg/kg (see Appendix F of this report for reference and 95% UCL analysis). The data confirms **that the on-site concentrations of arsenic fall within the range of naturally occurring background concentrations for this area of Watsonville.**

**= Chromium (Total) has no threshold so Chromium III threshold has been placed instead. (Chromium (VI) thresholds for RSL = 0.3 / 6.3 ; (Residential / Commercial)

***= A 2003 background assessment for metals in shallow soil was completed for the Watsonville area by Uribe & Associates: *Remedial Investigation Report, Watsonville 2 Former Manufactured Gas Plant Site, Pacific Gas and Electric Company, GC Yard 11, Walker Street, Watsonville, California,* September 4, 2003. Analysis of the 95% Upper Confidence Limit for arsenic in 14 shallow soil samples that were collected to establish background concentrations for metals in the Watsonville area yields a concentration of 7.48 mg/kg. Analysis of the 95% Upper Confidence Limit for arsenic collected from on site soil samples at depths of 0.5, 1.5 and 4 feet bgs yielded concentrations of 4.30, 5.20, and 3.66 mg/kg, respectively (see Appendix X of this report for details). The data confirms that the on-site concentrations of arsenic fall within the range of naturally occurring background concentrations for this area of Watsonville.

STLC = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

B = Laboratory reports that the same analyte is found in the associated blank.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

^ = Method Detection Limit and Practical Quantitation Limit raised after sample was diluted. Dilutions were necessary due to elevated analyte concentrations or matrix interferences.

BOLD = Analytical result above commercial ESL, RSL, or HERO Note 3 values (whichever is the most conservative).

-- = Not analyzed for

Table 3: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			*Laboratory Analytical Results*							
			Hydrocarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8260)*				
Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
B-1	5/3/2016	*1.5*	--	--	--	--	--	--	--	< 1.85 P
		4	--	--	--	--	--	--	--	< 1.76 J6
B-3	5/4/2016	*0.5*	< 0.175	< 15.5	**208.6**	< 0.000631	< 0.000789	< 0.000579	**0.00249 J**	--
		1.5	< 0.178	**12.2**	**59.6**	< 0.000642	< 0.000803	< 0.000589	< 0.00246	--
B-4	5/3/2016	*0.5*	< 0.173	< 0.766	**4.43**	< 0.000627	< 0.000784	< 0.000575	< 0.00240	--
		1.5	< 0.176	**9.71**	**40.9**	< 0.000638	< 0.000797	< 0.000585	< 0.00244	< 1.67
		4	--	--	--	--	--	--	--	**2.34 J**
B-5	5/3/2016	*4*	< 0.188	**1.77 J**	**22.59**	< 0.000680	< 0.000850	< 0.000624	< 0.00261	--
		10	< 0.183	< 0.808	**2.27 J**	< 0.000661	< 0.000827	< 0.000606	< 0.00254	**3.12 J**
		15	< 0.192	**2.12 J**	**7.19**	< 0.000693	< 0.000866	< 0.000635	< 0.00266	**8.49**
		20	< 0.207	**2.35 J**	**1.89 J**	< 0.000749	< 0.000936	< 0.000686	< 0.00287	**64.3**
B-6	5/3/2016	*0.5*	< 0.185	**6.21**	**42.7**	**0.00168 J**	**0.00181 J**	< 0.000613	< 0.00256	--
		1.5	< 0.211	**6.3**	**15.05**	< 0.000761	**0.00105 J**	< 0.000698	< 0.00292	--
B-7	5/3/2016	*0.5*	< 0.171	< 7.54	**93.8**	< 0.000618	< 0.000772	< 0.000566	< 0.00237	--
		1.5	< 0.200	**928**	**3,300**	< 0.000724	< 0.000905	< 0.000664	< 0.00278	< 1.89
		4	--	--	--	--	--	--	--	**2.15 J**
B-8	5/3/2016	*10*	--	--	--	--	--	--	--	**3.69 J**
		15	**3.14**	**346**	**479**	< 0.000691	< 0.000864	< 0.000634	**0.00890 J**	--
		17	**0.618**	**1,850**	**1,665**	< 0.000707	< 0.000884	< 0.000648	**0.00439 J**	**161**
		20	< 0.189	**29.5**	**13.7**	< 0.000684	< 0.000855	< 0.000627	< 0.00262	**110**
		23	< 0.204	**12.1**	**4.92 J**	< 0.000736	< 0.000920	< 0.000675	< 0.00282	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			**100 / 500**	**230 / 570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	--
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)			**500**	**570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	--
***DTSC - Human and Ecological Risk Office (HERO)* Human Health Risk Assessment - Note 3**			--	--	--	*0.33 / 1.4*	*1,100 / 5,400*	--	--	--
USEPA Region 9 *Regional Screening Levels (RSLs)* [2] (Residential / Commercial)			--	--	--	*1.2 / 5.1*	*4,900 / 47,000*	*5.8 / 25*	*580 / 2,500*	--

Table 3: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			*Laboratory Analytical Results*							
			Hydrocarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8260)*				
Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
B-9	5/3/2016 & 8/18/2016	*0.5*	--	< 152	**2,860**	--	--	--	--	**--**
		1.5	--	**4.26**	**3.41 J**	--	--	--	--	**15.3**
		4	--	**4,980**	**12,350**	--	--	--	--	**4.06 J**
		6	--	**358**	**1,231**	--	--	--	--	--
		8	--	**234**	**409**	--	--	--	--	--
B-10	5/3/2016	*1.5*	--	--	--	--	--	--	--	**9.79**
		4	--	--	--	--	--	--	--	< 1.73 P
B-11	5/4/2016	*0.5*	< 0.174	**1.43 J**	**16.83**	< 0.000629	< 0.000786	< 0.000576	< 0.00241	--
		1.5	< 0.198	**191 J**	**1,022**	< 0.000715	< 0.000893	< 0.000655	< 0.00274	< 1.87
		4	< 0.189	**1.49 J**	< 3.02	< 0.000683	< 0.000854	< 0.000626	< 0.00262	**5.87 J6**
		10	< 0.181	**2.13 J**	**1.68 J**	< 0.000653	< 0.000816	< 0.000599	< 0.00250	< 1.71
		15	< 0.193	**4.86**	**2.21 J**	< 0.000699	< 0.000874	< 0.000641	< 0.00268	**45.4**
		20	< 0.203	**7.73**	**2.99 J**	< 0.000734	< 0.000917	< 0.000673	< 0.00281	**62.3**
		24	< 0.199	**9.39**	**3.76 J**	< 0.000719	< 0.000899	< 0.000660	< 0.00276	--
		28	< 0.192	< 0.848	< 3.08	< 0.000694	< 0.000868	< 0.000637	< 0.00266	--
B-12	5/3/2016	*0.5*	< 0.185	< 40.9	**495**	< 0.000670	< 0.000838	< 0.000614	< 0.00257	--
		1.5	< 0.196	**2.96 J**	**15.26**	< 0.000708	< 0.000886	< 0.000649	< 0.00272	--
B-14	5/3/2016	*4*	< 0.183	**2.02 J**	**5.89 J**	< 0.000661	< 0.000827	< 0.000606	< 0.00254 **B**	--
		10	< 0.188	< 0.831	< 3.02	< 0.000680	< 0.000850	< 0.000624	< 0.00261 **B**	--
		15	< 0.195	< 0.862	< 3.12	< 0.000705	< 0.000882	< 0.000647	< 0.00270 **B**	--
		20	< 0.181	< 0.797	< 2.90	< 0.000653	< 0.000816	< 0.000598	< 0.00250 **B**	--
B-15	5/3/2016	*0.5*	< 0.199	< 0.879	**14.11**	< 0.000719	< 0.000899	< 0.000660	< 0.00276 **B**	--
		1.5	< 0.201	**1.20 J**	**5.81 J**	< 0.000727	**0.00102 J, B**	< 0.000667	< 0.00279 **B**	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			**100 / 500**	**230 / 570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)			**500**	**570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
DTSC - Human and Ecological Risk Office (HERO) **Human Health Risk Assessment - Note 3**			--	--	--	***0.33 / 1.4***	***1,100 / 5,400***	--	--	--
USEPA Region 9 ***Regional Screening Levels (RSLs) [2]*** **(Residential / Commercial)**			--	--	--	***1.2 / 5.1***	***4,900 / 47,000***	***5.8 / 25***	***580 / 2,500***	--

Table 3: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			Laboratory Analytical Results							
			Hydrocarbon Ranges			Volatile Organic Compounds (VOC's by EPA 8260)				
Sample Identification	Sample Date	Sample Depth (feet, bgs)	Gasoline Range C5-C12	Diesel Range C12-C22	*Motor Oil Range C22-C40	Benzene	Toluene	Ethyl-benzene	Xylene (total)	Ammonia as N By Method 350.1
P-1	5/5/2016	0.5	< 0.172	< 0.757	< 2.74	--	--	--	--	--
		1.5	< 0.199	159	607	--	--	--	--	--
P-2	5/5/2016	0.5	0.224 J	2.37 J	2.13 J	--	--	--	--	--
		1.5	< 0.200	2,260	6,980	--	--	--	--	--
	8/18/2016	4	--	4,130	8,060	--	--	--	--	--
		6	--	706	899.3	--	--	--	--	--
		8	--	2,730	2,109	--	--	--	--	--
		12	--	2,210	1,305	--	--	--	--	--
		15.5	--	394	268.9	--	--	--	--	--
		18	--	2,220	1,341	--	--	--	--	--
P-3	5/5/2016	0.5	< 0.174	1.74 J	< 2.78	--	--	--	--	--
		1.5	< 0.213	5.22	2.61 J	--	--	--	--	--
P-4	5/5/2016	0.5	< 0.197	14.3	48.8	--	--	--	--	--
		1.5	< 0.188	7.63	20.33	--	--	--	--	--
P-7	5/5/2016	0.5	< 0.203	5.14	6.89 J	--	--	--	--	--
		1.5	< 0.189	1.73 J	< 3.02	--	--	--	--	--
Reported Detection Limit (RDL)			0.1	4	8	0.0005	0.005	0.0005	0.0015	5
Environmental Screening Levels for SHALLOW Soils (< 10 ft) [1]: (Residential / Commercial)			100 / 500	230 / 570	5,100	0.044	2.9	1.4	2.3	--
Environmental Screening Levels for DEEP Soils (> 10 ft) [1]: (Residential / Commercial)			500	570	5,100	0.044	2.9	1.4	2.3	--
DTSC - Human and Ecological Risk Office (HERO) Human Health Risk Assessment - Note 3			--	--	--	0.33 / 1.4	1,100 / 5,400	--	--	--
USEPA Region 9 Regional Screening Levels (RSLs) [2] (Residential / Commercial)			--	--	--	1.2 / 5.1	4,900 / 47,000	5.8 / 25	580 / 2,500	--

Table 3: Soil - TPH, VOCs and Ammonia as Nitrogen Analytical Results

Additional Site Assessment

25 East Fifth Avenue, Watsonville, California

All soil sample results are in parts per million (mg/kg).

Soil Sampling Information			*Laboratory Analytical Results*							
			Hydrocarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8260)*				
Sample Identification	*Sample Date*	*Sample Depth (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	**Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	Ammonia as N By Method 350.1
DG-1	8/18/2016	*0.5*	--	58.8	577	--	--	--	--	--
		1.5	--	105	570	--	--	--	--	--
		4	--	208	1,022	--	--	--	--	--
		6	--	1.09 J	1.60 J	--	--	--	--	--
		8	--	2.53 J	2.88 J	--	--	--	--	--
DG-2	8/18/2016	*0.5*	--	76	568	--	--	--	--	--
		1.5	--	5.14	7.80 J	--	--	--	--	--
		4	--	2.84 J	2.84 J	--	--	--	--	--
		6	--	8.24	93.3	--	--	--	--	--
		8	--	5.66	55.7	--	--	--	--	--
DG-3	8/18/2016	*0.5*	--	10.4	27.88	--	--	--	--	--
		1.5	--	7.94	17.6	--	--	--	--	--
		4	--	3.72 J	3.73 J	--	--	--	--	--
		6	--	3.05 J	15.93 B	--	--	--	--	--
		8	--	4.72	30.8 B	--	--	--	--	--
DG-4	8/18/2016	*0.5*	--	< 7.62	69.1 J	--	--	--	--	--
		1.5	--	4.21	3.47 J	--	--	--	--	--
		4	--	3.04 J	4.95 J	--	--	--	--	--
		6	--	8.32	20.87 B	--	--	--	--	--
		8	--	2.67 J	34.09	--	--	--	--	--
Reported Detection Limit (RDL)			*0.1*	*4*	*8*	*0.0005*	0.005	0.0005	*0.0015*	*5*
Environmental Screening Levels for <u>SHALLOW</u> Soils (< 10 ft) [(1)]: (Residential / Commercial)			**100 / 500**	**230 / 570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
Environmental Screening Levels for <u>DEEP</u> Soils (> 10 ft) [(1)]: (Residential / Commercial)			**500**	**570**	**5,100**	**0.044**	**2.9**	**1.4**	**2.3**	**--**
***DTSC - Human and Ecological Risk Office (HERO)* Human Health Risk Assessment - Note 3**			--	--	--	***0.33 / 1.4***	***1,100 / 5,400***	--	--	--
USEPA Region 9 *Regional Screening Levels (RSLs)* [(2)] (Residential / Commercial)			--	--	--	***1.2 / 5.1***	***4,900 / 47,000***	***5.8 / 25***	***580 / 2,500***	--

Notes:

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document, Table A. Shallow Soils (<3m).

Residential / Commercial = **Screening levels for Residential or Commercial land uses:** screening limit concentration are presented in BROWN for Residential land uses and in Green for Commercial/Industrial land uses. One number indicates the screening level is the same for both Residential and Commercial.

2 = **Regional Screening Levels (RSLs):** from the *USEPA Region 9 RSL Tables* (updated November 2015), and the *User's Guide* (November 2015). The RSLs are risk-based screening levels used for screening sites, calculating risk factors and potentially as cleanup goals once a site has been characterized.

BOLD = Analytical result above commercial ESL, RSL, or HERO Note 3 values (whichever is the most conservative).

bgs = below ground surface. **ND =** Not detected at or above the lab's practical quantitation limit.

*** =** C22-C32 and C32-C40 ranges combined for Motor Oil Hydrocarbon Range results.

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

J6 = Laboratory reports that the sample matrix interfered with the ability to make any accurate determination; spike value is low.

P = Laboratory reports that the RPD value not applicable for sample concentrations less than 5 times the reporting limit.

B = Laboratory reports that the analyte is found in the associated blank.

T= Laboratory reports TPH value due to significant contribution from hydrocarbons heavier then requested fuel with the C5-C12 range quantified as Gasoline.

Table 4: Groundwater - PAH Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil results are in micrograms per liter (ug/L)

Sample Information				***Polycyclic Aromatic Hydrocarbons (PAHs)*** *by EPA Method 8270C-SIM*													
Sample ID	***Sample Date***	****Depth to Groundwater (ft, bgs)***	***Temporary Screen Interval (feet, bgs)***	***Acenaphthene***	***Acenaphthylene***	***Anthracene***	***Benzo[g,h,i] perylene***	***Fluoranthene***	***Fluorene***	***Naphthalene***	***Phenanthrene***	***Pyrene***	***Benzo[a]pyrene***	***Benzo[a] anthracene***	***Benzo[b] fluoranthene***	***Benzo[k] fluoranthene***	***Chrysene***	***Dibenzo[a,h] anthracene***	***Indeno [1,2,3-cd] pyrene***
GW-1	**5/4/2016**	**27.9**	**22 - 32**	**0.446**	**0.256**	**0.0480 J**	**0.00393 J, B**	< 0.0157	**0.176**	**9.27**	**0.0673 B**	< 0.0117	< 0.0116	< 0.00410	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-2		**27**	**24 - 34**	**0.0191 J**	< 0.0120	**0.0169 J**	**0.00459 J, B**	< 0.0157	**0.0377 J**	**0.454**	**0.0379 J, B**	< 0.0117	< 0.0116	**0.00789 J**	**0.00338 J**	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-3		**26.5**	**24 - 34**	**7.85**	**3.94**	**5.91**	**0.0923**	**3.45**	**7.35**	**34.7**	**7.38**	**3.11**	**0.377**	**0.733**	**0.309**	**0.159**	**0.45**	**0.0367 J**	**0.0886**
GW-4		**26.6**	**20 - 30**	**0.0517**	**0.0536**	**0.0146 J**	**0.00404 J, B**	< 0.0157	**0.0262 J**	**0.106 J**	**0.0197 J, B**	< 0.0117	< 0.0116	**0.00806 J**	**0.00352 J**	< 0.0136	< 0.0108	< 0.00396	< 0.0148
GW-5		**22.5**	**24 - 34**	**0.0146 J**	**0.0149 J**	< 0.0140	**0.00509 J, B**	< 0.0157	**0.0199 J**	**0.165 J**	**0.0297 J, B**	< 0.0117	< 0.0116	**0.00921 J**	< 0.00212	< 0.0136	< 0.0108	< 0.00396	< 0.0148
Reported Detection Limit (RDL) :				0.05	0.05	0.05	0.05	0.05	0.05	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Water Board ***Environmental Screening Levels*** [1] (Groundwater)				**20**	**30**	**0.73**	**0.1**	**8**	**3.9**	**0.17**	**4.6**	**2**	**0.014**	**0.027**	**0.012**	**0.017**	**0.049**	**0.0034**	**0.034**
Maximum Contaminant Levels (MCLs) [2]				NE	NE	NE	NE	NE	NE	**17** [3]	NE	NE	**0.2**	NE	NE	NE	NE	NE	NE

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted.

2 = **Maximum Contaminant Levels (MCLs):** MCL's are drinking water standards established in Title 22 of the California Code of Regulations.

3 = **Napthalene's** objective is based on its established health-based advisory level, currently called a "notification level". These notification/action levels have been used to provide information to public water systems and others about certain non-regulated chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than these levels, certain requirement and recommendations apply.

***=** Depth to groundwater may not neccesarilly be stabilized.

bgs= below ground surface

< X = Constituent not detected above the laboratory's Method Detection Limit (MDL), X.

J = Laboratory reports that the detection value is between MDL and PQL, and should be considered to be an estimate.

B = Laboratory reports that the same analyte is found in the associated blank.

NE = Not Established

BOLD = Result exceeds the Commercial ESL threshold.

Table 5: Groundwater - TPH, VOC, Ammonia as N, & Cyanide Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, California

All groundwater sample results are in parts per billion (ug/L).

Groundwater Sampling Information				*Laboratory Analytical Results*									
				HydroCarbon Ranges			*Volatile Organic Compounds (VOC's by EPA 8021)*					*Ammonia as N*	*Cyanide*
Sample ID #	*Sample Date*	**Depth to Groundwater (ft, bgs)*	*Temporary Screen Interval (feet, bgs)*	*Gasoline Range C5-C12*	*Diesel Range C12-C22*	***Motor Oil Range C22-C40*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylene (total)*	*MTBE*		
GW-1	***5/4/2016***	**27.9**	**22 - 32**	< 30.4	**546**	**361.1**	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	**55,000**	**75**
GW-2		**27**	**24 - 34**	< 30.4	**43.6 J**	< 66.0	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	< 280	< 1.80
GW-3		**26.5**	**24 - 34**	< 30.4	**870**	**441.2**	**0.333 J**	< 0.780	< 0.384	**1.50 J**	< 0.367	**6,400**	**237**
GW-4		**26.6**	**20 - 30**	< 30.4	**78.8**	**53.5 J**	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	**17,000**	**60**
GW-5		**22.5**	**24 - 34**	< 30.4	< 71.3	< 142.6	< 0.331	< 0.780	< 0.384	< 1.06	< 0.367	**4,000**	**21**
Laboratory Practical Quantitation Limit (PQLs):				100	100	200	1.0	5.0	1.0	3.0	1.0	280	5.0
Water Board *Environmental Screening Levels* [1] Groundwater				**100**		**50,000**	**1.0**	**40**	**13**	**20**	**5.0**	**NE**	**150**
Maximum Contaminant Levels (MCLs) [2]				--			**1**	**150**	**300**	**1,750**	**5**	**NE**	**150**

NOTES:

WQG = **W**ater **Q**uality **G**oals: Goals establised by the CRWQCB Central Coast Region based on Maximum Contaminant Limits (Department of Health Services) or taste & odor threshold limits.

RED BOLD results indicate detected concentrations are above WQG's Threshold limits.

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (February 2016). **<http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >** The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted.

2 = **Maximum Contaminant Levels (MCLs):** MCL's are drinking water standards established in Title 22 of the California Code of Regulations.
Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule

BOLD = Result exceeds the Commercial ESL threshold.

ND = Not detected at or above the lab's practical quantitation limit.

*** =** Depth to groundwater may not neccesarilly be stabilized.

**** =** C22-C32 and C32-C40 ranges combined for Motor Oil Hydrocarbon Range results.

NE = Not Established

< X = Constituent not detected above laboratory's Method Detection Limit (MDL), X.

(a) = Micro-Extraction -No TPH as Motor Oil pattern present at 200 ug/L.

bgs = below ground surface

MTBE = Methyl-tert-Butyl-Ether

Table 6: Soil Vapor - Volatile Organic Compounds Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil vapor results are in micrograms per meter cubed (ug/m ^{3})

Sample Information			Total Petroleum Hydrocarbons as Gasoline	Volatile Organic Compounds (VOCs) Laboratory Analysis by EPA Method TO-15						Leak Check Monitoring (Isopropyl Alcohol)		
Sample ID	Sample Date	Depth (feet below ground surface)		Benzene	Toluene	EthylBenezene	Xylenes	Naphthalene	Other VOCs	Field Shroud Concentration (avg., in ppm)	Laboratory Results (in ug/m^3)	Calculated Leakage (percent)
SV-1 (by EPA Method TO-15)	5/12/2016	5'	< 280	< 5.9	< 4.5	< 3.9	< 12	< 150	All Other VOCs = ND	13.3	< 6.6	< 0.02
		10'	< 280	< 5.8	< 4.4	< 3.9	< 12	< 150	1,2-Dibromoethane = 99 PCE = 65 J All Other VOCs = ND	26.3	< 6.5	< 0.01
SV-2 (by EPA Method TO-15)	5/12/2016	5'	< 290	**17 J**	**20 J**	< 4.0	< 12	< 160	All Other VOCs = ND	78	540	0.28
		10'	< 280	< 6.0	< 4.5	< 4.0	< 12	< 160	Styrene = 31 J All Other VOCs = ND	8.8	< 6.7	< 0.03
SV-3 (by EPA Method TO-15)	5/12/2016	5'	< 290	**27 J**	**67**	**37 J**	**210**	< 160	n-Heptane = 13 J All Other VOCs = ND	34.8	< 6.8	< 0.01
		10'	**6,400**	**170**	**200**	**69 J**	**370**	< 150	Propylene = 1,500 All Other VOCs = ND	38.1	< 6.5	< 0.01
SV-4 (by EPA Method TO-15)	5/12/2016	5'	< 280	< 6.0	< 4.5	< 4.0	< 12	< 160	All Other VOCs = ND	15.7	< 6.7	< 0.02
		10'	< 270	< 5.8	< 4.4	< 3.8	< 12	< 150	All Other VOCs = ND	71.2	< 6.4	< 0.004
Laboratory's *Practical Quantitation Limit (PQL)*			200	2	2	5	5	20	Various	--	--	--
Environmental Screening Levels [1] **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			50,000 100,000	48 420	160,000 1,300,000	560 4,900	52,000 440,000	41 360	**1,2-Dibromoethane: 2.3 / 20** **PCE: 240 / 2,100** **Styrene: 470,000 / 1,400,000** **Acetone: 15,000,000 / 31,000,000** All Others: vary or Not Established			
US EPA Regional Screening Levels **Residential / Commercial** **(0.03 ATTENUATION FACTOR)** [2]			**Not Established**	12 53	173,333 733,333	37 163	3,333 14,667	2.8 12	**1,2-Dibromoethane: 0.157 / 0.66** **PCE: 3.67 / 1,567** **Styrene: 33,333.33 / 146,667** **Propylene: 103,333 / 433,333** **Acetone: 1,066,667 / 4,666,667** All Others: vary or Not Established			
CA DTSC-Modified Soil Gas Levels [3] **"Near Source" Threshold Limits** **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			**Not Established**	49 420	155,000 1,300,000	550 4,900	50,000 440,000	42 360	**1,2-Dibromoethane: 2.35 / 20** **PCE: 240 / 2,100** **Styrene: 470,000 / 3,900,000** **Propylene: 1,550,000^r / 13,000,000^r** **Acetone: 16,000,000^r / 140,000,000^r** All Others: vary or Not Established			
"Subslab" Threshold Limits **Residential / Commercial** ***(0.05 ATTENUATION FACTOR)*** [3]			**Not Established**	1.9 8	6,200 26,000	22 98	2,000 8,800	2 7	**1,2-Dibromoethane: 0.094 / 0.4** **PCE: 9.6 / 42** **Styrene: 18,800 / 78,000** **Propylene: 62,000^r / 260,000^r** **Acetone: 640,000^r / 2,800,000^r** All Others: vary or Not Established			
Site-Specific **Risk-based Soil Gas Screening Levels**[4] **@5 ft bgs/ @15 ft bgs**			850,000 2,000,000	3,100 7,300	960,000 2,300,000	39,000 97,000	320,000 780,000	3,400 8,800	**Styrene: 3,300,000 / 8,200,000** **Acetone: 80,000,000 / 180,000,000** All Others: Not Established			

Table 6: Soil Vapor - Volatile Organic Compounds Analytical Results
Additional Site Assessment
25 East Fifth Street, Watsonville, CA

All soil vapor results are in micrograms per meter cubed (ug/m ^{3})

Sample Information			Total Petroleum Hydrocarbons as Gasoline	Volatile Organic Compounds (VOCs) Laboratory Analysis by EPA Method TO-15						Leak Check Monitoring (Isopropyl Alcohol)		
Sample ID	Sample Date	Depth (feet below ground surface)		Benzene	Toluene	EthylBenezene	Xylenes	Naphthalene	Other VOCs	Field Shroud Concentration (avg., in ppm)	Laboratory Results (in ug/m^3)	Calculated Leakage (percent)
SV-5 (by EPA Method TO-15)	5/12/2016	5'	< 280	< 5.8	< 4.4	< 3.9	< 12	< 150	All Other VOCs = ND	22.6	< 6.5	< 0.01
		10'	< 280	< 5.9	< 4.5	< 3.9	< 12	< 150	Acetone = 18 ^{J} All Other VOCs = ND	53.6	< 6.6	< 0.01
SV-5 (by EPA Method TO-17)	5/12/2016	5'	**380** ^{a}	< 16	**18**	< 16	**57**	< 16	All Other VOCs = ND	89.8	23	0.01
		10'	**370** ^{a}	< 16	**28**	< 16	**31**	< 16	All Other VOCs = ND	25.8	22	0.03
Laboratory's *Practical Quantitation Limit (PQL)*			200	2	2	5	5	20	Various	--	--	--
Environmental Screening Levels [1] **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			50,000^o 100,000^o	48 420	160,000 1,300,000	560 4,900	52,000 440,000	41 360	**1,2-Dibromoethane:** 2.3 / 20 **PCE:** 240 / 2,100 **Styrene:** 470,000 / 1,400,000 **Acetone:** 15,000,000^o / 31,000,000^o All Others: vary or Not Established			
US EPA Regional Screening Levels **Residential / Commercial** **(0.03 ATTENUATION FACTOR)** [2]			**Not Established**	12 53	173,333 733,333	37 163	3,333 14,667	2.8 12	**1,2-Dibromoethane:** 0.157 / 0.66 **PCE:** 3.67 / 1,567 **Styrene:** 33,333.33 / 146,667 **Propylene:** 103,333 / 433,333 **Acetone:** 1,066,667 / 4,666,667 All Others: vary or Not Established			
CA DTSC-Modified Soil Gas Levels [3] **"Near Source" Threshold Limits** **Residential ATTENUATION FACTOR: 0.002** **Commercial ATTENUATION FACTOR: 0.001**			**Not Established**	49 420	155,000 1,300,000	550 4,900	50,000 440,000	42 360	**1,2-Dibromoethane:** 2.35 / 20 **PCE:** 240 / 2,100 **Styrene:** 470,000 / 3,900,000 **Propylene:** 1,550,000^r / 13,000,000^r **Acetone:** 16,000,000^r / 140,000,000^r All Others: vary or Not Established			
"Subslab" Threshold Limits **Residential / Commercial** ***(0.05 ATTENUATION FACTOR)*** [3]			**Not Established**	1.9 8	6,200 26,000	22 98	2,000 8,800	2 7	**1,2-Dibromoethane:** 0.094 / 0.4 **PCE:** 9.6 / 42 **Styrene:** 18,800 / 78,000 **Propylene:** 62,000^r / 260,000^r **Acetone:** 640,000^r / 2,800,000^r All Others: vary or Not Established			
Site-Specific **Risk-based Soil Gas Screening Levels**[4] **@5 ft bgs/ @15 ft bgs**			850,000 2,000,000	3,100 7,300	960,000 2,300,000	39,000 97,000	320,000 780,000	3,400 8,800	**Styrene:** 3,300,000 / 8,200,000 **Acetone:** 80,000,000 / 180,000,000 All Others: Not Established			

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (Interim Final, Feb 2016) <http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_PDF_Rev2.pdf >. The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document,"Tier 1 ESLs", based on shallow soils (<3m), groundwater is a current or potential source of drinking water.

2 = **US EPA Region 9's *Regional Screening Levels* (RSLs):** From *US EPA Regional Screening Levels for Indoor Air* (http://www.epa.gov/region9/superfund/prg/, revised November 2015) . The Indoor Air RSLs are divided by the **US EPA's Recommended Vapor Attenuation Factor (0.03)** (from the US EPA's *Recommended Vapor Attenuation Factor for Risk Based Screening* of *sub-slab soil gas* [*Table 6-1 in Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway From Subsurface Sources to Indoor Air* , June 2015]) to calculate the Risk Level concentration appropriate for the specific sample collected (i.e., *Sub-slab soil gas* , *"Near-source" exterior soil gas* , *Crawl space air* , etc.).

3 = **CA DTSC Modified Air Screening Levels:** From the California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), *Human Health Risk Assessment (HHRA) Note Number 3, Table 3* , Jan 2016 < **https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-2016-01.pdf** >. The Modified Air Screening Levels are divided by the DTSC's Recommended Vapor Attenuation Factor (0.05) to calculate the Risk Level concentration appropriate for the specific sample collected. Where Modified Air Screening Levels are not available, US EPA RSLs (see Note 2 above) are used with the DTSC attenuation factor.

4 = **Site-Specific Risk-Based Soil Gas Screening Levels (adjacent MGP site):** From *Table 8. Risk-based Soil Gas Screening Levels taken from the "Soil gas, Sub-slab Soil Gas, and Indoor Air Screening Levels" section of the* ***Watsonville-1 Former MGP Site Report (September 29, 2009) prepared by Iris Environmental.***

^{o} = ESL threshold is due to Odor. (See note 2 for more information)

^{r} = No DTSC CA Note 3 screening level established for this compound, used RSL when calcualting Subslab

PCE = Tetrachloroethene

-- = Sample was not analyzed for this constituent

< X = Constituent not detected above laboratory's Method Detection Limit (MDL), X.

BOLD = Analytical result exceeds Commercial threshold.

BOLD = Compound detected.

^{J} = Laboratory note: Estimated value

^{a} = Laboratory notes, Result reported as gasoline but sample chromatogram does not match reference standard pattern. TPH value due to presence of heavy hydrocarbons (best match Stoddard Solvent pattern) within range of C5-C12 quantified as Gasoline.

APPENDIX B

REVIEW OF FORMER WATSONVILLE-1 MANUFACTURED GAS PLANT CHARACTERIZATION & CORRECTIVE ACTIONS

INCLUDES: SELECT TABLES & FIGURES

(618 Main Street, Watsonville - Adjacent Jalisco Restaurant Property)

REVIEW OF FORMER WATSONVILLE-1 MANUFACTURED GAS PLANT CHARACTERIZATION & CORRECTIVE ACTIONS

Research of previous environmental investigations at the adjacent commercial restaurant parcel to the west (618 Main Street, Jalisco Restaurant) has documented evidence of soil and groundwater contamination that is associated with the same manufactured gas plant that operated on the subject Site. The adjacent property characterization and cleanup activities have been ongoing since approximately 1986 and investigation is currently under the direction of the California Department of Toxic Substances Control (DTSC). Additional details, including electronic copies of previous reports can be obtained at the State GeoTracker database website[17].

Adjacent property characterization activities have included extensive sampling of soil, groundwater and soil vapor media that has provided sufficient definition of subsurface chemical impacts to guide conservative, regulatory approved corrective actions (i.e., soil removal, institutional controls and ongoing natural attenuation monitoring) that are protective of the commercial land use scenario. A land use covenant has been recorded for this property that is restrictive of residential land use.

The following provides a brief synopsis of soil, groundwater and soil vapor sample results for this adjacent property. Select Tables and Figures from previous investigations are also included in Appendix B for reference.

SOIL

Numerous soil samples have been collected throughout the property, with the vast majority collected in 1991, 2001 and 2004. Site *Chemicals of Concern* (*COCs*) in soil include: polynuclear aromatic hydrocarbons (PAHs), and to a much lesser extent Naphthalene, Total Petroleum Hydrocarbons (TPH), and Cyanide. The following worst case concentrations for each COC in soil have been historically detected at this site:

Worst Case concentration of COCs in Soil Historically Detected at 618 Main Street, Watsonville

Chemical of Concern	Depth Interval	Concentration (mg/kg)	Sample Location	Sample Depth (feet, bgs)
PAHs expressed as benzo(a)pyrene equivalent	< 10 feet	17.161	GP1	0.5
	> 10 feet	21.035	GP1	15

[17] http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLT3S1091318

Worst Case concentration of COCs in Soil Historically Detected at 618 Main Street, Watsonville

Chemical of Concern	Depth Interval	Concentration (mg/kg)	Sample Location	Sample Depth (feet, bgs)
Naphthalene	< 10 feet	0.25	HA10	1.5
	> 10 feet	320	GP4	15
TPH-gasoline	< 10 feet	8.1	DSS-1-WAT1-2	surface
	> 10 feet	5,300*	GP1	15
TPH-diesel	< 10 feet	2,100	GP1	2.5
	> 10 feet	14,000		15
TPH-motor oil	< 10 feet	4,200	GP1	2.5
	> 10 feet	9,500		15
Cyanide	< 10 feet	14.3	MW-WAT1-2	5
	> 10 feet	13.1		13

* = Concentrations of toluene, ethylbenzene, and xylenes detected at 19, 28 and 400 mg/kg, respectively

The worst case soil concentrations were detected at the rear (eastern) portion of the property, within the footprint of historic MGP infrastructure.

GROUNDWATER

Between 1991 and 2009 a total of seven (7) groundwater monitoring wells have been installed throughout the property (MW-WAT1-1 through -7; see Figures in Appendix B). Groundwater levels are documented to fluctuate between approximately 16 and 32 feet bgs and documented to consistently flow in a northwesterly to southwesterly direction (generally westerly with some seasonal variation). Groundwater is sampled semi-annually (October and April) from all wells and analyzed for the following chemicals:

- TPH-diesel and TPH-motor oil by EPA Method 8015B
- TPH-gas and BTEX/MTBE by EPA Method 8260B
- PAHs by EPA Method 8270SIM
- Arsenic by EPA Method 6010B
- Total cyanide by Standard Method 4500, and
- Ammonia as nitrogen by Standard Method 4500

Overall, impacted groundwater is generally limited to the eastern part of the property in the vicinity of wells MW-WAT1-3 and MW-WAT1-4 with the highest concentrations of COCs observed in groundwater at upgradient (eastern) well MW-WAT1-3. Decreasing concentrations of TPH-diesel, TPH-gas and BTEX have been observed since the April 2009. These compounds continue to be trace to non-detectable at the downgradient wells (i.e., MW-WAT1-5 and MW-WAT1-7) indicating that the groundwater contaminant plume is stable.

The following provides a brief synopsis of groundwater sample analytical results:

Petroleum Hydrocarbons

Low levels of TPH-diesel have been consistently detected in the groundwater samples collected from well MW-WAT1-3 and MW-WAT1-4, at concentrations periodically exceeding the Central Coast Water Quality Objective of 1,000 µg/L. Only trace to non-detectable concentrations of TPH-gas and TPH-motor oil are detected in the monitoring well network.

BTEX

BTEX compounds are currently detected in well MW-WAT1-3 at concentrations of 3.2 µg/L, 1.8 µg/L, 17 µg/L and 17 µg/L, respectively (April 2015). Benzene was detected slightly above the Maximum Contaminant Levels (MCL) of 1.0 µg/L. The BTEX detections in groundwater samples from well MW-WAT1-3 are consistent with historical ranges of concentrations for this well and are relatively low-level. These compounds are not detected in any of the other site wells, with the exception of a few sporadic low-level concentrations detected in wells MW-WAT1-2 and MW-WAT1-4.

PAHs

Relatively low-level concentrations of PAHs, including naphthalene, are detected in monitoring wells MW-WAT1-3 and MW-WAT1-4. All other wells in the monitoring network remain free of PAHs.

Arsenic & Cyanide

Low-levels of arsenic have been historically detected in well MW-WAT1-3 generally below the MCL of 10 µg/L and has remained free of arsenic since 2011. All other wells in the monitoring network remain free of arsenic.

Total cyanide has been historically detected in well MW-WAT1-2 at concentrations above the MCL of 150 µg/L. Low-level concentrations of total cyanide, below the MCL, have been periodically detected in all other wells in the monitoring network.

SOIL GAS

In October 2009, nine (9) dual-depth permanent soil gas probes were installed throughout the property (SG-1 through -6 and -8 through -10; see Figure 2 and Appendix A). Additional soil gas probes were installed in May 2011 to provide additional sampling points adjacent to probe locations where samples could not be collected due to low flow conditions. Soil gas sample depths at each location are set at 5 feet bgs and either between 9 and 10 feet bgs or 14.5 feet bgs.

Soil gas samples from each probe location are collected and analyzed on a semi-annual basis for TPH-gas and VOCs (including naphthalene) by EPA Method TO-15. In general, the highest TPH-gas and VOC concentrations detected in soil gas samples are encountered the eastern portion of the property's parking lot (at probe locations SG-4A and SG-6A). These two probes are situated where elevated soil impacts were encountered during previous investigations. In the western portion of the property soil gas VOCs, if detected, are at concentrations significantly lower than those reported at locations SG-4A and SG-6A.

Risk-Based Soil Gas Screening Levels

Results of soil gas sampling and analysis are evaluated with respect to site-specific risk based screening levels (RBSLs) that were developed for the site to be protective of restaurant building occupants (commercial risk scenario)[18]. The site-specific screening level human health risk evaluation was based on transport modeling of VOCs from soil gas to indoor air using the USEPA-recommended Johnson and Ettinger Model for soil gas and using site-specific inputs (i.e., multiple chemicals, soil layers and site-specific building parameters such as having a basement and slab-on-grade construction). The screening levels were calculated using conservative assumptions and are based on a commercial / industrial exposure scenario with a target risk level of 10^{-5} and a hazard index of 1.0. From the attenuation factors predicted using the Johnson and Ettinger Model and from risk-based target indoor air concentrations, site-specific risk-based screening levels (RBSLs) for chemicals of concern in soil gas were calculated for both shallow (5 feet bgs) and deeper (15-feet bgs) impacts. A tabular summary of the soil gas RBSLs is included in this Appendix for reference.

A *Contingency Plan for Soil Gas Sampling*[19] was developed for the property to present steps to be taken in the unlikely event that soil gas concentrations exceed the site-specific RBSLs. If the cumulative potential cancer risk is greater than 10^{-5} or the hazard index is greater than 1.0, then a sub-slab sampling plan will be implemented, followed by potential indoor air sampling and ultimately mitigation if necessary (i.e., soil vapor extraction – see contingency below). **Continued evaluation of semi-annual sampling results**

[18] Iris Environmental: Draft Screening Levels for Chemicals in Soil Gas, Sub-Slab Soil Gas, and Indoor Air, Watsonville-1 Former Manufactured Gas Plant, dated September 29, 2009

[19] Terra Pacific Group: Contingency Plan for Soil Gas Sampling, Watsonville-1 Former Manufactured Gas Plant, dated September 30, 2009

confirms that potential vapor intrusion impacts to the existing commercial building are below levels of concern.

In 2011, three (3) vapor extraction wells (VW-1 through VW-3) were installed in the parking lot at the property and a vapor extraction (VE) pilot study was conducted to support the construction of a contingency vapor extraction system (VES). The VE pilot study was successfully completed and provided the necessary data to support the construction of the contingency VES. Results of the pilot test confirmed that the installed vapor wells (i.e., VW-1 through VW-3) were spaced adequately to meet the objectives of the proposed remedy contingency[20].

OVERVIEW OF REMOVAL ACTION ACTIVITIES/CORRECTIVE ACTIONS

The removal action goal (RAG) developed for the property and approved by DTSC was to minimize potential future exposure of humans (property workers and visitors) to the COCs that may otherwise be available for ingestion, inhalation, or dermal contact[21].

Soil Corrective Actions

The selected remedial approach for soil consisted of containment and institutional controls along with focused excavation of soil. This approach included the removal of near-surface soil within landscape planter areas that contain elevated PAH concentrations and backfilling with clean import soil. The approach also included the installation of new pavement and the surface water drainage system. The new concrete pavement and clean soil backfill within the planters collectively constitute a cap to contain or conceal the underlying impacted soil.

Specifically, these activities included the removal of impacted soil to a depth of 2 feet in various planters, as well as asphalt and soil to a depth of 1.5 feet beneath the entire parking lot and driveway area. Approximately 686 tons of non-hazardous soil was removed and properly disposed of at an off-site facility. Following the removal of impacted soils, a total of eighteen (18) confirmation soil samples were collected from the base of the excavated areas and analyzed for PAHs to document soil conditions below the new fill material. Thereafter, the parking lot was restored with new paving and planters were backfilled with clean imported soil and landscaped. A Figure showing these corrective actions and residual soil impacts that were capped in-place is included in this Appendix for reference.

As there are residual COCs beneath the cap (predominantly PAHs), a Land Use Covenant (LUC; i.e., deed restriction) was required to remain in place for the property that will be used to maintain the integrity of

[20] Terra Pacific Group: Vapor Extraction Pilot Study Results, Watsonville-1 Former Manufactured Gas Plant, dated December 21, 2011

[21] Terra Pacific Group: Final Removal Action Completion Report, Watsonville-1 Former Manufactured Gas Plant, dated October 27, 2011

cover features and enforce land use restrictions (i.e., commercial land use only) at the property due to a potential elevated health risk associated with residual concentrations of COCs.

Groundwater & Soil Gas Corrective Actions

As described in the above sections, a post-remediation soil gas and groundwater natural attenuation monitoring program was implemented (i.e., semi-annual sampling) to evaluate attenuation of soil gas and groundwater associated with residual COCs that remain at depth beneath the property.

Soil vapor extraction and institutional controls have been retained as a contingency alternative for soil gas should soil gas monitoring show that soil gas concentrations are increasing and exceeding site-specific risk based screening levels (RBSLs). **As noted above, continued evaluation of semi-annual sampling results confirms that potential vapor intrusion impacts to the existing commercial building are below levels of concern.**

Tables & Figure - Groundwater & Soil Gas Results

Source: April 2015 Groundwater and Soil Gas Monitoring Report,

Terra Pacific Group, dated June 20, 2015.

Table 3
Summary of VOCs, TPH, Metals and Other Constituents in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

		Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-1	6/24/1991	<1	<1	<1	1.4	---	<50	<50	<500	---	---	---	<10	<50	---
	10/17/1997	<0.5	<0.5	<0.5	<0.5	---	<50	<50	<500	---	---	---	<10	<5	---
	4/16/1998	<0.5	<0.5	<0.5	<0.5	---	<50	<50	<500	---	---	---	40	<5	340
	6/19/1998	<0.5	<0.5	<0.5	<0.5	---	<50	<50	<500	---	---	---	<10	<50	300
	10/16/1998	<0.5	<0.5	<0.5	<0.5	<5	<50	57	<500	---	---	---	<10	<5	---
	4/15/1999	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	<10	<5	---
	10/26/1999	<0.5	<0.5	<0.5	<0.5	7.6	<50	<50	<300	---	---	---	<10	<50	---
	4/13/2000	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	<5	110	---
	10/5/2000	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	<10	<100	---
	3/14/2001	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	3/27/2001	<0.5	<0.5	<0.5	<0.5	<5	140	<50	<500	---	---	---	<5	<100	---
	10/26/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	---	---	---
	4/23/2002	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	<10	130	<10	---	---
	10/29/2002	<0.5	<0.5	<0.5	<1.5 UJ	---	<50 UJ	<500	<500	<5	---	<110	<24	---	---
	4/28/2003	<0.5	<0.5	<0.5	<1.5 UJ	<5	<50	<480	<480	<5	---	2,030	<21	---	---
	11/20/2003	<0.30	<0.30	<0.30	<0.30	<5.0	<50	<50	<250	<15	---	<100	<50	---	---
	5/12/2004	<0.30	<0.30	<0.30	<0.60	<5.0	<50	<50	<250	<15	---	<100	<50	---	---
	11/9/2004	0.24 J	<0.30	<0.30	<0.30	<5.0	<50	<50	<250	<10	---	<100	<50	---	---
	5/12/2005	<0.30	0.53	<0.30	<0.30	<5.0	<50	<50	<250	<10	---	<100	<50	---	---
	8/2/2006	<0.30	<0.30	<0.30	<0.60	<5.0	<50	<50	<250	<10.0	---	<100	<50	---	---
	12/19/2006	<0.50	<0.50	<0.50	<1.0	<5.0	<50	<50	<250	<10.0	---	<100	<50	---	---
	6/26/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	<200	<10	---	---
	11/15/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	<200	<10	---	---
	4/22/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	<200	<10	---	---
	11/6/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	66 UN	<500	9.2	---	<200	<10	---	---
	4/8/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<300	<9.5	---	<200	<10	---	---
	10/12/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<310	<10	---	<200	<10	---	---
	4/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<310	<10	---	<200	<10	---	---
	10/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	48 J, J+	100 J	<10	---	88 J	<10	---	---
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<99	<10	---	<200	<10	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	130 UN	<10	---	<200	<10	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<48	<95	<10	---	<200	<10	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<53	<110	<10	---	<200	<10	---	---
	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	<10	---	---
	10/6/2014	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	<10	---	---
MW-WAT1-2	6/24/1991	2.3	2.2	2.1	12	---	360	60	<500	---	---	---	40	<50	---
	10/17/1997	<0.5	<0.5	<0.5	<0.5	---	<50	<62	<620	---	---	---	130	<5	---
	4/16/1998	<0.5	<0.5	<0.5	<0.5	---	11	120	<500	---	---	---	210	7	390
	6/19/1998	<0.5	<0.5	<0.5	<0.5	---	<50	<50	<500	---	---	---	87	<50	400
	10/16/1998	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

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Former Watsonville-1 MGP Site
Watsonville, California

Well ID	Date Sampled	Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
		Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-2 (continued)	4/15/1999	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	74.9	<50	---
	10/26/1999	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/13/2000	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	<5	100	---
	10/5/2000	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	3/14/2001	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	3/27/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	56	<500	---	---	---	<5	<100	---
	10/26/2001	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/23/2002	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/29/2002	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/28/2003	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	11/20/2003	<0.30	<0.30	<0.30	<0.30	<5.0	<50	140	<250	---	---	<100	---	---	---
	5/12/2004	<0.30	<0.30	<0.30	<0.60	<5.0	<50	<50	<250	<15	---	<100	190	---	---
	11/9/2004	<0.30	0.27J	<0.30	0.45	<5.0	<50	<50	<250	NC	---	NC	<50	---	---
	5/12/2005	<0.30	0.57	<0.30	<0.30	<5.0	<50	110	<250	<10	---	1,700	100	---	---
	8/2/2006	<0.30	<0.30	<0.30	<0.60	<5.0	<50	<50	<250	<10.0	---	350	81	---	---
	12/19/2006	<0.50	<0.50	<0.50	<1.0	<5.0	<50	NC	NC	NC	---	NC	NC	---	---
	6/26/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	150	<500	<5.0	---	1,300	220	---	---
	11/15/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	NC	NC	NC	NC	NC	NC	NC	NC
	4/22/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	160	<500	<5.0	---	1,900	220	---	---
	11/6/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	200	<500	<5.0	---	<200	300	---	---
	4/8/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<300	<9.5	---	<200	100	---	---
	10/13/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	NC	NC	NC	---	NC	NC	---	---
	4/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<53	<320	<10	---	1,100	46	---	---
	10/13/2010	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	52	<100	<10	---	1,300	130	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	66	170 UN	<10	---	<200	120	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	93	140	<10	---	<200	65	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	96	---	---
	10/22/2013	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<210	94	---	---
	10/6/2014	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	NC	NC	<10	NC	NC	66	NC	NC
MW-WAT1-3	6/24/1991	140	350	270	730	---	900	510	800	---	---	---	<10	350	---
	10/17/1997	8.8	49	8.7	100	---	470	560	<570	---	---	---	140	11	---
	4/16/1998	18	130	130	420	---	2,100	4,900	<500	---	---	---	30	61	610
	6/19/1998	7.6	81	47	190	---	1,500	2,000	670	---	---	---	24	69	500
	10/16/1998	1.2	6.9	2.4	12	<5	73	170	<500	---	---	---	<10	<5	---
	4/15/1999	25	310	120	740	<50	2,800	3,100	<500	---	---	---	18	110	---
	10/26/1999	2.3	24	9.3	39	4.3	300	150	<290	---	---	---	10	<50	---
	4/13/2000	33	360	110	650	<25	2,800	6,500	<500	---	---	---	<5	350	---
	10/5/2000	<0.5	5.2	1.2	6	<5	<50	160	<500	---	---	---	20	<100	---
	3/14/2001	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

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Watsonville, California

		Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-3 (continued)	3/27/2001	9.4	40	36	99	<25	900	1,500	<590	---	---	---	<5	<100	---
	10/26/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	---	---	---
	4/23/2002	1.8	4.3	7.3	15	<5	240	460	<500	---	<10	4,100	6	---	---
	10/29/2002	1.5	<0.5 UJ	<0.5 UJ	9.1	---	<50 UJ	<500 UJ	<500	8.3	---	2,860	<24	---	---
	4/28/2003	4.2	8.9	28.5	47	12	250	350 J	<480	6	---	3,490	<21	---	---
	11/20/2003	3.9	17	8.5	19.6	<10	110	160	<250	18.4	---	2,500	<50	---	---
	5/12/2004	3.3	7.3	16	27.2	<5.0	330	680	<250	<15	---	4,700	<50	---	---
	11/9/2004	0.53	0.68	0.88	1.93	<5.0	<50	69	<250	<10	---	2,000	<50	---	---
	5/12/2005	8.8	38	78	190	<10	1,800	3,000	1,000	<10	---	6,700	<50	---	---
	8/2/2006	2.9	2.7	19	18.6	<5.0	520	1,200	610	<10.0	---	<100	<50	---	---
	12/19/2006	0.55	1.2	1.7	3.4	<5.0	<50	220	<250	<10.0	---	4,600	<50	---	---
	6/26/2007	2.5	2.9	12	11	<0.50	290	500	<500	5.0	---	5,800	<10	---	---
	11/15/2007	0.70	2.4	2.1	4.7	<0.50	59	<50	<500	7.2	---	2,000	<10	---	---
	4/22/2008	8.6	23	49	45	<0.50	710	1,000	<500	5.1	---	7,300	<10	---	---
	11/6/2008	23	67	110	220	<0.50	1,500	1,300	< 500	6.7	---	5,600	<10	---	---
	4/8/2009	41	290	270	750	<2.5	4,200	5,800	<300	<9.5	---	8,000	<10	---	---
	10/13/2009	<0.50	0.81	2.1	4.0	<0.50	<50	150	<310	<10	---	3,600	13	---	---
	4/13/2010	5.2	4.9	33	30.0	<0.50	320	1,000	<300	<10	---	3,300	11	---	---
	10/13/2010	0.36 J	1.4 B	1.7	5.2	<0.50	51	250 J+	220 J	7.3 J	---	4,500	14	---	---
	5/10/2011	0.79	1.1	3.1	3.4	<0.50	75	980	<100	<10	---	4,500	17	---	---
	10/4/2011	2.8	2.9	5.3	6.1	<0.50	210	940	180 UN	<10	---	8,000	29	---	---
	10/22/2012	6.7	8.2	40	31	<0.50	460	900	<100	<10	---	5,900	14	---	---
	4/23/2013	2.3	1.5	22	4.0	<0.50	250	1,300	230	<10	---	2,700	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	270	<100	<10	---	3,700	<10	---	---
	4/16/2014	1.9	1.8	15	8.8	<0.50	130	550	<100	<10	---	3,900	<10	---	---
	10/6/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	270	<100	<10	---	4,400	<10	---	---
	4/21/2015	3.2	1.8	17	17	<0.50	190	630	<100	<10	---	3,600	<10	---	---
MW-WAT1-3 duplicate	4/16/1998	21	150	130	430	---	2,200	3,400	<500	---	---	---	20	43	640
	6/19/1998	8.6	92	55	230	---	1,800	1,900	640	---	---	---	230	<50	800
	10/16/1998	1.2	7.6	2.6	12	<5	66	250	<500	---	---	---	10	<5	---
	4/15/1999	26	440	110	680	<50	3,000	3,300	<500	---	---	---	16.6	110	---
	10/26/1999	2.3	23	8.8	36	7	290	200	<300	---	---	---	20	<50	---
	4/13/2000	38	410	110	720	<25	3,300	5,600	<500	---	---	---	<5	360	---
	10/5/2000	0.57	5.7	1.6	5.9	<5	51	210	<500	---	---	---	<10	<100	---
	3/27/2001	11	48	41	100	<25	1,100	1,700	<1,000	---	---	---	---	---	---
	10/26/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	---	---	---	---	---	---	---	---
	10/29/2002	1.8	<0.5 UJ	<0.5 UJ	10	---	<50 UJ	<500 UJ	<500	9.8	---	3,040	<24	---	---
	4/28/2003	3.9	8.4	27.4	45	<5	230	400 J	<480	5.4	---	3,530	<21	---	---
	11/20/2003	2.9	15	7.5	16.6	<10	100	140	<250	24.2	---	2,500	<50	---	---
	5/12/2004	3.2	7.2	15	27	6.2	340	750	<250	<15	---	4,600	<50	---	---
	11/9/2004	0.44	0.58	0.73	1.48	<5.0	<50	<50	<250	<10	---	2,000	<50	---	---
	5/12/2005	8.8	39	79	192	<10	1,800	3,600	1,200	<10	---	6,700	<50	---	---

Table 3
Summary of VOCs, TPH, Metals and Other Constituents in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

		Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-3 duplicate (continued)	8/2/2006	3	2.8	19	18.7	<5.0	600	930	420	<10.0	---	<100	<50	---	---
	12/19/2006	0.53	1.1	1.6	3.3	<5.0	<50	200	<250	<10.0	---	4,000	<50	---	---
	6/26/2007	2.1	2.6	11	9.4	<0.50	270	480	<500	<5.0	---	5,800	12	---	---
	11/15/2007	0.74	2.4	2.2	4.9	<0.50	53	<50	<500	<5.0	---	2,100	<10	---	---
	4/22/2008	6.2	17	37	36	<0.50	520	910	<500	<5.0	---	5,800	<10	---	---
	11/6/2008	20	55	96	180	<0.50	1,100	1,400	<500	6.6	---	5,600	< 10	---	---
	4/8/2009	39	310	260	720	<2.5	4,100	5,800	<300	<9.5	---	8,000	< 10	---	---
	10/13/2009	0.53	0.94	2.3	4.5	<0.50	<50	150	<310	<10	---	3,400	13	---	---
	4/13/2010	4.8	4.4	30	27	<0.50	300	1,100	<310	<10	---	3,400	11	---	---
	10/13/2010	0.36 J	1.5	1.6	5	<0.50	35 J	240 J+	230 J	5.4 J	---	4,300	15	---	---
	5/10/2011	0.76	1.0	2.9	3.3	<0.50	70	430	<100	<10	---	4,000	13	---	---
	10/4/2011	2.5	3.0	5.6	6.1	<0.50	240	950	180 UN	<10	---	7,600	33	---	---
	10/22/2012	7.2	9.1	43	33	<0.50	420	860	<100	<10	---	5,800	15	---	---
	4/23/2013	2.5	1.6	22	4.5	<0.50	270	1,400	220	<10	---	3,000	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	<100	<10	---	3,900	<10	---	---
	4/16/2014	1.9	1.7	14	8.5	<0.50	130	690	<100	<10	---	4,000	<10	---	---
	10/6/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	240	<100	10	---	4,200	<10	---	---
	4/21/2015	3.3	1.8	18	18	<0.50	200	900	<110	<10	---	3,700	<10	---	---
MW-WAT1-4	3/27/2001	<0.5	1.1	1	18	<5	230	990	<500	---	---	---	<5	<100	---
	10/26/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	---	---	---
	4/23/2002	<0.5	<0.5	<0.5	<0.5	<5	<50	180	<500	---	<10	1,400	<10	---	---
	10/29/2002	<0.5	<0.5	<0.5	<1.5 UJ	---	<50 UJ	<500	<500	<5	---	402	<24	---	---
	4/28/2003	<0.5	<0.5 UJ	1.4	<1.5 UJ	15	33 J	<480	<480	<5	---	664	<21	---	---
	11/20/2003	<0.30	<0.30	<0.30	<0.30	<5.0	<50	<50	<250	<15	---	<100	<50	---	---
	5/12/2004	<0.30	<0.30	<0.30	<0.60	<5.0	<50	<50	<250	<15	---	1,800	<50	---	---
	11/9/2004	0.54	<0.30	0.18 J	0.39	<5.0	<50	<50	<250	<10	---	<100	<50	---	---
	5/12/2005	<0.30	0.78	<0.30	<0.30	6.1	<50	110	<250	<10	---	280	<50	---	---
	8/2/2006	<0.30	<0.30	<0.30	<0.60	<5.0	<50	150	<250	<10.0	---	<100	<50	---	---
	12/19/2006	<0.50	<0.50	<0.50	<1.0	<5.0	<50	<50	<250	<10.0	---	560	<50	---	---
	6/26/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	350	660	<5.0	---	1,600	<10	---	---
	11/15/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	610	<10	---	---
	4/22/2008	1.7	13	2.8	39	<0.50	190	620	<500	<5.0	---	440	<10	---	---
	11/6/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	110	<500	<5.0	---	<200	37	---	---
	4/8/2009	<0.50	1.0	<0.50	2.4	<0.50	<50	280	<300	<9.5	---	750 UN	<10	---	---
	10/13/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	55	<310	<10	---	1,200	<10	---	---
	4/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	110	<300	<10	---	<200	<10	---	---
	10/13/2010	0.096J	<0.50	<0.50	<1.0	<0.50	<50	100 J+	140 J	<10	---	1,300	12	---	---
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	130	<100	<10	---	1,300	<10	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	86	150 UN	<10	---	1,900	<10	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	82	<93	<10	---	690	11	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	220	<100	<10	---	1,000	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	58	<100	<10	---	1,100	<10	---	---

Table 3
Summary of VOCs, TPH, Metals and Other Constituents in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

		Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-4 (continued)	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	87	<100	<10	---	580	18	---	---
	10/6/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	57	<100	<10	---	970	<10	---	---
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	110	<100	<10	---	810	<10	---	---
MW-WAT1-4 duplicate	4/23/2002	<0.5	<0.5	<0.5	<0.5	<5	<50	150	<570	---	<0.01	870	<10	---	---
MW-WAT1-5	3/27/2001	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	---	---	<5	<100	---
	10/26/2001	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/23/2002	<0.5	<0.5	<0.5	<0.5	<5	<50	<50	<500	---	<10	400	<10	---	---
	10/29/2002	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/28/2003	<0.5	<0.5 UJ	<0.5	<1.5 UJ	<5	<50	<480	<480	<5	---	<170	<21	---	---
	11/20/2003	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2004	<0.30	<0.30	<0.30	<0.60	8.8	<50	<50	<250	<15	---	<100	<50	---	---
	11/9/2004	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2005	<0.30	<0.30	<0.30	<0.30	<5.0	<50	---	---	<10	---	<100	<50	---	---
	8/2/2006	<0.30	<0.30	<0.30	<0.60	<5.0	<50	66	<250	<10.0	---	<100	<50	---	---
	12/19/2006	<0.50	<0.50	<0.50	<1.0	<5.0	<50	<50	<250	<10.0	---	<100	<50	---	---
	6/26/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	100	<500	<5.0	---	<200	<10	---	---
	11/15/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	<200	<10	---	---
	4/22/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	<5.0	---	<200	<10	---	---
	11/6/2008	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<500	12	---	<200	<10	---	---
	4/8/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<300	<9.5	---	<200	<10	---	---
	10/12/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<300	<10	---	<200	<10	---	---
	4/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<300	<10	---	<200	<10	---	---
	10/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	55 UN	150 J	<10	---	120 J	<10	---	---
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	110 UN	<10	---	<200	<10	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<48	<95	<10	---	<200	<10	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	10/6/2014	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<100	<10	---	<200	<10	---	---
MW-WAT1-6	10/13/2009***	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,800 / 68	1,000 / <300	<10	---	510	<10	---	---
	4/13/2010***	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50 / <50	<300 / <300	<10	---	<200	11	---	---
	10/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	70 UN	160 J	<10	---	96 J	6.0 J	---	---
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	13	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	100 UN	<10	---	<200	<10	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<47	<94	<10	---	<200	<10	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<100	<10	---	<200	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<99	<10	---	<200	<10	---	---
	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	10/6/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<100	<10	---	<200	<10	---	---
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<100	<10	---	200	<10	---	---

Table 3
Summary of VOCs, TPH, Metals and Other Constituents in Groundwater
Former Watsonville-1 MGP Site

Watsonville, California

Well ID	Date Sampled	Volatile Organic Compounds					Total Petroleum Hydrocarbons			Metals		Other Constituents			
		Benzene	Toluene	Ethylbenzene	Total Xylenes*	MTBE	TPHg	TPHd	TPHmo	Arsenic **	Hexavalent Chromium	Ammonia (as Nitrogen)	Total Cyanide	Phenolics	Total Dissolved Solids
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L
MW-WAT1-7	10/13/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<300	<10	---	<200	<10	---	---
	4/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	<310	<10	---	<200	<10	---	---
	10/13/2010	<0.50	<0.50	<0.50	<1.0	<0.50	<50	17 J, UN	100 J	<10	---	76 J	3.9 J	---	---
	5/10/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<100	<10	---	<200	<10	---	---
	10/4/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	100 UN	<10	---	<200	<10	---	---
	10/22/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<47	<94	<10	---	<200	<10	---	---
	4/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<99	<10	---	<200	<10	---	---
	10/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	4/16/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<51	<100	<10	---	<200	<10	---	---
	10/6/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<53	<110	<10	---	<200	<10	---	---
	4/21/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	<100	<10	---	<200	<10	---	---
Drinking Water MCL (ug/L)		1.0	150	300	1,750	13	---	---	---	10	---	---	150	---	---

Notes:

Analytical results presented in **bold** exceed the drinking water maximum contaminant level (MCL), if available

* Total xylenes represents the sum of p/m-xylene and o-xylene; when both constituents were not detected, the higher reporting limit of the individual constituent is shown.

** Beginning in 2003, all samples collected for arsenic analysis have been filtered upon collection.

*** TPHd and TPHmo sample re-analyzed using silica-gel cleanup: initial TPHd and TPHmo concentration on left, and TPHd and TPHmo concentrations with silica-gel cleanup on right.

MTBE = methyl tert-butyl ether

MGP= manufactured gas plant

TPHg = total petroleum hydrocarbons (TPH) quantified as gasoline

TPHd = TPH quantified as diesel

TPHmo = TPH quantified as motor oil

µg/L = micrograms per liter

mg/L = milligrams per liter

VOC = volatile organic compound

"<" = analyte not detected at or above laboratory reporting limit shown

"J" = analyte detected at an estimated concentration between the laboratory method detection limit and reporting limit

"UJ" = analyte detected at an estimated concentration below the reporting limit, but was changed to non-detected above reporting limit based on detected concentration in associated QA/QC sample

"UN" = reported result considered tentative non-detect due to a detection of the compound in an associated QA/QC sample, where the result in the primary sample is less than 5 times that of the QA/QC sample

"J+" = reported result believed to be biased high due to a detection of the compound in an associated QA/QC sample, where the result in the primary sample is 5-20 times that of the QA/QC sample

"NC" = sample was not collected due to insufficient water column

"MCL" = Maximum Contaminant Level based on Federal Drinking Water Standards (USEPA) (last updated May 2009) or California EPA (last updated May 2009); the more stringent MCL is shown

--- = not analyzed / no data (MCL has not been established for compound)

Source: modified from ENV America (2005) and Shaw (2003)

Table 4
Summary of PAHs in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-1	6/24/1991	Unfiltered	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	10/17/1997	Filtered	<0.1	<0.1	<0.051	<0.15	<0.1	<0.051	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	10/17/1997	Unfiltered	<0.1	<0.1	<0.051	<0.15	<0.1	<0.051	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	4/16/1998	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/16/1998	Unfiltered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	6/19/1998	Unfiltered	<10	<10	<0.5	<0.5	<1	<0.5	<2	<0.5	<0.5	<2	<1	<1	<0.5	<5	<0.5	<1
	10/16/1998	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/16/1998	Unfiltered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	4/15/1999	Filtered	<0.1	<0.1	<0.052	<0.15	<0.1	<0.052	<0.1	<0.1	<0.1	<0.1	<0.21	<0.1	<0.1	0.67	<0.1	<0.15
	4/15/1999	Unfiltered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	0.14	<0.1	<0.15
	10/26/1999	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/26/1999	Unfiltered	<1	<10	<0.5	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	<1	<0.14	<5	<0.5	<0.2
	4/13/2000	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/5/2000	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	3/27/2001	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/26/2001	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	4/23/2002	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/29/2002	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	4/28/2003	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	11/20/2003	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.062 J	0.64 J
	5/12/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/9/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2005	Filtered	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
	8/2/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/26/2007	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	11/15/2007	Filtered	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
	4/22/2008	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	11/6/2008	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	4/8/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/12/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

Table 4
Summary of PAHs in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-1	10/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
(continued)	5/10/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/4/2011	Unfiltered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	10/22/2012	Unfiltered	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095
	4/23/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/16/2014	Unfiltered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	10/6/2014	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-WAT1-2	6/24/1991	Unfiltered	8.6	8.6	<5	<5	<5	<5	<5	<5	<5	<5	<5	5.5	<5	5.2	<5	<5
	10/17/1997	Filtered	<0.12	<0.12	<0.059	<0.12	<0.12	<0.059	<0.12	<0.12	<0.12	<0.12	<0.24	<0.12	<0.11	<0.12	<0.12	<0.18
	10/17/1997	Unfiltered	<0.11	<0.11	<0.056	<0.11	<0.11	<0.056	<0.11	<0.11	<0.11	<0.11	<0.22	<0.11	<0.11	<0.11	<0.11	<0.17
	4/16/1998	Filtered	<0.1	3.8	0.17	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	0.36
	4/16/1998	Unfiltered	<0.1	2.6	0.75	0.4	<0.1	<0.05	0.74	<0.1	0.39	<0.1	1.4	<0.1	0.32	<0.1	<0.1	1.2
	6/19/1998	Unfiltered	<10	<10	<0.5	<0.5	<1	<0.5	<2	<0.5	<0.5	<2	<1	<1	<0.5	<5	<0.5	<1
	10/16/1998	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/16/1998	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/15/1999	Filtered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	4/15/1999	Unfiltered	11	<2	<1	<3.1	<2	<1	<2	<2	<2	<2	<4.1	21	<2	410	8.7	<3.1
	10/26/1999	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/26/1999	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/13/2000	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/5/2000	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	3/27/2001	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/26/2001	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/23/2002	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	10/29/2002	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/28/2003	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	11/20/2003	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/9/2004	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2005	Filtered	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
	8/2/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2006	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	6/26/2007	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-2	11/15/2007	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
(continued)	4/22/2008	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	11/6/2008	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/8/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/13/2009	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/13/2010	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/10/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/4/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2012	Unfiltered	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095
	4/23/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2013	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/16/2014	Unfiltered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	10/6/2014	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MW-WAT1-3	6/24/1991	Unfiltered	40	74	20	<5	<5	<5	<5	<5	<5	<5	<5	42	<5	<5	33	16
	10/17/1997	Filtered	<0.1	<0.1	<0.051	<0.15	<0.1	<0.051	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	11	<0.1	<0.15
	10/17/1997	Unfiltered	4.6	0.72	11	<0.11	<0.11	<0.054	<0.11	<0.11	0.24	<0.11	1.4	7.9	<0.11	18	<0.11	<0.16
	4/16/1998	Filtered	11	230	1.8	<3	<2	<1	<2	<2	<2	<2	8	12	<2	260	2.5	<3
	4/16/1998	Unfiltered	12	230	3.1	<3	<2	<1	<2	<2	<2	<2	<4	19	<2	290	4.4	<3
	6/19/1998	Unfiltered	<10	120	1.9	<0.5	<1	<0.5	<2	<0.5	<0.5	<2	<1	11	<0.5	<5	2.6	<1
	10/16/1998	Filtered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	0.4	<0.1	<0.15
	10/16/1998	Unfiltered	<0.1	<0.1	2.4	<0.15	<0.1	<0.05	<0.1	0.51	<0.1	<0.1	1.3	<0.1	<0.1	1.7	<0.1	0.7
	4/15/1999	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/15/1999	Unfiltered	<2.2	<2.2	1.9	<3.3	<2.2	<1.1	<2.2	<2.2	<2.2	<2.2	<4.3	23	<2.2	440	6.5	<3.3
	10/26/1999	Filtered	<1	<10	4.6	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	5	<0.14	34	<0.5	<0.2
	10/26/1999	Unfiltered	<1	<10	6.4	0.2	<0.2	<0.1	<0.2	0.2	0.4	<0.2	1.2	5.4	<0.14	38	<0.5	1.1
	4/13/2000	Filtered	<2	<2	<1	<2	<2	<1	<2	<2	<2	<2	<3	19	<2	510	5.8	<3
	10/5/2000	Filtered	<0.1	<0.1	0.73	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	3/27/2001	Filtered	<5	<5	<2.5	<5	<5	<2.5	<5	<5	<5	<5	<7.5	<5	<5	97	<5	<7.5
	10/26/2001	Filtered	0.33	0.95	0.6	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.28	0.67	<0.1	<0.15	<0.1	<0.15
	4/23/2002	Filtered	18	19	1.5	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.98	1.6	<0.1	13	0.46	0.97
	10/29/2002	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	4/28/2003	Filtered	<5	26 J	0.93 J	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	0.37	1.4 J	<0.1	14 J	0.07 J	0.25
	11/20/2003	Filtered	<1.0	<1.0	0.16 J	0.15 J	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	0.41 J	<1.0	<1.0	<1.0	0.18 J	<1.0

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		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-3	5/12/2004	Filtered	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	0.60J	2.2	<1.0	42	0.14J	0.27J
(continued)	11/9/2004	Filtered	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	0.66 J	<1.0	<1.0	<1.0	0.068 J	0.70 J
	5/12/2005	Filtered	<0.94	<0.94	0.53 J	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	7.4	<0.94	NA	0.73 J	<0.94
	8/2/2006	Filtered	2.7	19	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	7.5	<1.0	23	<1.0	<1.0
	12/19/2006	Filtered	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	<1.0
	6/26/2007	Filtered	1.7	1.8	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.48	<0.10	3.3	<0.10	<0.10
	11/15/2007	Filtered	0.15	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.12	<0.11	<0.11
	4/22/2008	Filtered	3.4	3.3	0.82	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	2.3	<0.51	29	<0.51	<0.51
	11/6/2008	Filtered	3.9	8.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	99	<2.0	<2.0
	4/8/2009	Filtered	13	16	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	12	<5.2	450	<5.2	<5.2
	10/13/2009	Filtered	1.3	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.30	<0.10	3.0	<0.10	<0.10
	4/13/2010	Filtered	6.2	6.8	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	1.20	<0.11	62	<0.11	<0.11
	10/13/2010	Filtered	0.13	0.057 J	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	<0.10	<0.10	0.47 J+	<0.10	<0.10
	5/10/2011	Unfiltered	4	3.7	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.2	1.90	<0.10	14	0.19	0.23
	10/4/2011	Unfiltered	7.7	5.1	1.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21	3.90	<0.10	3	<0.10	0.18
	10/22/2012	Unfiltered	5.1	3.7	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.18	2.6	<0.10	21	0.17	0.2
	4/23/2013	Unfiltered	8.1	6.3	2.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.39	5.20	<0.10	13	1.1	0.33
	10/22/2013	Unfiltered	2.9	2.2	1.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.27	1.40	<0.10	0	<0.10	0.27
	4/16/2014	Unfiltered	6	4.8	1.6	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.25	3.80	<0.11	13	0.23	0.2
	10/6/2014	Unfiltered	2.0	1.2	0.95	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	0.68	<0.10	0.15	<0.10	0.15
	4/21/2015	Unfiltered	4.7	4.0	1.1	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.18	1.3	<0.11	27	0.44	0.21
MW-WAT1-3	4/16/1998	Filtered	9.7	210	1.2	<1.5	<1	<0.5	<1	<1	<1	<1	<2	10	<1	250	1.8	<1.5
duplicate	4/16/1998	Unfiltered	18	360	4	<3	<2	<1	<2	<2	<2	<2	<4	22	<2	360	5.4	<3
	6/19/1998	Unfiltered	<10	160	2.1	<0.5	<1	<0.5	<2	<0.5	<0.5	<2	<1	13	<0.5	77	2.6	<1
	10/16/1998	Filtered	<0.1	<0.1	<0.05	<0.15	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.15
	10/16/1998	Unfiltered	<0.1	<0.1	2.6	0.2	<0.1	<0.05	<0.1	0.36	<0.1	<0.1	1.3	<0.1	<0.1	1.6	<0.1	0.49
	4/15/1999	Unfiltered	<2	<2	<1	<3	<2	<1	<2	<2	<2	<2	<4	27	<2	440	8.8	<3
	10/26/1999	Filtered	<1	<10	4	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.4	4.2	<0.14	32	<0.5	<0.2
	10/26/1999	Unfiltered	<1	<10	6.6	0.2	<0.2	<0.1	<0.2	0.1	0.3	<0.2	1.1	6	<0.14	39	<0.5	1
	4/13/2000	Filtered	<2	<2	<1	<2	<2	<1	<2	<2	<2	<2	<3	19	<2	580	5.4	<3
	10/5/2000	Filtered	1.2	<0.1	1.4	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	1.8	<0.1	4.5	<0.1	<0.15
	3/27/2001	Filtered	<0.96	<0.96	4.1	<0.96	<0.96	<0.48	<0.96	<0.96	<0.96	<0.96	<1.4	7.6	<0.96	120	3.6	<1.4
	10/29/2002	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	4/28/2003	Filtered	<5	17 J	0.41 J	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	0.69 J	<0.1	9 J	0.07 J	<0.15
	11/20/2003	Filtered	<1.0	<1.0	<1.0	0.17 J	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	0.66 J	0.13 J	<1.0

Table 4
Summary of PAHs in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-3 duplicate (continued)	5/12/2004	Filtered	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	0.32J	2.3	<1.0	47	0.14J	0.2J
	11/9/2004	Filtered	<1.0	<1.0	2	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	0.63 J	<1.0	<1.0	<1.0	<1.0	0.64 J
	5/12/2005	Filtered	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	NA	<0.94	NA	0.11 J	<0.94
	8/2/2006	Filtered	4.7	21	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	8.1	<1.0	26	<1.0	<1.0
	12/19/2006	Filtered	<1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
	6/26/2007	Filtered	3.3	3.1	0.35	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	2.2	<0.10	4.7	<0.10	<0.10
	11/15/2007	Filtered	0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.16	<0.11	<0.11
	4/22/2008	Filtered	5	4.9	0.99	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	3.5	<0.51	40	<0.51	<0.51
	11/6/2008	Filtered	3.9	6.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	100	<1.0	<1.0
	4/8/2009	Filtered	13	16	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	11	<5.1	460	<5.1	<5.1
	10/13/2009	Filtered	1.3	1.1	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.40	<0.10	3.0	<0.10	<0.10
	4/13/2010	Filtered	9.3	9.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	4.40	<0.10	74	<0.10	<0.10
	10/13/2010	Filtered	0.6	0.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	0.032 J	<0.10	1.6 J+	<0.10	<0.10
	5/10/2011	Unfiltered	4.3	3.9	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21	2.0	<0.10	14	0.18	0.23
	10/4/2011	Unfiltered	5.7	3.8	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.17	2.8	<0.10	2	<0.10	0.14
	10/22/2012	Unfiltered	4.8	3.4	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.17	2.5	<0.10	19	0.15	0.19
	4/23/2013	Unfiltered	6.9	5.4	1.8	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.36	4.3	<0.10	12	0.9	0.33
	10/22/2013	Unfiltered	2.5	1.8	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.25	1.1	<0.10	0	<0.10	0.26
	4/16/2014	Unfiltered	6.1	4.9	1.6	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.24	4.0	<0.10	13	0.24	0.2
	10/6/2014	Unfiltered	1.6	0.93	0.76	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.14	0.47	<0.10	0.13	<0.10	0.14
	4/21/2015	Unfiltered	3.6	2.9	0.98	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	1.0	<0.10	18	0.32	0.18
MW-WAT1-4	3/27/2001	Filtered	<2	30	6.3	9.7	8.5	<1	<2	9.9	7.5	<2	7.6	12	<2	94	9.6	4.6
	10/26/2001	Filtered	<0.11	0.56	0.18	<0.11	<0.11	<0.056	<0.11	<0.11	<0.11	<0.11	0.26	<0.11	<0.11	<0.17	<0.11	<0.17
	4/23/2002	Filtered	24	10	1.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.35	3.1	<0.1	8.6	0.4	<0.15
	10/29/2002	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	4/28/2003	Filtered	<5	<2	<0.05	<0.1	<0.1	0.03 J	0.2	0.1	<0.1	0.27	<0.15	<0.1	0.08 J	<5	<0.1	<0.15
	11/20/2003	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/9/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2005	Filtered	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
	8/2/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/26/2007	Filtered	<0.10	0.41	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	11/15/2007	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	4/22/2008	Filtered	<0.10	0.36	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	4.3	<0.10	<0.10
	11/6/2008	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	4/8/2009	Filtered	0.46	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.24	<0.10	<0.10

Table 4
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Former Watsonville-1 MGP Site
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Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-4 (continued)	10/13/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.2	<0.10	<0.10
	10/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	0.035 J	<0.10	<0.10	<0.10	0.030 J	<0.10
	5/10/2011	Unfiltered	<0.10	0.40	0.63	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.10	<0.10	<0.10	<0.10	0.13
	10/4/2011	Unfiltered	<0.10	<0.10	0.29	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.34	<0.10	<0.10	<0.10	<0.10	0.26
	10/22/2012	Unfiltered	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094
	4/23/2013	Unfiltered	<0.10	0.70	1.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.93	<0.10	<0.10	<0.10	0.13	0.62
	10/22/2013	Unfiltered	<0.10	0.16	0.23	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10	<0.10	0.17
	4/16/2014	Unfiltered	<0.10	0.46	0.73	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.28	<0.10	<0.10	<0.10	<0.10	0.17
	10/6/2014	Unfiltered	<0.10	<0.10	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.18	<0.10	<0.10	<0.10	<0.10	0.24
	4/21/2015	Unfiltered	<0.10	0.14	0.58	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.34	<0.10	<0.10	<0.10	<0.10	0.34
MW-WAT1-4 duplicate	4/23/2002	Filtered	18	11	0.95	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.52	1.5	<0.1	6.2	0.29	<0.15
MW-WAT1-5	3/27/2001	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/26/2001	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/23/2002	Filtered	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.1	<0.15	<0.1	<0.15
	10/29/2002	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/28/2003	Filtered	<5	<2	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.18	<0.15	<0.1	<0.1	<5	<0.1	<0.15
	11/20/2003	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2004	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/9/2004	Filtered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	5/12/2005	Filtered	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.19	<0.94	<0.94	<0.94	<0.94	<0.94	0.56 J	<0.94	<0.94
	8/2/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2006	Filtered	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/26/2007	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	11/15/2007	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/22/2008	Filtered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	11/6/2008	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/8/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/12/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	5/10/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/4/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2012	Unfiltered	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095
	4/23/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

Table 4
Summary of PAHs in Groundwater
Former Watsonville-1 MGP Site
Watsonville, California

Well ID	Date Sampled	Filtered / Unfiltered	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) Anthra-cene	Benzo(b) Fluoran-thene	Benzo(k) Fluoran-thene	Benzo (g,h,i) perylene	Benzo(a) pyrene	Chrysene	Dibenz (a,h) Anthra-cene	Fluoran-thene	Fluorene	Indeno-(1,2,3-cd)-pyrene	Naph-thalene	Phenan-threne	Pyrene
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-WAT1-5 (continued)	10/22/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/16/2014	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/6/2014	Unfiltered	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	4/21/2015	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-WAT1-6	10/13/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	5/10/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/4/2011	Unfiltered	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
	10/22/2012	Unfiltered	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094
	4/23/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/16/2014	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/6/2014	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/21/2015	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-WAT1-7	10/13/2009	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/13/2010	Filtered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	5/10/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/4/2011	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2012	Unfiltered	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096
	4/23/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/22/2013	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/16/2014	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	10/6/2014	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	4/21/2015	Unfiltered	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
		Drinking Water MCL (ug/L)	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---

Notes:

Analytical results presented in **bold** exceed the MCL, if available

PAHs = polycyclic aromatic hydrocarbons

µg/L = micrograms per liter

"<" = analyte not detected at or above laboratory reporting limit shown

"J" = analyte detected at an estimated concentration between the laboratory method detection limit and the reporting limit

"J+" = reported result believed to be biased high due to a detection of the compound in an associated QA/QC sample, where the result in the primary sample is 5-20 times that of the QA/QC sample

* = LCS and/or LCSD recovery exceeds the laboratory control limits

"NC" = not collected due to insufficient water column

MGP = manufactured gas plant

MCL = Maximum Contaminant Level based on Federal Drinking Water Standards (USEPA) (last updated June 2003) or California EPA (last updated September 2003); the more stringent MCL is shown

--- = MCL has not been established for compound

Source: modified from ENV America (2005) and Shaw (2003)

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-1									
Probe Location ID	SG-1	SG-1A				SG-1B				
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	8260B	8260B	TO-15	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	2/13/08	10/12/09	CONF 10/12/09	4/26/10	10/13/10	6/29/11	10/3/11	11/6/12	4/18/13	10/14/13
TPHg	NA	6.17	8.5	NS	NS	ND (0.26)	ND (0.23)	ND (0.26)	2.7	ND (0.24)
1,2,4-Trichlorobenzene	ND (0.007)	ND (0.008)	ND (0.019)	NS	NS	ND (0.038)	ND (0.033) UJ	ND (0.037)	ND (0.035)	ND (0.034)
1,2,4-Trimethylbenzene	ND (0.007)	0.142	ND (0.0064)	NS	NS	ND (0.0063)	ND (0.0055)	ND (0.0062)	0.12	ND (0.0057)
1,3,5-Trimethylbenzene	ND (0.007)	0.021	ND (0.0054)	NS	NS	ND (0.0063)	ND (0.0055)	ND (0.0062)	0.035	ND (0.0057)
1,3-Butadiene	NA	NA	NA	NS	NS	ND (0.0028)	ND (0.0025)	ND (0.0028)	ND (0.0026)	ND (0.0026)
2,2,4-Trimethylpentane	NA	NA	NA	NS	NS	ND (0.0060)	ND (0.0052)	ND (0.0059)	0.029	ND (0.0054)
2-Butanone (MEK)	NA	NA	0.0083 J	NS	NS	ND (0.015)	ND (0.013)	ND (0.015)	ND (0.014)	ND (0.014)
4-Ethyltoluene	NA	NA	ND (0.0049)	NS	NS	ND (0.0063)	ND (0.0055)	ND (0.0062)	0.093	ND (0.0057)
4-Isopropyltoluene	ND (0.007)	0.043	NA	NS	NS	NA	NA	NA	NA	NA
Acetone	NA	NA	0.036	NS	NS	ND (0.012)	ND (0.011)	ND (0.030)	ND (0.028)	ND (0.028)
Benzene	ND (0.007)	ND (0.008)	ND (0.0048)	NS	NS	ND (0.0041)	ND (0.0036)	ND (0.0040)	0.010	ND (0.0037)
Bromodichloromethane	ND (0.007)	0.030	ND (0.0067)	NS	NS	ND (0.0086)	ND (0.0075)	ND (0.0084)	ND (0.0079)	ND (0.0078)
n-Butylbenzene	ND (0.007)	0.059	NA	NS	NS	NA	NA	NA	NA	NA
sec-Butylbenzene	ND (0.007)	0.140	NA	NS	NS	NA	NA	NA	NA	NA
tert-Butylbenzene	ND (0.007)	ND (0.008)	NA	NS	NS	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	ND (0.0062)	NS	NS	ND (0.016)	ND (0.014)	ND (0.016)	ND (0.015)	ND (0.014)
Carbon tetrachloride	ND (0.007)	ND (0.008)	ND (0.0063)	NS	NS	ND (0.0081)	ND (0.0070)	ND (0.0079)	ND (0.0074)	ND (0.0073)
Chloroform	ND (0.007)	0.384	0.56	NS	NS	0.58	0.049	0.033	0.18	0.080
Cyclohexane	NA	NA	NA	NS	NS	ND (0.0044)	ND (0.0038)	ND (0.0043)	0.015	0.0053
Dichlorodifluoromethane (Freon 12)	ND (0.007)	ND (0.008)	ND (0.0074)	NS	NS	ND (0.0064)	ND (0.0055)	ND (0.0062)	ND (0.0058)	ND (0.0057)
Ethanol	NA	NA	NA	NS	NS	ND (0.0097)	ND (0.0084)	ND (0.0095)	0.088	ND (0.0087)
Ethylbenzene	ND (0.007)	0.018	0.0051 J	NS	NS	ND (0.0056)	ND (0.0049)	ND (0.0055)	0.039	ND (0.0050)
Heptane	NA	NA	NA	NS	NS	ND (0.0053)	ND (0.0046)	ND (0.0052)	0.019	ND (0.0048)
Hexane	NA	NA	NA	NS	NS	ND (0.0045)	ND (0.0039)	ND (0.0044)	0.011	ND (0.0041)
Isopropylbenzene (Cumene)	ND (0.007)	0.025	NA	NS	NS	ND (0.0063)	ND (0.0055)	ND (0.0062)	ND (0.0058)	ND (0.0057)
Methylene chloride	ND (0.007)	ND (0.008)	0.011 UN	NS	NS	0.0045 UN	ND (0.0039)	ND (0.044)	ND (0.041)	ND (0.040)
Naphthalene	ND (0.007)	ND (0.008)	ND (0.016)	NS	NS	ND (0.027)	ND (0.023) UJ	ND (0.026)	ND (0.025)	ND (0.024)
n-Propylbenzene	ND (0.007)	ND (0.008)	NA	NS	NS	ND (0.0063)	ND (0.0055)	ND (0.0062)	0.014	ND (0.0057)
Styrene	ND (0.007)	ND (0.008)	ND (0.0043)	NS	NS	ND (0.0055)	ND (0.0048)	ND (0.0054)	ND (0.0050)	ND (0.0049)
Tetrachloroethene	ND (0.007)	ND (0.008)	ND (0.0068)	NS	NS	ND (0.0088)	ND (0.0076)	ND (0.0085)	ND (0.0080)	ND (0.0079)
Toluene	0.013	ND (0.008)	0.013	NS	NS	ND (0.0049)	ND (0.0042)	ND (0.0047)	0.14	ND (0.0044)
Trichlorofluoromethane (Freon 11)	ND (0.007)	ND (0.008)	ND (0.0056)	NS	NS	ND (0.0072)	ND (0.0063)	ND (0.0071)	ND (0.0066)	ND (0.0065)
Vinyl Chloride	ND (0.007)	ND (0.008)	ND (0.0051)	NS	NS	ND (0.0033)	ND (0.0029)	ND (0.0032)	ND (0.0030)	ND (0.0030)
m,p-Xylene	NA	NA	NA	NS	NS	ND (0.0056)	ND (0.0049)	ND (0.0055)	0.18	ND (0.0050)
o-Xylene	NA	NA	NA	NS	NS	ND (0.0056)	ND (0.0049)	ND (0.0055)	0.067	ND (0.0050)
Xylenes (total)	ND (0.007)	0.202	0.027	NS	NS	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	NS	NS	ND	ND	ND	ND	0.0036 [4]

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-1											
Probe Location ID	SG-1B			SG-1A			SG-1B					
Sample Depth (feet bgs)	5	5	5	9	9	9	9	9	9	9	9	9
EPA Analytical Method	TO-15	TO-15	TO-15	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	4/7/14	10/7/14	4/14/15	10/12/09	4/26/10	10/13/10	6/29/11	10/3/11	11/6/12	4/18/13	10/14/13	4/7/14
TPHg	ND (0.24)	0.49	ND (0.47)	1.49	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	ND (0.035)	ND (0.034)	ND (0.034)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	ND (0.0058)	ND (0.0057)	ND (0.0056)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ND (0.0058)	ND (0.0057)	ND (0.0056)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Butadiene	ND (0.0026)	ND (0.0026)	ND (0.0025)	NA	NS	NS	NS	NS	NS	NS	NS	NS
2,2,4-Trimethylpentane	ND (0.0055)	ND (0.0054)	ND (0.0053)	NA	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	ND (0.014)	0.019	ND (0.014)	NA	NS	NS	NS	NS	NS	NS	NS	NS
4-Ethyltoluene	ND (0.0058)	ND (0.0057)	ND (0.0056)	NA	NS	NS	NS	NS	NS	NS	NS	NS
4-Isopropyltoluene	NA	NA	NA	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	0.031	0.057	ND (0.027)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	ND (0.0038)	0.018	ND (0.0036)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ND (0.0079)	ND (0.0078)	ND (0.0077)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	NA	NA	NA	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	NA	NA	NA	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	NA	NA	NA	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ND (0.015)	ND (0.014)	ND (0.014)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	ND (0.0074)	ND (0.0073)	ND (0.0072)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	0.26	0.66	1.3	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexane	ND (0.0041)	ND (0.0040)	ND (0.0039)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane (Freon 12)	ND (0.0058)	ND (0.0058)	ND (0.0057)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Ethanol	0.0093	0.014	0.014	NA	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	ND (0.0051)	ND (0.0050)	ND (0.0050)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Heptane	ND (0.0048)	ND (0.0048)	ND (0.0047)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Hexane	ND (0.0042)	0.0067	ND (0.0040)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene (Cumene)	ND (0.0058)	0.077	ND (0.0056)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	ND (0.041)	ND (0.040)	ND (0.040)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ND (0.025)	ND (0.024)	ND (0.024)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ND (0.0058)	ND (0.0057)	ND (0.0056)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	ND (0.0050)	ND (0.0050)	ND (0.0049)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ND (0.0080)	ND (0.0079)	ND (0.0078)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	ND (0.0044)	0.021	ND (0.0043)	0.403	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane (Freon 11)	ND (0.0066)	ND (0.0065)	ND (0.0064)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride	ND (0.0030)	ND (0.0030)	ND (0.0029)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
m,p-Xylene	ND (0.0051)	ND (0.0050)	ND (0.0050)	NA	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ND (0.0051)	ND (0.0050)	ND (0.0050)	NA	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes (total)	NA	NA	NA	0.085	NS	NS	NS	NS	NS	NS	NS	NS
Other VOCs	ND	0.027 6	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-1		SG-2									
Probe Location ID	SG-1B		SG-2	SG-2A				SG-2B				
Sample Depth (feet bgs)	9	9	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	TO-15	TO-15	8260B	8260B	8260B	TO-15	8260B	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/7/14	4/14/15	2/13/08	10/12/09	4/26/10	CONF 4/26/10	10/13/10	6/27/11	10/3/11	11/6/12	4/18/13	10/14/13
TPHg	NS	NS	NA	ND (0.008)	1.38	2.4 J	0.322	ND (0.25)	ND (0.25)	ND (0.24)	1.1	ND (0.24)
1,2,4-Trichlorobenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.037)	ND (0.008)	ND (0.036)	ND (0.036) UJ	ND (0.034)	ND (0.034)	ND (0.035)
1,2,4-Trimethylbenzene	NS	NS	ND (0.007)	ND (0.008)	0.160	0.013 J	ND (0.008)	ND (0.0059)	ND (0.0059)	ND (0.0057)	0.019	ND (0.0059)
1,3,5-Trimethylbenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.020)	ND (0.008)	ND (0.0059)	ND (0.0059)	ND (0.0057)	0.0057	ND (0.0059)
1,3-Butadiene	NS	NS	NA	NA	NA	NA	NA	ND (0.0027)	ND (0.0027)	ND (0.0026)	ND (0.0025)	ND (0.0026)
2,2,4-Trimethylpentane	NS	NS	NA	NA	NA	NA	NA	ND (0.0056)	ND (0.0056)	ND (0.0054)	0.021	ND (0.0056)
2-Butanone (MEK)	NS	NS	NA	NA	NA	ND (0.018)	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
4-Ethyltoluene	NS	NS	NA	NA	NA	0.020	NA	ND (0.0059)	ND (0.0059)	ND (0.0057)	0.014	ND (0.0059)
4-Isopropyltoluene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA
Acetone	NS	NS	NA	NA	NA	0.073	NA	0.013 UN	0.028 UN	ND (0.028)	ND (0.027)	0.044
Benzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.0096)	ND (0.008)	ND (0.0039)	ND (0.0039)	ND (0.0037)	0.0069	ND (0.0038)
Bromodichloromethane	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.013)	ND (0.008)	ND (0.0081)	ND (0.0081)	ND (0.0078)	ND (0.0077)	ND (0.0080)
n-Butylbenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA
sec-Butylbenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA
tert-Butylbenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA
Carbon disulfide	NS	NS	NA	NA	NA	ND (0.025)	NA	ND (0.015)	ND (0.015)	ND (0.014)	ND (0.014)	ND (0.015)
Carbon tetrachloride	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.013)	ND (0.008)	ND (0.0076)	ND (0.0076)	ND (0.0073)	ND (0.0072)	ND (0.0075)
Chloroform	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	0.017 J	ND (0.008)	ND (0.0059)	ND (0.0059)	ND (0.0057)	ND (0.0056)	ND (0.0058)
Cyclohexane	NS	NS	NA	NA	NA	NA	NA	ND (0.0042)	ND (0.0042)	ND (0.0040)	0.0068	ND (0.0041)
Dichlorodifluoromethane (Freon 12)	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.0099)	ND (0.008)	ND (0.0060)	ND (0.0060)	ND (0.0058)	ND (0.0057)	ND (0.0059)
Ethanol	NS	NS	NA	NA	NA	NA	NA	ND (0.0091)	ND (0.0091)	ND (0.0088)	0.082 J+	ND (0.0090)
Ethylbenzene	NS	NS	ND (0.007)	ND (0.008)	0.034	0.017 J	0.084	ND (0.0052)	ND (0.0052)	ND (0.0050)	0.0079	ND (0.0052)
Heptane	NS	NS	NA	NA	NA	NA	NA	ND (0.0050)	ND (0.0050)	ND (0.0048)	0.0082	ND (0.0049)
Hexane	NS	NS	NA	NA	NA	NA	NA	ND (0.0043)	ND (0.0043)	ND (0.0041)	0.0083	ND (0.0042)
Isopropylbenzene (Cumene)	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	ND (0.0059)	ND (0.0059)	ND (0.0057)	ND (0.0056)	ND (0.0059)
Methylene chloride	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	0.012 J, UN	ND (0.008)	ND (0.0042)	ND (0.0042)	ND (0.040)	ND (0.040)	ND (0.042)
Naphthalene	NS	NS	ND (0.007)	ND (0.008)	0.159	ND (0.031)	ND (0.008)	ND (0.025)	ND (0.025) UJ	ND (0.024)	ND (0.024)	ND (0.025)
n-Propylbenzene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	NA	ND (0.008)	ND (0.0059)	ND (0.0059)	ND (0.0057)	ND (0.0056)	ND (0.0059)
Styrene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.0085)	ND (0.008)	ND (0.0052)	ND (0.0052)	ND (0.0050)	ND (0.0049)	ND (0.0051)
Tetrachloroethene	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.014)	ND (0.008)	ND (0.0082)	ND (0.0082)	ND (0.0079)	ND (0.0078)	ND (0.0081)
Toluene	NS	NS	0.015	ND (0.008)	0.009	0.040	0.041	ND (0.0046)	ND (0.0046)	ND (0.0044)	0.048	ND (0.0045)
Trichlorofluoromethane (Freon 11)	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.011)	ND (0.008)	ND (0.0068)	ND (0.0068)	ND (0.0065)	ND (0.0065)	ND (0.0067)
Vinyl Chloride	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.010)	ND (0.008)	ND (0.0031)	ND (0.0031)	ND (0.0030)	ND (0.0029)	ND (0.0030)
m,p-Xylene	NS	NS	NA	NA	NA	NA	NA	ND (0.0052)	ND (0.0052)	ND (0.0050)	0.032	ND (0.0052)
o-Xylene	NS	NS	NA	NA	NA	NA	NA	ND (0.0052)	ND (0.0052)	ND (0.0050)	0.012	ND (0.0052)
Xylenes (total)	NS	NS	ND (0.007)	ND (0.008)	0.199	0.15	0.208	NA	NA	NA	NA	NA
Other VOCs	NS	NS	ND	ND	ND	0.016 J [1]	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-2			SG-2							
Probe Location ID	SG-2B			SG-2C							
Sample Depth (feet bgs)	5	5	5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
EPA Analytical Method	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	4/7/14	10/7/14	4/14/15	6/28/11	10/4/11	11/8/12	4/18/13	10/14/13	4/7/14	10/8/14	4/14/15
TPHg	ND (0.24)	0.32	ND (0.49)	7.2	0.57	ND (0.24)	ND (0.44)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.45)
1,2,4-Trichlorobenzene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.033)	ND (0.035)	ND (0.035)	ND (0.065)	ND (0.032)	ND (0.035)	ND (0.035)	ND (0.033)
1,2,4-Trimethylbenzene	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0058)	ND (0.011)	ND (0.0052)	ND (0.0059)	ND (0.0058)	ND (0.0054)
1,3,5-Trimethylbenzene	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0058)	ND (0.011)	ND (0.0052)	ND (0.0059)	ND (0.0058)	ND (0.0054)
1,3-Butadiene	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0025)	ND (0.0026)	ND (0.0026)	ND (0.0048)	ND (0.0024)	ND (0.0026)	ND (0.0026)	ND (0.0024)
2,2,4-Trimethylpentane	ND (0.0055)	ND (0.0056)	ND (0.0056)	0.023	0.011	ND (0.0055)	ND (0.010)	ND (0.0050)	ND (0.0056)	ND (0.0055)	ND (0.0051)
2-Butanone (MEK)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.026)	ND (0.012)	ND (0.014)	ND (0.014)	ND (0.013)
4-Ethyltoluene	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0058)	ND (0.011)	ND (0.0052)	ND (0.0059)	ND (0.0058)	ND (0.0054)
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	ND (0.028)	ND (0.028)	ND (0.028)	0.015 UN	0.046 UN	ND (0.028)	ND (0.052)	0.044	ND (0.028)	ND (0.028)	ND (0.026)
Benzene	ND (0.0038)	ND (0.0038)	ND (0.0038)	ND (0.0036)	ND (0.0038)	ND (0.0038)	ND (0.0070)	ND (0.0034)	ND (0.0038)	ND (0.0038)	ND (0.0035)
Bromodichloromethane	ND (0.0079)	ND (0.0080)	ND (0.0080)	ND (0.0075)	ND (0.0079)	ND (0.0079)	ND (0.015)	ND (0.0071)	ND (0.0080)	ND (0.0079)	ND (0.0074)
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ND (0.015)	ND (0.015)	ND (0.015)	0.12	0.064	ND (0.015)	ND (0.027)	ND (0.013)	ND (0.015)	ND (0.015)	ND (0.014)
Carbon tetrachloride	ND (0.0074)	ND (0.0075)	ND (0.0076)	ND (0.0070)	ND (0.0074)	ND (0.0074)	ND (0.014)	ND (0.0067)	ND (0.0075)	ND (0.0074)	ND (0.0069)
Chloroform	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0055)	ND (0.0057)	ND (0.0058)	ND (0.011)	ND (0.0052)	0.017	ND (0.0058)	ND (0.0054)
Cyclohexane	ND (0.0041)	ND (0.0041)	ND (0.0041)	0.054	0.013	ND (0.0041)	ND (0.0075)	0.0040	ND (0.0041)	ND (0.0041)	ND (0.0038)
Dichlorodifluoromethane (Freon 12)	ND (0.0059)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.011)	ND (0.0053)	ND (0.0059)	ND (0.0059)	ND (0.0054)
Ethanol	ND (0.0089)	ND (0.0090)	ND (0.0090)	ND (0.0084)	ND (0.0088)	ND (0.0089)	ND (0.016)	0.011	ND (0.0090)	ND (0.0089)	ND (0.0083)
Ethylbenzene	ND (0.0051)	ND (0.0052)	ND (0.0052)	ND (0.0049)	ND (0.0051)	ND (0.0051)	ND (0.0095)	ND (0.0046)	ND (0.0052)	ND (0.0051)	ND (0.0048)
Heptane	ND (0.0048)	ND (0.0049)	ND (0.0049)	ND (0.0046)	0.0052	ND (0.0048)	ND (0.0089)	ND (0.0044)	ND (0.0049)	ND (0.0048)	ND (0.0045)
Hexane	ND (0.0042)	ND (0.0042)	ND (0.0042)	0.062	0.011	ND (0.0042)	ND (0.0077)	0.0041	ND (0.0042)	ND (0.0042)	ND (0.0039)
Isopropylbenzene (Cumene)	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0058)	ND (0.011)	ND (0.0052)	ND (0.0059)	ND (0.0058)	ND (0.0054)
Methylene chloride	ND (0.041)	ND (0.042)	ND (0.042)	ND (0.0039)	ND (0.0041)	ND (0.041)	ND (0.076)	ND (0.037)	ND (0.042)	ND (0.041)	ND (0.038)
Naphthalene	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.023)	ND (0.025)	ND (0.025)	ND (0.046)	ND (0.022)	ND (0.025)	ND (0.025)	ND (0.023)
n-Propylbenzene	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0055)	ND (0.0058)	ND (0.0058)	ND (0.011)	ND (0.0052)	ND (0.0059)	ND (0.0058)	ND (0.0054)
Styrene	ND (0.0050)	ND (0.0051)	ND (0.0051)	ND (0.0048)	ND (0.0050)	ND (0.0050)	ND (0.0093)	ND (0.0045)	ND (0.0051)	ND (0.0050)	ND (0.0047)
Tetrachloroethene	ND (0.0080)	ND (0.0081)	ND (0.0081)	ND (0.0076)	0.0088	ND (0.0080)	ND (0.015)	ND (0.0072)	ND (0.0081)	ND (0.0080)	ND (0.0075)
Toluene	ND (0.0045)	ND (0.0045)	ND (0.0045)	ND (0.0042)	ND (0.0044)	ND (0.0045)	ND (0.0082)	ND (0.0040)	ND (0.0045)	ND (0.0045)	ND (0.0041)
Trichlorofluoromethane (Freon 11)	ND (0.0066)	ND (0.0067)	ND (0.0067)	ND (0.0063)	ND (0.0066)	ND (0.0066)	ND (0.012)	ND (0.0060)	ND (0.0067)	ND (0.0066)	ND (0.0062)
Vinyl Chloride	ND (0.0030)	ND (0.0030)	ND (0.0031)	ND (0.0029)	ND (0.0030)	ND (0.0030)	ND (0.0056)	ND (0.0027)	ND (0.0030)	ND (0.0030)	ND (0.0028)
m,p-Xylene	ND (0.0051)	ND (0.0052)	ND (0.0052)	ND (0.0049)	ND (0.0051)	ND (0.0051)	ND (0.0095)	ND (0.0046)	ND (0.0052)	ND (0.0051)	ND (0.0048)
o-Xylene	ND (0.0051)	ND (0.0052)	ND (0.0052)	ND (0.0049)	ND (0.0051)	ND (0.0051)	ND (0.0095)	ND (0.0046)	ND (0.0052)	ND (0.0051)	ND (0.0048)
Xylenes (total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-2									SG-3		
Probe Location ID	SG-2			SG-2A			SG-2B			SG-3	SG-3A	
Sample Depth (feet bgs)	15	15	15	14.5	14.5	14.5	14.5	14.5	14.5	5	5	5
EPA Analytical Method	8260B	8260B	TO-15	8260B	8260B	8260B	TO-15	TO-15	TO-15	8260B	8260B	8260B
Sample Date	2/13/08	DUP 2/13/08	CONF 2/13/08	10/12/09	4/26/10	10/13/10	6/27/11	10/4/11	11/8/12	2/13/08	10/12/09	4/26/10
TPHg	NA	NA	NA	ND (0.008)	2.22	NS	NS	NS	NS	NA	6.32	0.026
1,2,4-Trichlorobenzene	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
1,2,4-Trimethylbenzene	ND (0.007)	ND (0.007)	0.0051	ND (0.008)	0.010	NS	NS	NS	NS	ND (0.007)	ND (0.008)	0.026
1,3,5-Trimethylbenzene	ND (0.007)	ND (0.007)	ND (0.0024)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
1,3-Butadiene	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
2,2,4-Trimethylpentane	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
2-Butanone (MEK)	NA	NA	0.0055	NA	NA	NS	NS	NS	NS	NA	NA	NA
4-Ethyltoluene	NA	NA	0.0040	NA	NA	NS	NS	NS	NS	NA	NA	NA
4-Isopropyltoluene	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Acetone	NA	NA	0.032	NA	NA	NS	NS	NS	NS	NA	NA	NA
Benzene	ND (0.007)	ND (0.007)	0.030	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Bromodichloromethane	ND (0.007)	ND (0.007)	ND (0.002)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
n-Butylbenzene	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
sec-Butylbenzene	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
tert-Butylbenzene	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Carbon disulfide	NA	NA	0.019	NA	NA	NS	NS	NS	NS	NA	NA	NA
Carbon tetrachloride	ND (0.007)	ND (0.007)	ND (0.0019)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Chloroform	ND (0.007)	ND (0.007)	ND (0.0015)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Cyclohexane	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
Dichlorodifluoromethane (Freon 12)	ND (0.007)	ND (0.007)	0.0038	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Ethanol	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
Ethylbenzene	ND (0.007)	ND (0.007)	0.0044	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Heptane	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
Hexane	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
Isopropylbenzene (Cumene)	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Methylene chloride	ND (0.007)	ND (0.007)	0.0016	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Naphthalene	ND (0.007)	ND (0.007)	ND (0.0026)	ND (0.008)	0.234	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
n-Propylbenzene	ND (0.007)	ND (0.007)	NA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Styrene	ND (0.007)	ND (0.007)	0.0035 JA	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Tetrachloroethene	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Toluene	0.037	0.020	0.041	ND (0.008)	ND (0.008)	NS	NS	NS	NS	0.042	3.12	ND (0.008)
Trichlorofluoromethane (Freon 11)	ND (0.007)	ND (0.007)	0.0027	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Vinyl Chloride	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
m,p-Xylene	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
o-Xylene	NA	NA	NA	NA	NA	NS	NS	NS	NS	NA	NA	NA
Xylenes (total)	ND (0.007)	ND (0.007)	0.024	ND (0.008)	0.101	NS	NS	NS	NS	ND (0.007)	ND (0.008)	ND (0.008)
Other VOCs	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-3											
Probe Location ID	SG-3A			SG-3A						SG-3	SG-3A	
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	15	14.5	14.5
EPA Analytical Method	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B	8260B	8260B
Sample Date	10/13/10	6/28/11	10/3/11	11/7/12	4/19/13	10/17/13	4/9/14	10/9/14	4/15/15	2/13/08	10/12/09	4/26/10
TPHg	0.152	ND (0.24)	ND (0.24)	2.2	3.5	ND (0.23)	ND (0.24)	ND (0.24)	ND (0.46)	NA	ND (0.008)	0.325
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.035)	ND (0.034) UJ	ND (0.033)	ND (0.034)	ND (0.033)	ND (0.035)	ND (0.035)	ND (0.034)	ND (0.007)	ND (0.008)	ND (0.008)
1,2,4-Trimethylbenzene	0.017	ND (0.0058)	ND (0.0057)	0.080	0.14	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.007)	ND (0.008)	ND (0.008)
1,3,5-Trimethylbenzene	ND (0.008)	ND (0.0058)	ND (0.0057)	0.028	0.045	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.007)	ND (0.008)	ND (0.008)
1,3-Butadiene	NA	ND (0.0026)	ND (0.0026)	ND (0.0025)	ND (0.0026)	ND (0.0025)	ND (0.0026)	ND (0.0026)	ND (0.0025)	NA	NA	NA
2,2,4-Trimethylpentane	NA	ND (0.0056)	ND (0.0054)	ND (0.0052)	0.053	ND (0.0052)	ND (0.0055)	ND (0.0056)	ND (0.0053)	NA	NA	NA
2-Butanone (MEK)	NA	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	NA	NA	NA
4-Ethyltoluene	NA	ND (0.0058)	ND (0.0057)	0.052	0.15	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	NA	NA	NA
4-Isopropyltoluene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.008)	ND (0.008)
Acetone	NA	ND (0.011)	0.020 UN	ND (0.027)	ND (0.028)	ND (0.027)	ND (0.028)	ND (0.028)	ND (0.027)	NA	NA	NA
Benzene	ND (0.008)	ND (0.0038)	ND (0.0037)	ND (0.0036)	0.012	ND (0.0036)	ND (0.0038)	ND (0.0038)	ND (0.0036)	ND (0.007)	ND (0.008)	ND (0.008)
Bromodichloromethane	ND (0.008)	ND (0.0080)	ND (0.0078)	ND (0.0075)	ND (0.0078)	ND (0.0075)	ND (0.0079)	ND (0.0080)	ND (0.0076)	ND (0.007)	ND (0.008)	ND (0.008)
n-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.008)	ND (0.008)
sec-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.008)	ND (0.008)
tert-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.008)	ND (0.008)
Carbon disulfide	NA	ND (0.015)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.015)	ND (0.015)	ND (0.014)	NA	NA	NA
Carbon tetrachloride	ND (0.008)	ND (0.0075)	ND (0.0073)	ND (0.0070)	ND (0.0073)	ND (0.0070)	ND (0.0074)	ND (0.0075)	ND (0.0071)	ND (0.007)	ND (0.008)	ND (0.008)
Chloroform	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0055)	ND (0.0057)	ND (0.0055)	ND (0.0058)	0.010	ND (0.0055)	ND (0.007)	ND (0.008)	ND (0.008)
Cyclohexane	NA	ND (0.0041)	ND (0.0040)	ND (0.0038)	0.018	ND (0.0038)	ND (0.0041)	ND (0.0041)	ND (0.0039)	NA	NA	NA
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.0059)	ND (0.0058)	ND (0.0055)	ND (0.0057)	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.007)	ND (0.008)	ND (0.008)
Ethanol	NA	ND (0.0090)	ND (0.0088)	ND (0.0084)	0.10	ND (0.0084)	ND (0.0089)	ND (0.0090)	0.013	NA	NA	NA
Ethylbenzene	0.058	ND (0.0052)	ND (0.0050)	0.017	0.076	ND (0.0049)	ND (0.0051)	ND (0.0052)	ND (0.0049)	ND (0.007)	ND (0.008)	ND (0.008)
Heptane	NA	ND (0.0049)	ND (0.0048)	ND (0.0046)	0.025	ND (0.0046)	ND (0.0048)	ND (0.0049)	ND (0.0046)	NA	NA	NA
Hexane	NA	ND (0.0042)	ND (0.0041)	ND (0.0039)	0.014	ND (0.0039)	ND (0.0042)	ND (0.0042)	ND (0.0040)	NA	NA	NA
Isopropylbenzene (Cumene)	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0055)	ND (0.0057)	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.007)	ND (0.008)	ND (0.008)
Methylene chloride	ND (0.008)	ND (0.0041)	ND (0.0040)	ND (0.039)	ND (0.040)	ND (0.039)	ND (0.041)	ND (0.042)	ND (0.039)	ND (0.007)	ND (0.008)	ND (0.008)
Naphthalene	ND (0.008)	ND (0.025)	ND (0.024) UJ	0.032	ND (0.024)	ND (0.023)	ND (0.025)	ND (0.025)	ND (0.024)	ND (0.007)	ND (0.008)	0.061
n-Propylbenzene	ND (0.008)	ND (0.0058)	ND (0.0057)	0.0060	0.021	ND (0.0055)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.007)	ND (0.008)	ND (0.008)
Styrene	ND (0.008)	ND (0.0051)	ND (0.0050)	ND (0.0048)	ND (0.0049)	ND (0.0048)	ND (0.0050)	ND (0.0051)	ND (0.0048)	ND (0.007)	ND (0.008)	ND (0.008)
Tetrachloroethene	ND (0.008)	ND (0.0081)	ND (0.0079)	ND (0.0076)	ND (0.0079)	ND (0.0076)	ND (0.0080)	ND (0.0081)	ND (0.0077)	ND (0.007)	ND (0.008)	ND (0.008)
Toluene	0.077	ND (0.0045)	ND (0.0044)	0.054	0.19	ND (0.0042)	ND (0.0044)	ND (0.0045)	ND (0.0043)	0.083	ND (0.008)	ND (0.008)
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.0067)	ND (0.0065)	ND (0.0063)	ND (0.0065)	ND (0.0063)	ND (0.0066)	ND (0.0067)	ND (0.0064)	ND (0.007)	ND (0.008)	ND (0.008)
Vinyl Chloride	ND (0.008)	ND (0.0030)	ND (0.0030)	ND (0.0029)	ND (0.0030)	ND (0.0029)	ND (0.0030)	ND (0.0030)	ND (0.0029)	ND (0.007)	ND (0.008)	ND (0.008)
m,p-Xylene	NA	ND (0.0052)	ND (0.0050)	0.12	0.38	ND (0.0049)	ND (0.0051)	ND (0.0052)	ND (0.0049)	NA	NA	NA
o-Xylene	NA	ND (0.0052)	ND (0.0050)	0.061	0.13	ND (0.0049)	ND (0.0051)	ND (0.0052)	ND (0.0049)	NA	NA	NA
Xylenes (total)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.008)	ND (0.008)
Other VOCs	ND	ND	ND	ND	0.019 [5]	0.027 [6]	0.012 [7]	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-3									SG-4	
Probe Location ID	SG-3A									SG-4	
Sample Depth (feet bgs)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	5	5
EPA Analytical Method	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B	TO-15
Sample Date	10/13/10	6/28/11	10/3/11	11/7/12	4/19/13	10/17/13	4/9/14	10/9/14	4/15/15	2/12/08	CONF 2/12/08
TPHg	3.92	ND (0.24)	ND (0.24)	ND (0.26)	5.1	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.46)	NA	NA
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.035)	ND (0.034) UJ	ND (0.038)	ND (0.14)	ND (0.033)	ND (0.034)	ND (0.036)	ND (0.034)	ND (0.007)	ND (0.007)
1,2,4-Trimethylbenzene	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0063)	0.17	ND (0.0055)	ND (0.0056)	ND (0.0060)	ND (0.0056)	ND (0.018)	0.033
1,3,5-Trimethylbenzene	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0063)	0.054	ND (0.0055)	ND (0.0056)	ND (0.0060)	ND (0.0056)	ND (0.018)	0.025
1,3-Butadiene	NA	ND (0.0026)	ND (0.0026)	ND (0.0028)	ND (0.010)	ND (0.0025)	ND (0.0025)	ND (0.0027)	ND (0.0025)	NA	NA
2,2,4-Trimethylpentane	NA	ND (0.0056)	ND (0.0054)	ND (0.0060)	0.10	ND (0.0052)	ND (0.0053)	ND (0.0057)	ND (0.0053)	NA	NA
2-Butanone (MEK)	NA	ND (0.014)	ND (0.014)	ND (0.015)	ND (0.056)	ND (0.013)	ND (0.013)	ND (0.014)	ND (0.013)	NA	ND (0.0058)
4-Ethyltoluene	NA	ND (0.0058)	ND (0.0057)	ND (0.0063)	0.17	ND (0.0055)	ND (0.0056)	ND (0.0060)	ND (0.0056)	NA	0.046
4-Isopropyltoluene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	NA
Acetone	NA	ND (0.011)	0.020 UN	ND (0.031)	ND (0.11)	ND (0.027)	ND (0.027)	ND (0.029)	ND (0.027)	NA	0.026
Benzene	ND (0.008)	ND (0.0038)	ND (0.0037)	ND (0.0041)	0.024	ND (0.0036)	ND (0.0036)	ND (0.0039)	ND (0.0036)	0.571	0.0093
Bromodichloromethane	ND (0.008)	ND (0.0080)	ND (0.0078)	ND (0.0086)	ND (0.032)	ND (0.0075)	ND (0.0076)	0.014	0.011	ND (0.018)	ND (0.004)
n-Butylbenzene	0.392	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	NA
sec-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	NA
tert-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	NA
Carbon disulfide	NA	ND (0.015)	ND (0.014)	ND (0.016)	ND (0.060)	ND (0.014)	ND (0.014)	ND (0.015)	ND (0.014)	NA	0.0084
Carbon tetrachloride	ND (0.008)	ND (0.0075)	ND (0.0073)	ND (0.0081)	ND (0.030)	ND (0.0071)	ND (0.0072)	ND (0.0076)	ND (0.0071)	ND (0.018)	ND (0.0038)
Chloroform	0.041	0.035	0.051	0.037	ND (0.023)	0.020	0.011	0.044	0.026	ND (0.018)	ND (0.003)
Cyclohexane	NA	ND (0.0041)	ND (0.0040)	ND (0.0044)	0.026	ND (0.0039)	ND (0.0039)	ND (0.0042)	ND (0.0039)	NA	NA
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.0059)	ND (0.0058)	ND (0.0064)	ND (0.024)	ND (0.0056)	ND (0.0056)	ND (0.0060)	ND (0.0056)	ND (0.018)	ND (0.003)
Ethanol	NA	ND (0.0090)	ND (0.0088)	ND (0.0097)	0.26	ND (0.0085)	ND (0.0086)	ND (0.0092)	ND (0.0086)	NA	NA
Ethylbenzene	ND (0.008)	ND (0.0052)	ND (0.0050)	ND (0.0056)	0.10	ND (0.0049)	ND (0.0049)	ND (0.0053)	ND (0.0049)	0.525	0.015
Heptane	NA	ND (0.0049)	ND (0.0048)	ND (0.0053)	0.048	ND (0.0046)	ND (0.0047)	ND (0.0050)	ND (0.0046)	NA	NA
Hexane	NA	ND (0.0042)	ND (0.0041)	ND (0.0045)	0.029	ND (0.0040)	ND (0.0040)	ND (0.0043)	ND (0.0040)	NA	NA
Isopropylbenzene (Cumene)	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0063)	ND (0.023)	ND (0.0055)	ND (0.0056)	ND (0.0060)	ND (0.0056)	ND (0.018)	NA
Methylene chloride	ND (0.008)	0.0042 UN	ND (0.0040)	ND (0.045)	ND (0.17)	ND (0.039)	ND (0.040)	ND (0.042)	ND (0.039)	ND (0.018)	ND (0.002)
Naphthalene	0.040	ND (0.025)	ND (0.024) UJ	ND (0.027)	ND (0.10)	ND (0.024)	ND (0.024)	ND (0.025)	ND (0.024)	ND (0.018)	ND (0.0052)
n-Propylbenzene	ND (0.008)	ND (0.0058)	ND (0.0057)	ND (0.0063)	0.027	ND (0.0055)	ND (0.0056)	ND (0.0060)	ND (0.0056)	ND (0.018)	NA
Styrene	ND (0.008)	ND (0.0051)	ND (0.0050)	ND (0.0055)	ND (0.020)	ND (0.0048)	ND (0.0048)	ND (0.0052)	ND (0.0048)	ND (0.018)	0.03 JA
Tetrachloroethene	ND (0.008)	ND (0.0081)	ND (0.0079)	ND (0.0088)	ND (0.032)	ND (0.0076)	ND (0.0077)	ND (0.0082)	ND (0.0077)	ND (0.007)	ND (0.007)
Toluene	0.055	ND (0.0045)	ND (0.0044)	ND (0.0049)	0.33	ND (0.0042)	ND (0.0043)	ND (0.0046)	ND (0.0043)	9.45	0.096
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.0067)	ND (0.0065)	ND (0.0072)	ND (0.027)	ND (0.0063)	ND (0.0064)	ND (0.0068)	ND (0.0064)	ND (0.018)	ND (0.0044)
Vinyl Chloride	ND (0.008)	ND (0.0030)	ND (0.0030)	ND (0.0033)	ND (0.012)	ND (0.0029)	ND (0.0029)	ND (0.0031)	ND (0.0029)	ND (0.007)	ND (0.007)
m,p-Xylene	NA	ND (0.0052)	ND (0.0050)	ND (0.0056)	0.52	ND (0.0049)	ND (0.0050)	ND (0.0053)	ND (0.0049)	NA	NA
o-Xylene	NA	ND (0.0052)	ND (0.0050)	ND (0.0056)	0.17	ND (0.0049)	ND (0.0050)	ND (0.0053)	ND (0.0049)	NA	NA
Xylenes (total)	0.108	NA	NA	NA	NA	NA	NA	NA	NA	3.16	0.430
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-4											
Probe Location ID	SG-4A											
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	8260B	8260B	TO-15	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/12/09	4/26/10	CONF 4/26/10	10/13/10	6/27/11	10/4/11	11/7/12	4/18/13	10/15/13	4/8/14	10/8/14	4/14/15
TPHg	15.4	29.3	170	13.3	ND (0.25)	ND (0.25)	ND (0.25)	1.9	ND (0.22)	ND (0.24)	ND (0.26)	ND (0.45)
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.008)	ND (0.76)	ND (0.008)	ND (0.036)	ND (0.037)	ND (0.037)	ND (0.073)	ND (0.032)	ND (0.035)	ND (0.037)	ND (0.033)
1,2,4-Trimethylbenzene	0.147	1.54	ND (0.26)	0.486	ND (0.0059)	ND (0.0061)	ND (0.0061)	0.034	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
1,3,5-Trimethylbenzene	0.067	0.162	ND (0.40)	0.230	ND (0.0059)	ND (0.0061)	ND (0.0061)	ND (0.012)	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
1,3-Butadiene	NA	NA	NA	NA	ND (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0055)	ND (0.0024)	ND (0.0026)	ND (0.0028)	ND (0.0024)
2,2,4-Trimethylpentane	NA	NA	NA	NA	ND (0.0056)	ND (0.0058)	ND (0.0058)	0.017	ND (0.0051)	ND (0.0056)	ND (0.0058)	ND (0.0052)
2-Butanone (MEK)	NA	NA	ND (0.36)	NA	ND (0.014)	ND (0.015)	ND (0.014)	ND (0.029)	ND (0.013)	ND (0.014)	0.020	ND (0.013)
4-Ethyltoluene	NA	NA	ND (0.20)	NA	ND (0.0059)	ND (0.0061)	ND (0.0061)	0.025	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
4-Isopropyltoluene	0.078	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	ND (0.39)	NA	0.014 UN	0.021 UN	ND (0.029)	0.059	0.026	ND (0.028)	ND (0.030)	ND (0.026)
Benzene	ND (0.008)	ND (0.008)	ND (0.20)	ND (0.008)	ND (0.0039)	ND (0.0040)	ND (0.0039)	ND (0.0079)	ND (0.0035)	ND (0.0038)	ND (0.0040)	ND (0.0035)
Bromodichloromethane	ND (0.008)	ND (0.008)	ND (0.27)	ND (0.008)	ND (0.0081)	ND (0.0083)	ND (0.0083)	ND (0.016)	ND (0.0073)	ND (0.0080)	ND (0.0084)	ND (0.0074)
n-Butylbenzene	0.06	0.065	NA	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	0.145	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ND (0.008)	ND (0.008)	NA	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	ND (0.51)	NA	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.031)	ND (0.014)	ND (0.015)	ND (0.016)	ND (0.014)
Carbon tetrachloride	ND (0.008)	ND (0.008)	ND (0.26)	ND (0.008)	ND (0.0076)	ND (0.0078)	ND (0.0078)	ND (0.016)	ND (0.0068)	ND (0.0075)	ND (0.0079)	ND (0.0070)
Chloroform	ND (0.008)	ND (0.008)	ND (0.20)	ND (0.008)	ND (0.0059)	ND (0.0060)	ND (0.0060)	ND (0.012)	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
Cyclohexane	NA	NA	NA	NA	ND (0.0042)	ND (0.0043)	ND (0.0042)	ND (0.0085)	ND (0.0037)	ND (0.0041)	ND (0.0043)	ND (0.0038)
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.008)	ND (0.20)	ND (0.008)	ND (0.0060)	ND (0.0061)	ND (0.0061)	ND (0.012)	ND (0.0054)	ND (0.0059)	ND (0.0062)	ND (0.0055)
Ethanol	NA	NA	NA	NA	ND (0.0091)	ND (0.0093)	ND (0.0093)	0.12	0.012	ND (0.0090)	0.013	0.0088
Ethylbenzene	0.671	1.84	ND (0.18)	1.25	ND (0.0052)	ND (0.0054)	ND (0.0054)	ND (0.011)	ND (0.0047)	ND (0.0052)	ND (0.0054)	ND (0.0048)
Heptane	NA	NA	NA	NA	ND (0.0050)	ND (0.0051)	ND (0.0051)	ND (0.010)	ND (0.0044)	ND (0.0049)	ND (0.0051)	ND (0.0045)
Hexane	NA	NA	NA	NA	ND (0.0043)	ND (0.0044)	ND (0.0044)	ND (0.0087)	ND (0.0038)	ND (0.0042)	0.0056	ND (0.0039)
Isopropylbenzene (Cumene)	0.03	0.043	NA	ND (0.008)	ND (0.0059)	ND (0.0061)	ND (0.0061)	ND (0.012)	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
Methylene chloride	ND (0.008)	ND (0.008)	ND (0.14)	ND (0.008)	0.0043 UN	ND (0.0043)	ND (0.043)	ND (0.086)	ND (0.038)	ND (0.041)	ND (0.043)	ND (0.038)
Naphthalene	ND (0.008)	0.452	ND (0.64)	0.487	ND (0.025)	ND (0.026)	ND (0.026)	ND (0.052)	ND (0.023)	ND (0.025)	ND (0.026)	ND (0.023)
n-Propylbenzene	ND (0.008)	ND (0.008)	NA	ND (0.008)	ND (0.0059)	ND (0.0061)	ND (0.0061)	ND (0.012)	ND (0.0053)	ND (0.0058)	ND (0.0061)	ND (0.0054)
Styrene	ND (0.008)	ND (0.008)	ND (0.17)	ND (0.008)	ND (0.0052)	ND (0.0053)	ND (0.0053)	ND (0.010)	ND (0.0046)	ND (0.0051)	ND (0.0053)	ND (0.0047)
Tetrachloroethene	ND (0.008)	ND (0.008)	ND (0.28)	ND (0.008)	ND (0.0082)	ND (0.0084)	ND (0.0084)	ND (0.017)	ND (0.0074)	ND (0.0081)	ND (0.0085)	ND (0.0075)
Toluene	0.295	1.71	0.29 J	0.567	ND (0.0046)	ND (0.0047)	ND (0.0046)	0.024	ND (0.0041)	ND (0.0045)	0.0080	ND (0.0042)
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.008)	ND (0.23)	ND (0.008)	ND (0.0068)	ND (0.0070)	ND (0.0069)	ND (0.014)	ND (0.0061)	ND (0.0067)	ND (0.0070)	ND (0.0062)
Vinyl Chloride	ND (0.008)	ND (0.008)	ND (0.21)	ND (0.008)	ND (0.0031)	ND (0.0032)	ND (0.0032)	ND (0.0063)	ND (0.0028)	ND (0.0030)	ND (0.0032)	ND (0.0028)
m,p-Xylene	NA	NA	NA	NA	ND (0.0052)	ND (0.0054)	ND (0.0054)	0.026	ND (0.0047)	ND (0.0052)	ND (0.0054)	ND (0.0048)
o-Xylene	NA	NA	NA	NA	ND (0.0052)	ND (0.0054)	ND (0.0054)	0.013	ND (0.0047)	ND (0.0052)	ND (0.0054)	ND (0.0048)
Xylenes (total)	1.05	9.50	0.49	3.04	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	0.22 J [2]	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-4											
Probe Location ID	SG-4		SG-4A									
Sample Depth (feet bgs)	15	15	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
EPA Analytical Method	8260B	8260B	8260B	TO-15	8260B	8260B	TO-15	8260B	8260B	TO-15	TO-15	TO-15
Sample Date	2/12/08	DUP 2/12/08	10/12/09	CONF 10/12/09	4/26/10	DUP 4/26/10	CONF 4/26/10	10/13/10	DUP 10/13/10	CONF 10/13/10	6/27/11	DUP 6/27/11
TPHg	NA	NA	6,170	6,200	1,910	1,840	170	7,430	7,160	7,100	11,000	12,000
1,2,4-Trichlorobenzene	ND (0.007)	ND (0.007)	ND (0.08)	ND (9.4)	ND (0.02)	ND (0.4)	ND (0.39)	ND (0.4)	ND (0.4)	ND (13)	ND (12)	ND (12)
1,2,4-Trimethylbenzene	1.13	1.23	114	110	31.3	32.4	0.79	230	216	82	150	160
1,3,5-Trimethylbenzene	1.24	1.18	157	70	1.61	1.50	0.67	145	149	76	84	89
1,3-Butadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.89)	ND (0.89)
2,2,4-Trimethylpentane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (1.9)	ND (1.9)
2-Butanone (MEK)	NA	NA	NA	ND (3.0)	NA	NA	ND (0.18)	NA	NA	ND (6.0)	ND (4.8)	ND (4.8)
4-Ethyltoluene	NA	NA	NA	140	NA	NA	1.1	NA	NA	150	150	160
4-Isopropyltoluene	ND (0.07)	ND (0.07)	ND (0.08)	NA	0.941	ND (0.4)	NA	3.79	4.02	NA	NA	NA
Acetone	NA	NA	NA	ND (3.0)	NA	NA	ND (0.20)	NA	NA	ND (6.4)	ND (3.8)	ND (3.8)
Benzene	41.5	43.7	26.8	20	35.1	3.97	0.25	28.7	30.1	21	18	19
Bromodichloromethane	ND (0.07)	ND (0.07)	ND (0.08)	ND (3.4)	ND (0.02)	ND (0.4)	ND (0.14)	ND (0.4)	ND (0.4)	ND (4.5)	ND (2.7)	ND (2.7)
n-Butylbenzene	ND (0.07)	ND (0.07)	ND (0.08)	NA	0.925	1.09	NA	8.04	7.81	NA	NA	NA
sec-Butylbenzene	ND (0.07)	ND (0.07)	ND (0.08)	NA	ND (0.02)	ND (0.4)	NA	183	172	NA	NA	NA
tert-Butylbenzene	ND (0.07)	ND (0.07)	5.66	NA	ND (0.02)	ND (0.4)	NA	ND (0.4)	ND (0.4)	NA	NA	NA
Carbon disulfide	NA	NA	NA	ND (3.1)	NA	NA	ND (0.26)	NA	NA	ND (8.4)	ND (1.2)	ND (1.2)
Carbon tetrachloride	ND (0.07)	ND (0.07)	ND (0.08)	ND (3.2)	ND (0.02)	ND (0.4)	ND (0.13)	ND (0.4)	ND (0.4)	ND (4.2)	ND (2.5)	ND (2.5)
Chloroform	ND (0.07)	ND (0.07)	ND (0.08)	ND (2.5)	ND (0.02)	ND (0.4)	ND (0.10)	ND (0.4)	ND (0.4)	ND (3.3)	ND (2.0)	ND (2.0)
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16	16
Dichlorodifluoromethane (Freon 12)	ND (0.07)	ND (0.07)	ND (0.08)	ND (3.7)	ND (0.02)	ND (0.4)	ND (0.10)	ND (0.4)	ND (0.4)	ND (3.3)	ND (2.0)	ND (2.0)
Ethanol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (3.0)	ND (3.0)
Ethylbenzene	26.5	27.3	283	180	90.5	4.26	1.6	308	309	170	170	180
Heptane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170	180
Hexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	40
Isopropylbenzene (Cumene)	1.65	0.824	25.8	NA	1.05	ND (0.4)	NA	26.4	28.6	NA	15	15
Methylene chloride	ND (0.07)	ND (0.07)	ND (0.08)	ND (1.8)	ND (0.02)	ND (0.4)	0.0079 J, UN	ND (0.4)	ND (0.4)	ND (2.3)	ND (1.4)	ND (1.4)
Naphthalene	ND (0.07)	ND (0.07)	85.8	ND (7.9)	9.30	0.886	ND (0.33)	7.70	12.6	ND (11)	75	78
n-Propylbenzene	ND (0.07)	ND (0.07)	ND (0.08)	NA	ND (0.02)	ND (0.4)	NA	20.6	22.1	NA	14	15
Styrene	ND (0.07)	ND (0.07)	ND (0.08)	63	ND (0.02)	ND (0.4)	0.51	ND (0.4)	ND (0.4)	66	81	84
Tetrachloroethene	ND (0.007)	ND (0.007)	ND (0.08)	ND (3.4)	ND (0.02)	ND (0.4)	ND (0.14)	ND (0.4)	ND (0.4)	ND (4.6)	ND (2.7)	ND (2.7)
Toluene	445	501	1,320	810	280	217	7.5	1,250	1,300	570	610	650
Trichlorofluoromethane (Freon 11)	ND (0.07)	ND (0.07)	ND (0.08)	ND (2.8)	ND (0.02)	ND (0.4)	ND (0.12)	ND (0.4)	ND (0.4)	ND (3.8)	ND (2.3)	ND (2.3)
Vinyl Chloride	ND (0.007)	ND (0.007)	ND (0.08)	ND (2.6)	ND (0.02)	ND (0.4)	ND (0.11)	ND (0.4)	ND (0.4)	ND (3.5)	ND (1.0)	ND (1.0)
m,p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	1,300
o-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	350	370
Xylenes (total)	130	145	2,170	1,800	489	454	15	1,580	1,660	1,500	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	0.10 J [2]	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-4											
Probe Location ID	SG-4A											
Sample Depth (feet bgs)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
EPA Analytical Method	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/4/11	11/7/12	4/18/13	DUP 4/18/13	10/15/13	DUP 10/15/13	4/8/14	DUP 4/8/14	10/8/14	DUP 10/8/14	4/14/15	DUP 4/14/15
TPHg	11,000	10,000	7,200	8,400	11,000	19,000	9,200	8,200	11,000	11,000	8,400	7,200
1,2,4-Trichlorobenzene	ND (18)	ND (75)	ND (18)	ND (12)	ND (18)	ND (18)	ND (18)	ND (9.0)	ND (64)	ND (61)	ND (34) UJ	ND (43) UJ
1,2,4-Trimethylbenzene	200	96	77	110	120	230	140	120	250	300	150	93
1,3,5-Trimethylbenzene	120	65	51	68	78	130	82	68	160	180	93	70
1,3-Butadiene	ND (1.4) UJ	ND (5.6)	ND (1.3)	ND (0.89)	ND (1.3)	ND (1.3)	ND (1.3)	ND (0.67)	ND (4.8)	ND (4.6)	ND (2.6)	ND (3.2)
2,2,4-Trimethylpentane	ND (2.9)	ND (12)	ND (2.8)	ND (1.9)	ND (2.8)	ND (2.8)	ND (2.8)	ND (1.4)	ND (10)	ND (9.6)	ND (5.4)	ND (6.8)
2-Butanone (MEK)	ND (7.4)	ND (30)	ND (7.1)	ND (4.7)	ND (7.0)	ND (7.0)	ND (7.2)	ND (3.6)	ND (26)	ND (24)	ND (14)	ND (17)
4-Ethyltoluene	200	110	91	120	140	250	140	120	250	300	180	120
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	ND (5.9)	ND (24)	ND (5.7)	ND (3.8)	ND (5.6)	ND (5.6)	ND (5.8)	ND (2.9)	ND (20)	ND (20)	ND (28)	ND (35)
Benzene	25	19	21	21	18	21	12	12	23	27	23	24
Bromodichloromethane	ND (4.2)	ND (17)	ND (4.0)	ND (2.7)	ND (4.0)	ND (4.0)	ND (4.1)	ND (2.0)	ND (14)	ND (14)	ND (7.8)	ND (9.8)
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ND (1.9)	ND (7.8)	ND (1.9)	ND (1.2)	ND (1.8)	ND (1.8)	ND (1.9)	ND (0.94)	ND (6.7)	ND (6.4)	ND (14)	ND (18)
Carbon tetrachloride	ND (3.9)	ND (16)	ND (3.8)	ND (2.5)	ND (3.7)	ND (3.7)	ND (3.8)	ND (1.9)	ND (14)	ND (13)	ND (7.3)	ND (9.2)
Chloroform	ND (3.0)	ND (12)	ND (3.0)	ND (2.0)	ND (2.9)	ND (2.9)	ND (3.0)	ND (1.5)	ND (10)	ND (10)	ND (5.7)	ND (7.1)
Cyclohexane	23	14	13	15	16	18	10	11	19	20	19	21
Dichlorodifluoromethane (Freon 12)	ND (3.1)	ND (12)	ND (3.0)	ND (2.0)	ND (2.9)	ND (2.9)	ND (3.0)	ND (1.5)	ND (11)	ND (10)	ND (5.7)	ND (7.2)
Ethanol	ND (4.7)	ND (19)	ND (4.6)	ND (3.0)	ND (4.4)	ND (4.5)	ND (4.6)	ND (2.3)	ND (16)	ND (16)	ND (8.7)	ND (11)
Ethylbenzene	250	160	160	180	210	340	170	150	300	340	250	230
Heptane	250	170	160	180	190	240	130	130	240	270	230	240
Hexane	54	31	28	33	27	31	17	19	43	51	42	42
Isopropylbenzene (Cumene)	21	15	12	14	16	29	15	13	25	29	20	16
Methylene chloride	ND (2.2)	ND (8.8)	ND (2.1)	ND (1.4)	ND (2.0)	ND (2.1)	ND (2.1)	ND (1.0)	ND (7.5)	ND (7.2)	ND (40)	ND (51)
Naphthalene	72	ND (53) J-	18	31	29	65	40	45	81	93	ND (24)	ND (31)
n-Propylbenzene	20	ND (12)	9.4	12	14	25	13	11	23	26	17	12
Styrene	100	52	64	76	88	150	81	72	140	160	100	62
Tetrachloroethene	ND (4.2)	ND (17)	ND (4.1)	ND (2.7)	ND (4.0)	ND (4.0)	ND (4.1)	ND (2.0)	ND (15)	ND (14)	ND (7.9)	ND (9.9)
Toluene	860	660	590	650	680	920	490	460	1,000	1,200	850	860
Trichlorofluoromethane (Freon 11)	ND (3.5)	ND (14)	ND (3.4)	ND (2.2)	ND (3.3)	ND (3.3)	ND (3.4)	ND (1.7)	ND (12)	ND (12)	ND (6.5)	ND (8.2)
Vinyl Chloride	ND (1.6) UJ	ND (6.4)	ND (1.5)	ND (1.0)	ND (1.5)	ND (1.5)	ND (1.6)	ND (0.77)	ND (5.5)	ND (5.3)	ND (3.0)	ND (3.7)
m,p-Xylene	1,700	1,100	1,100	1,200	1,500	2,300	1,200	1,100	2,500	2,900	1,900	1,700
o-Xylene	480	320	300	340	410	680	360	310	650	760	520	450
Xylenes (total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-5												
Probe Location ID	SG-5	SG-5A			SG-5B								
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	8260B	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	2/13/08	10/12/09	4/26/10	10/13/10	6/28/11	10/24/11	DUP 10/24/11	11/6/12	4/18/13	10/16/13	4/8/14	10/8/14	4/15/15
TPHg	NA	0.955	0.285	ND (0.080)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.24)	0.70	ND (0.23)	ND (0.24)	ND (0.23)	ND (0.47)
1,2,4-Trichlorobenzene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.034)	ND (0.023)	ND (0.023)	ND (0.034)	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.034)	ND (0.034)
1,2,4-Trimethylbenzene	ND (0.007)	0.119	0.016	ND (0.008)	ND (0.0056)	ND (0.0038)	ND (0.0038)	ND (0.0057)	0.021	ND (0.0056)	ND (0.0058)	ND (0.0056)	ND (0.0057)
1,3,5-Trimethylbenzene	ND (0.007)	0.027	ND (0.008)	ND (0.008)	ND (0.0056)	ND (0.0038)	ND (0.0038)	ND (0.0057)	0.0063	ND (0.0056)	ND (0.0058)	ND (0.0056)	ND (0.0057)
1,3-Butadiene	NA	NA	NA	NA	ND (0.0025)	ND (0.0017)	ND (0.0017)	ND (0.0026)	ND (0.0027)	ND (0.0025)	ND (0.0026)	ND (0.0025)	ND (0.0026)
2,2,4-Trimethylpentane	NA	NA	NA	NA	ND (0.0053)	ND (0.0037)	ND (0.0037)	ND (0.0054)	0.0097	ND (0.0053)	ND (0.0055)	ND (0.0053)	ND (0.0054)
2-Butanone (MEK)	NA	NA	NA	NA	0.015	ND (0.0092)	ND (0.0092)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
4-Ethyltoluene	NA	NA	NA	NA	ND (0.0056)	ND (0.0038)	ND (0.0038)	ND (0.0057)	0.012	ND (0.0056)	ND (0.0058)	ND (0.0056)	ND (0.0057)
4-Isopropyltoluene	ND (0.007)	0.044	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	0.13 J+	ND (0.0074)	0.016 UN	0.058	ND (0.029)	ND (0.027)	0.029	0.029	ND (0.027)
Benzene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0036)	ND (0.0025)	ND (0.0025)	ND (0.0037)	ND (0.0039)	ND (0.0036)	ND (0.0038)	ND (0.0036)	ND (0.0037)
Bromodichloromethane	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0077)	ND (0.0052)	ND (0.0052)	ND (0.0078)	ND (0.0083)	ND (0.0077)	ND (0.0079)	ND (0.0077)	ND (0.0077)
n-Butylbenzene	ND (0.007)	0.057	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ND (0.007)	0.102	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	ND (0.014)	ND (0.0098)	ND (0.0098)	ND (0.014)	ND (0.015)	ND (0.014)	ND (0.015)	ND (0.014)	ND (0.014)
Carbon tetrachloride	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0072)	ND (0.0049)	ND (0.0049)	ND (0.0073)	ND (0.0078)	ND (0.0072)	ND (0.0074)	ND (0.0072)	ND (0.0073)
Chloroform	ND (0.007)	0.142	0.025	0.115	0.077	0.040	0.039	0.023	0.010	0.0084	ND (0.0058)	ND (0.0056)	ND (0.0056)
Cyclohexane	NA	NA	NA	NA	ND (0.0039)	ND (0.0027)	ND (0.0027)	ND (0.0040)	ND (0.0042)	ND (0.0039)	ND (0.0041)	0.0050	ND (0.0040)
Dichlorodifluoromethane (Freon 12)	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0057)	ND (0.0039)	ND (0.0039)	ND (0.0058)	ND (0.0061)	ND (0.0057)	ND (0.0058)	ND (0.0057)	ND (0.0057)
Ethanol	NA	NA	NA	NA	0.018	ND (0.0059)	ND (0.0059)	0.0093	0.068 J+	ND (0.0086)	ND (0.0089)	0.013	ND (0.0087)
Ethylbenzene	ND (0.007)	ND (0.008)	0.052	ND (0.008)	ND (0.0050)	ND (0.0034)	ND (0.0034)	ND (0.0050)	ND (0.0054)	ND (0.0050)	ND (0.0051)	ND (0.0050)	ND (0.0050)
Heptane	NA	NA	NA	NA	ND (0.0047)	ND (0.0032)	ND (0.0032)	ND (0.0048)	ND (0.0051)	ND (0.0047)	ND (0.0048)	ND (0.0047)	ND (0.0047)
Hexane	NA	NA	NA	NA	ND (0.0040)	ND (0.0028)	ND (0.0028)	ND (0.0041)	ND (0.0044)	ND (0.0040)	ND (0.0042)	ND (0.0040)	ND (0.0041)
Isopropylbenzene (Cumene)	ND (0.007)	0.021	ND (0.008)	ND (0.008)	ND (0.0056)	ND (0.0038)	ND (0.0038)	ND (0.0057)	ND (0.0061)	ND (0.0056)	ND (0.0058)	ND (0.0056)	ND (0.0057)
Methylene chloride	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0040)	ND (0.0027)	ND (0.0027)	ND (0.040)	ND (0.043)	ND (0.040)	ND (0.041)	ND (0.040)	ND (0.040)
Naphthalene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.024)	ND (0.016)	ND (0.016)	ND (0.024)	ND (0.026)	ND (0.024)	ND (0.025)	ND (0.024)	ND (0.024)
n-Propylbenzene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0056)	ND (0.0038)	ND (0.0038)	ND (0.0057)	ND (0.0061)	ND (0.0056)	ND (0.0058)	ND (0.0056)	ND (0.0057)
Styrene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0049)	ND (0.0033)	ND (0.0033)	ND (0.0050)	ND (0.0053)	ND (0.0049)	ND (0.0050)	ND (0.0049)	ND (0.0049)
Tetrachloroethene	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0078)	ND (0.0053)	ND (0.0053)	ND (0.0079)	ND (0.0084)	ND (0.0078)	ND (0.0080)	ND (0.0078)	ND (0.0078)
Toluene	0.059	0.122	0.060	ND (0.008)	ND (0.0043)	ND (0.0030)	ND (0.0030)	ND (0.0044)	0.011	ND (0.0043)	ND (0.0044)	ND (0.0043)	ND (0.0044)
Trichlorofluoromethane (Freon 11)	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0064)	ND (0.0044)	ND (0.0044)	ND (0.0065)	ND (0.0069)	ND (0.0064)	ND (0.0066)	ND (0.0064)	ND (0.0065)
Vinyl Chloride	ND (0.007)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.0029)	ND (0.0020)	ND (0.0020)	ND (0.0030)	ND (0.0032)	ND (0.0029)	ND (0.0030)	ND (0.0029)	ND (0.0030)
m,p-Xylene	NA	NA	NA	NA	ND (0.0050)	ND (0.0034)	ND (0.0034)	ND (0.0050)	0.016	ND (0.0050)	ND (0.0051)	ND (0.0050)	ND (0.0050)
o-Xylene	NA	NA	NA	NA	ND (0.0050)	ND (0.0034)	ND (0.0034)	ND (0.0050)	0.0072	ND (0.0050)	ND (0.0051)	ND (0.0050)	ND (0.0050)
Xylenes (total)	ND (0.007)	0.321	0.157	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-5											
Probe Location ID	SG-5B								SG-5	SG-5A		
Sample Depth (feet bgs)	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	15	14.5	14.5	14.5
EPA Analytical Method	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B	8260B	8260B	8260B
Sample Date	6/28/11	10/24/11	11/6/12	4/18/13	10/16/13	4/9/14	10/8/14	4/15/15	2/12/08	10/12/09	4/26/10	10/13/10
TPHg	NS	NS	NS	NS	NS	NS	ND (0.25)	ND (0.45)	NA	17.5	2.26	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	ND (0.036)	ND (0.032)	ND (0.018)	ND (0.008)	ND (0.008)	NS
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	ND (0.018)	0.046	ND (0.008)	NS
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	ND (0.018)	0.052	ND (0.008)	NS
1,3-Butadiene	NS	NS	NS	NS	NS	NS	ND (0.0027)	ND (0.0024)	NA	NA	NA	NS
2,2,4-Trimethylpentane	NS	NS	NS	NS	NS	NS	ND (0.0057)	ND (0.0051)	NA	NA	NA	NS
2-Butanone (MEK)	NS	NS	NS	NS	NS	NS	ND (0.014)	ND (0.013)	NA	NA	NA	NS
4-Ethyltoluene	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	NA	NA	NA	NS
4-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NA	NA	ND (0.018)	ND (0.008)	ND (0.008)	NS
Acetone	NS	NS	NS	NS	NS	NS	ND (0.029)	ND (0.026)	NA	NA	NA	NS
Benzene	NS	NS	NS	NS	NS	NS	ND (0.0039)	ND (0.0035)	0.214	0.109	ND (0.008)	NS
Bromodichloromethane	NS	NS	NS	NS	NS	NS	ND (0.0082)	ND (0.0073)	ND (0.018)	ND (0.008)	ND (0.008)	NS
n-Butylbenzene	NS	NS	NS	NS	NS	NS	NA	NA	ND (0.018)	ND (0.008)	ND (0.008)	NS
sec-Butylbenzene	NS	NS	NS	NS	NS	NS	NA	NA	ND (0.018)	ND (0.008)	ND (0.008)	NS
tert-Butylbenzene	NS	NS	NS	NS	NS	NS	NA	NA	ND (0.018)	0.105	ND (0.008)	NS
Carbon disulfide	NS	NS	NS	NS	NS	NS	ND (0.015)	ND (0.014)	NA	NA	NA	NS
Carbon tetrachloride	NS	NS	NS	NS	NS	NS	ND (0.0077)	ND (0.0069)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Chloroform	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0053)	ND (0.018)	0.009	ND (0.008)	NS
Cyclohexane	NS	NS	NS	NS	NS	NS	ND (0.0042)	ND (0.0038)	NA	NA	NA	NS
Dichlorodifluoromethane (Freon 12)	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Ethanol	NS	NS	NS	NS	NS	NS	ND (0.0092)	ND (0.0082)	NA	NA	NA	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	ND (0.0053)	ND (0.0048)	ND (0.018)	0.124	0.258	NS
Heptane	NS	NS	NS	NS	NS	NS	ND (0.0050)	ND (0.0045)	NA	NA	NA	NS
Hexane	NS	NS	NS	NS	NS	NS	ND (0.0043)	ND (0.0038)	NA	NA	NA	NS
Isopropylbenzene (Cumene)	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	ND (0.018)	0.640	ND (0.008)	NS
Methylene chloride	NS	NS	NS	NS	NS	NS	ND (0.042)	ND (0.038)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Naphthalene	NS	NS	NS	NS	NS	NS	ND (0.026)	ND (0.023)	ND (0.018)	0.035	ND (0.008)	NS
n-Propylbenzene	NS	NS	NS	NS	NS	NS	ND (0.0060)	ND (0.0054)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Styrene	NS	NS	NS	NS	NS	NS	ND (0.0052)	ND (0.0047)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Tetrachloroethene	NS	NS	NS	NS	NS	NS	ND (0.0083)	ND (0.0074)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Toluene	NS	NS	NS	NS	NS	NS	ND (0.0046)	ND (0.0041)	1.56	0.211	0.036	NS
Trichlorofluoromethane (Freon 11)	NS	NS	NS	NS	NS	NS	ND (0.0068)	ND (0.0062)	ND (0.018)	ND (0.008)	ND (0.008)	NS
Vinyl Chloride	NS	NS	NS	NS	NS	NS	ND (0.0031)	ND (0.0028)	ND (0.018)	ND (0.008)	ND (0.008)	NS
m,p-Xylene	NS	NS	NS	NS	NS	NS	ND (0.0053)	ND (0.0048)	NA	NA	NA	NS
o-Xylene	NS	NS	NS	NS	NS	NS	ND (0.0053)	ND (0.0048)	NA	NA	NA	NS
Xylenes (total)	NS	NS	NS	NS	NS	NS	NA	NA	ND (0.018)	0.527	0.242	NS
Other VOCs	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-6											
Probe Location ID	SG-6	SG-6A										
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	8260B	8260B	TO-15	8260B	TO-15	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	2/12/08	10/12/09	CONF 10/12/09	4/26/10	CONF 4/26/10	10/13/10	6/29/11	10/4/11	11/7/12	4/20/13	10/17/13	4/9/2014
TPHg	NA	6.65	19	ND (0.08)	ND (1.7)	ND (0.080)	NS	ND (0.21)	ND (0.95)	ND (0.24)	ND (0.24)	ND (0.25)
1,2,4-Trichlorobenzene	ND (0.018)	ND (0.008)	ND (0.021)	ND (0.008)	ND (0.038)	ND (0.008)	NS	ND (0.031) UJ	ND (0.34)	ND (0.035)	ND (0.034)	ND (0.037)
1,2,4-Trimethylbenzene	ND (0.018)	0.342	0.054	ND (0.008)	ND (0.013)	ND (0.008)	NS	ND (0.0051)	ND (0.057)	0.0078	ND (0.0057)	ND (0.0061)
1,3,5-Trimethylbenzene	ND (0.018)	0.188	0.093	ND (0.008)	ND (0.020)	ND (0.008)	NS	ND (0.0051)	ND (0.057)	ND (0.0058)	ND (0.0057)	ND (0.0061)
1,3-Butadiene	NA	NA	NA	NA	NA	NA	NS	ND (0.0023)	ND (0.026)	ND (0.0026)	ND (0.0026)	ND (0.0027)
2,2,4-Trimethylpentane	NA	NA	NA	NA	NA	NA	NS	ND (0.0049)	ND (0.054)	ND (0.0055)	ND (0.0054)	ND (0.0058)
2-Butanone (MEK)	NA	NA	0.011 J	NA	ND (0.018)	NA	NS	ND (0.012)	ND (0.14)	ND (0.014)	ND (0.014)	ND (0.014)
4-Ethyltoluene	NA	NA	0.088	NA	ND (0.010)	NA	NS	ND (0.0051)	ND (0.057)	ND (0.0058)	ND (0.0057)	ND (0.0061)
4-Isopropyltoluene	ND (0.018)	0.057	NA	ND (0.008)	NA	ND (0.008)	NS	NA	NA	NA	NA	NA
Acetone	NA	NA	ND (0.0069)	NA	0.053	NA	NS	ND (0.0099)	ND (0.11)	ND (0.028)	ND (0.027)	ND (0.029)
Benzene	0.608	ND (0.008)	0.016	ND (0.008)	ND (0.0097)	ND (0.008)	NS	ND (0.0033)	ND (0.037)	ND (0.0038)	ND (0.0037)	ND (0.0039)
Bromodichloromethane	ND (0.018)	ND (0.008)	ND (0.0078)	ND (0.008)	ND (0.014)	ND (0.008)	NS	ND (0.0070)	ND (0.078)	ND (0.0079)	ND (0.0077)	ND (0.0083)
n-Butylbenzene	ND (0.018)	0.076	NA	ND (0.008)	NA	ND (0.008)	NS	NA	NA	NA	NA	NA
sec-Butylbenzene	ND (0.018)	0.301	NA	ND (0.008)	NA	ND (0.008)	NS	NA	NA	NA	NA	NA
tert-Butylbenzene	ND (0.018)	ND (0.008)	NA	ND (0.008)	NA	ND (0.008)	NS	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	0.019 J	NA	ND (0.025)	NA	NS	ND (0.013)	ND (0.036)	ND (0.015)	ND (0.014)	ND (0.015)
Carbon tetrachloride	ND (0.018)	ND (0.008)	ND (0.0073)	ND (0.008)	ND (0.013)	ND (0.008)	NS	ND (0.0066)	ND (0.073)	ND (0.0074)	ND (0.0073)	ND (0.0078)
Chloroform	ND (0.018)	ND (0.008)	0.010 J	ND (0.008)	ND (0.0099)	ND (0.008)	NS	0.068	ND (0.057)	ND (0.0058)	ND (0.0056)	ND (0.0060)
Cyclohexane	NA	NA	NA	NA	NA	NA	NS	ND (0.0036)	ND (0.040)	ND (0.0041)	ND (0.0040)	ND (0.0042)
Dichlorodifluoromethane (Freon 12)	ND (0.018)	ND (0.008)	ND (0.0086)	ND (0.008)	ND (0.010)	ND (0.008)	NS	ND (0.0052)	ND (0.058)	ND (0.0058)	ND (0.0057)	ND (0.0061)
Ethanol	NA	NA	NA	NA	NA	NA	NS	ND (0.0079)	ND (0.088)	0.016 UN	ND (0.0087)	ND (0.0093)
Ethylbenzene	0.940	0.649	0.082	ND (0.008)	ND (0.0088)	ND (0.008)	NS	ND (0.0045)	ND (0.050)	ND (0.0051)	ND (0.0050)	ND (0.0054)
Heptane	NA	NA	NA	NA	NA	NA	NS	ND (0.0043)	ND (0.048)	ND (0.0048)	ND (0.0047)	ND (0.0051)
Hexane	NA	NA	NA	NA	NA	NA	NS	ND (0.0037)	ND (0.041)	ND (0.0042)	ND (0.0041)	ND (0.0044)
Isopropylbenzene (Cumene)	ND (0.018)	0.095	NA	ND (0.008)	NA	ND (0.008)	NS	ND (0.0051)	ND (0.057)	ND (0.0058)	ND (0.0057)	ND (0.0061)
Methylene chloride	ND (0.018)	ND (0.008)	0.0096 UN	ND (0.008)	0.0095 J, UN	ND (0.008)	NS	ND (0.0036)	ND (0.040)	ND (0.041)	ND (0.040)	ND (0.043)
Naphthalene	ND (0.018)	ND (0.008)	0.023 J	ND (0.008)	ND (0.032)	ND (0.008)	NS	ND (0.022) UJ	ND (0.24)	ND (0.025)	ND (0.024)	ND (0.026)
n-Propylbenzene	ND (0.018)	0.021	NA	ND (0.008)	NA	ND (0.008)	NS	ND (0.0051)	ND (0.057)	ND (0.0058)	ND (0.0057)	ND (0.0061)
Styrene	ND (0.018)	ND (0.008)	ND (0.0049)	ND (0.008)	ND (0.0087)	ND (0.008)	NS	ND (0.0044)	ND (0.050)	ND (0.0050)	ND (0.0049)	ND (0.0053)
Tetrachloroethene	ND (0.018)	ND (0.008)	ND (0.0079)	ND (0.008)	ND (0.014)	ND (0.008)	NS	ND (0.0071)	ND (0.079)	ND (0.0080)	ND (0.0078)	ND (0.0084)
Toluene	5.97	0.141	0.052	ND (0.008)	0.0092 J	ND (0.008)	NS	ND (0.0039)	ND (0.044)	ND (0.0044)	ND (0.0044)	ND (0.0046)
Trichlorofluoromethane (Freon 11)	ND (0.018)	ND (0.008)	ND (0.0065)	ND (0.008)	ND (0.011)	ND (0.008)	NS	ND (0.0059)	ND (0.065)	ND (0.0066)	ND (0.0065)	ND (0.0069)
Vinyl Chloride	ND (0.018)	ND (0.008)	ND (0.0059)	ND (0.008)	ND (0.010)	ND (0.008)	NS	ND (0.0027)	ND (0.030)	ND (0.0030)	ND (0.0030)	ND (0.0032)
m,p-Xylene	NA	NA	NA	NA	NA	NA	NS	ND (0.0045)	ND (0.050)	ND (0.0051)	ND (0.0050)	ND (0.0054)
o-Xylene	NA	NA	NA	NA	NA	NA	NS	ND (0.0045)	ND (0.050)	ND (0.0051)	ND (0.0050)	ND (0.0054)
Xylenes (total)	6.00	1.14	0.40	ND (0.008)	ND (0.0088)	ND (0.008)	NS	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	0.0055 [4]

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-6												
Probe Location ID	SG-6A		SG-6	SG-6A									
Sample Depth (feet bgs)	5	5	15	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
EPA Analytical Method	TO-15	TO-15	8260B	8260B	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/9/14	4/16/15	2/12/08	10/12/09	4/26/10	DUP 4/26/10	10/13/10	CONF 10/13/2010	6/29/11	10/4/11	11/7/12	DUP 11/7/12	4/20/13
TPHg	ND (0.25)	ND (0.52)	NA	946	1,990	2,090	3,000	3,200	4,400	3,200	4,600	4,200	1,800
1,2,4-Trichlorobenzene	ND (0.037)	ND (0.037)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (2.2)	ND (1.8)	ND (8.3)	ND (8.6)	ND (11)	ND (1.8)
1,2,4-Trimethylbenzene	ND (0.0061)	ND (0.0062)	ND (0.018)	11.1	13.3	154	188	79	110	100	110	100	33
1,3,5-Trimethylbenzene	ND (0.0061)	ND (0.0062)	ND (0.018)	29.6	38.3	85.5	40.7	30	28	26	32	30	9.8
1,3-Butadiene	ND (0.0027)	ND (0.0028)	NA	NA	NA	NA	NA	NA	ND (0.13)	ND (0.62) UJ	ND (0.64)	ND (0.84)	ND (0.14)
2,2,4-Trimethylpentane	ND (0.0058)	ND (0.0059)	NA	NA	NA	NA	NA	NA	ND (0.28)	ND (1.3)	ND (1.4)	ND (1.8)	0.86
2-Butanone (MEK)	ND (0.015)	ND (0.015)	NA	NA	NA	NA	NA	ND (1.1)	ND (0.70)	ND (3.3)	ND (3.4)	ND (4.5)	ND (0.74)
4-Ethyltoluene	ND (0.0061)	ND (0.0062)	NA	NA	NA	NA	NA	48	46	48	54	48	17
4-Isopropyltoluene	NA	NA	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	0.540	NA	NA	NA	NA	NA	NA
Acetone	ND (0.029)	ND (0.030)	NA	NA	NA	NA	NA	ND (1.1)	ND (0.56)	ND (2.7)	ND (2.8)	ND (3.6)	ND (0.59)
Benzene	ND (0.0040)	ND (0.0040)	19.1	3.54	5.12	5.37	7.87	8.1	5.9	7.8	6.1	5.9	6.2
Bromodichloromethane	ND (0.0083)	ND (0.0084)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.81)	ND (0.40)	ND (1.9)	ND (1.9)	ND (2.6)	ND (0.42)
n-Butylbenzene	NA	NA	ND (0.018)	ND (0.02)	1.71	2.30	6.24	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	1.00	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	ND (0.018)	0.995	0.318	ND (0.4)	ND (0.008)	NA	NA	NA	NA	NA	NA
Carbon disulfide	ND (0.015)	ND (0.016)	NA	NA	NA	NA	NA	ND (1.5)	ND (0.18)	ND (0.87)	ND (0.91)	ND (1.2)	ND (0.19)
Carbon tetrachloride	ND (0.0078)	ND (0.0079)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.76)	ND (0.37)	ND (1.8)	ND (1.8)	ND (2.4)	ND (0.39)
Chloroform	ND (0.0060)	ND (0.0062)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.59)	ND (0.29)	ND (1.4)	ND (1.4)	ND (1.9)	ND (0.30)
Cyclohexane	ND (0.0043)	ND (0.0043)	NA	NA	NA	NA	NA	NA	6.6	7.4	5.7	5.3	5.4
Dichlorodifluoromethane (Freon 12)	ND (0.0061)	ND (0.0062)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.60)	ND (0.29)	ND (1.4)	ND (1.4)	ND (1.9)	ND (0.31)
Ethanol	ND (0.0093)	ND (0.0095)	NA	NA	NA	NA	NA	NA	ND (0.45)	ND (2.1)	ND (2.2)	ND (2.9)	ND (0.47)
Ethylbenzene	ND (0.0054)	ND (0.0055)	10.4	43.5	17.1	20.0	194	100	93	120	110	100	59
Heptane	ND (0.0051)	ND (0.0052)	NA	NA	NA	NA	NA	NA	47	55	44	41	38
Hexane	ND (0.0044)	ND (0.0044)	NA	NA	NA	NA	NA	NA	12	14	9.2	8.9	8.6
Isopropylbenzene (Cumene)	ND (0.0061)	ND (0.0062)	0.441	9.87	19.5	23.2	35.5	NA	15	19	20	18	7.8
Methylene chloride	ND (0.043)	ND (0.044)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.42)	ND (0.21)	ND (0.97)	ND (1.0)	ND (1.3)	ND (0.22)
Naphthalene	ND (0.026)	ND (0.026)	ND (0.018)	19.7	10.6	42.4	28.0	9.3	73 E	34	31	40	12
n-Propylbenzene	ND (0.0061)	ND (0.0062)	ND (0.018)	ND (0.02)	8.76	11.5	18.0	NA	10	12	13	12	4.0
Styrene	ND (0.0053)	ND (0.0054)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.51)	ND (0.25)	ND (1.2)	ND (1.2)	ND (1.6)	1.4
Tetrachloroethene	ND (0.0084)	ND (0.0085)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.82)	ND (0.40)	ND (1.9)	ND (2.0)	ND (2.6)	ND (0.42)
Toluene	ND (0.0047)	ND (0.0047)	99.3	70.0	124	138	148	96	76	100	49	45	30
Trichlorofluoromethane (Freon 11)	ND (0.0070)	ND (0.0071)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.68)	ND (0.33)	ND (1.6)	ND (1.6)	ND (2.1)	ND (0.35)
Vinyl Chloride	ND (0.0032)	ND (0.0032)	ND (0.018)	ND (0.02)	ND (0.008)	ND (0.4)	ND (0.008)	ND (0.62)	ND (0.15)	ND (0.72) UJ	ND (0.74)	ND (0.98)	ND (0.16)
m,p-Xylene	ND (0.0054)	0.0062	NA	NA	NA	NA	NA	NA	190	250	240	220	120
o-Xylene	ND (0.0054)	ND (0.0055)	NA	NA	NA	NA	NA	NA	140	170	66	62	31
Xylenes (total)	NA	NA	24.7	258	546	622	658	230	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-6									SG-7		SG-8	
Probe Location ID	SG-6A									SG-7		SG-8	
Sample Depth (feet bgs)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	5	15	5	5
EPA Analytical Method	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B	8260B	8260B	8260B
Sample Date	DUP 4/20/13	10/17/13	DUP 10/17/13	4/9/14	DUP 4/9/14	10/9/14	DUP 10/9/14	4/16/15	DUP 4/16/15	2/12/08	2/12/08	10/12/09	4/26/10
TPHg	1,700	5,300	4,000	2,500	3,200	4,000	4,000	2,600	2,500	NA	NA	ND (0.008)	2.14
1,2,4-Trichlorobenzene	ND (1.2)	ND (6.1)	ND (7.3)	ND (2.4)	ND (5.5)	ND (18)	ND (18)	ND (15) UJ	ND (14) UJ	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
1,2,4-Trimethylbenzene	32	150	130	61	96	170	180	96	120	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
1,3,5-Trimethylbenzene	9.3	37	32	15	23	39	36	25	26	ND (0.018)	ND (0.018)	ND (0.008)	0.293
1,3-Butadiene	ND (0.090)	ND (0.45)	ND (0.54)	ND (0.18)	ND (0.41)	ND (1.3)	ND (1.3)	ND (1.1)	ND (1.1)	NA	NA	NA	NA
2,2,4-Trimethylpentane	0.91	ND (0.96)	ND (1.1)	0.53	ND (0.87)	ND (2.8)	ND (2.8)	ND (2.3)	ND (2.2)	NA	NA	NA	NA
2-Butanone (MEK)	ND (0.48)	ND (2.4)	ND (2.9)	ND (0.94)	ND (2.2)	ND (7.0)	ND (7.0)	ND (5.8)	ND (5.7)	NA	NA	NA	NA
4-Ethyltoluene	16	66	57	28	42	69	72	48	53	NA	NA	NA	NA
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Acetone	ND (0.39)	ND (1.9)	ND (2.3)	ND (0.76)	ND (1.8)	ND (5.6)	ND (5.6)	ND (12)	ND (11)	NA	NA	NA	NA
Benzene	5.9	5.4	5.4	2.8	3.6	5.7	6.0	7.5	7.1	0.051	1.19	ND (0.008)	ND (0.008)
Bromodichloromethane	ND (0.27)	ND (1.4)	ND (1.6)	ND (0.53)	ND (1.2)	ND (4.0)	ND (4.0)	ND (3.3)	ND (3.2)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Carbon disulfide	ND (0.13)	ND (0.64)	ND (0.76)	ND (0.25)	ND (0.58)	ND (1.8)	ND (1.8)	ND (6.2)	ND (6.0)	NA	NA	NA	NA
Carbon tetrachloride	ND (0.26)	ND (1.3)	ND (1.5)	ND (0.50)	ND (1.2)	ND (3.7)	ND (3.7)	ND (3.1)	ND (3.0)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Chloroform	ND (0.20)	ND (1.0)	ND (1.2)	ND (0.39)	ND (0.91)	ND (2.9)	ND (2.9)	ND (2.4)	ND (2.3)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Cyclohexane	5.4	6.4	6.2	3.5	4.3	6.1	6.1	6.9	6.6	NA	NA	NA	NA
Dichlorodifluoromethane (Freon 12)	ND (0.20)	ND (1.0)	ND (1.2)	ND (0.39)	ND (0.92)	ND (2.9)	ND (2.9)	ND (2.4)	ND (2.4)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Ethanol	ND (0.31)	ND (1.5)	ND (1.8)	ND (0.60)	ND (1.4)	ND (4.5)	ND (4.5)	ND (3.7)	ND (3.6)	NA	NA	NA	NA
Ethylbenzene	56	140	130	70	93	150	150	150	160	1.26	0.358	ND (0.008)	0.019
Heptane	37	51	51	30	37	56	58	53	52	NA	NA	NA	NA
Hexane	8.7	8.4	8.6	4.8	5.8	10	10	9.7	9.6	NA	NA	NA	NA
Isopropylbenzene (Cumene)	7.4	25	23	12	16	27	27	22	25	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Methylene chloride	ND (0.14)	ND (0.71)	ND (0.85)	ND (0.28)	ND (0.65)	ND (2.1)	ND (2.1)	ND (17)	ND (17)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Naphthalene	11	58	55	25	60	88	90	ND (10)	12	ND (0.018)	ND (0.018)	ND (0.008)	0.263
n-Propylbenzene	3.7	16.0	14	6.1	9.0	15	15	11	13	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Styrene	1.3	3.2	2.9	ND (0.34)	ND (0.79)	ND (2.5)	ND (2.5)	ND (2.1)	ND (2.0)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Tetrachloroethene	ND (0.28)	ND (1.4)	ND (1.7)	ND (0.54)	ND (1.3)	ND (4.0)	ND (4.0)	ND (3.4)	ND (3.2)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Toluene	28	46	43	33	42	90	91	100	100	2.01	6.97	ND (0.008)	0.031
Trichlorofluoromethane (Freon 11)	ND (0.23)	ND (1.2)	ND (1.4)	ND (0.45)	ND (1.0)	ND (3.3)	ND (3.3)	ND (2.8)	ND (2.7)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
Vinyl Chloride	ND (0.10)	ND (0.52)	ND (0.63)	ND (0.20)	ND (0.48)	ND (1.5)	ND (1.5)	ND (1.3)	ND (1.2)	ND (0.018)	ND (0.018)	ND (0.008)	ND (0.008)
m,p-Xylene	110	280	260	150	200	360	360	330	370	NA	NA	NA	NA
o-Xylene	30	76	71	47	64	130	130	160	170	NA	NA	NA	NA
Xylenes (total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.0	1.10	ND (0.008)	0.473
Other VOCs	ND	ND	1.4 [4]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-8										
Probe Location ID	SG-8										
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5	14.5
EPA Analytical Method	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B
Sample Date	10/13/10	6/28/11	10/3/11	DUP 10/3/11	11/7/12	4/20/13	10/16/13	4/8/2014	10/7/14	4/14/15	10/12/09
TPHg	ND (0.080)	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.24)	0.66	ND (0.24)	ND (0.24)	ND (0.23)	ND (0.47)	ND (0.008)
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.036)	ND (0.034) UJ	ND (0.034) UJ	ND (0.034)	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.034)	ND (0.034)	ND (0.008)
1,2,4-Trimethylbenzene	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	0.040	ND (0.0057)	ND (0.0058)	ND (0.0056)	ND (0.0057)	ND (0.008)
1,3,5-Trimethylbenzene	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	0.011	ND (0.0057)	ND (0.0058)	ND (0.0056)	ND (0.0057)	ND (0.008)
1,3-Butadiene	NA	ND (0.0027)	ND (0.0026)	ND (0.0026)	ND (0.0025)	ND (0.0028)	ND (0.0026)	ND (0.0026)	ND (0.0025)	ND (0.0026)	NA
2,2,4-Trimethylpentane	NA	ND (0.0056)	ND (0.0054)	ND (0.0054)	ND (0.0054)	0.0076	ND (0.0054)	ND (0.0055)	ND (0.0053)	ND (0.0054)	NA
2-Butanone (MEK)	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.015)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	NA
4-Ethyltoluene	NA	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	0.030	ND (0.0057)	ND (0.0058)	ND (0.0056)	ND (0.0057)	NA
4-Isopropyltoluene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)
Acetone	NA	0.028 UN	0.032 UN	0.017 UN	ND (0.027)	ND (0.030)	ND (0.028)	ND (0.028)	ND (0.027)	ND (0.028)	NA
Benzene	ND (0.008)	ND (0.0039)	ND (0.0037)	ND (0.0037)	ND (0.0037)	ND (0.0040)	ND (0.0037)	ND (0.0038)	ND (0.0036)	ND (0.0037)	ND (0.008)
Bromodichloromethane	ND (0.008)	ND (0.0081)	ND (0.0078)	ND (0.0078)	ND (0.0077)	ND (0.0084)	ND (0.0078)	ND (0.0079)	ND (0.0076)	ND (0.0078)	ND (0.008)
n-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)
sec-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)
tert-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)
Carbon disulfide	NA	ND (0.015)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.016)	ND (0.014)	ND (0.015)	ND (0.014)	ND (0.014)	NA
Carbon tetrachloride	ND (0.008)	ND (0.0076)	ND (0.0073)	ND (0.0073)	ND (0.0072)	ND (0.0079)	ND (0.0073)	ND (0.0074)	ND (0.0071)	ND (0.0073)	ND (0.008)
Chloroform	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	ND (0.0061)	0.020	0.020	0.018	0.010	ND (0.008)
Cyclohexane	NA	ND (0.0042)	ND (0.0040)	ND (0.0040)	0.0044	ND (0.0043)	ND (0.0040)	ND (0.0041)	ND (0.0039)	ND (0.0040)	NA
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.0060)	ND (0.0058)	ND (0.0058)	ND (0.0057)	ND (0.0062)	ND (0.0058)	ND (0.0059)	ND (0.0056)	ND (0.0057)	ND (0.008)
Ethanol	NA	ND (0.0091)	ND (0.0088)	ND (0.0088)	ND (0.0087)	0.051 J+	ND (0.0088)	ND (0.0089)	ND (0.0086)	ND (0.0087)	NA
Ethylbenzene	ND (0.008)	ND (0.0052)	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.0070	ND (0.0050)	ND (0.0051)	ND (0.0049)	ND (0.0050)	ND (0.008)
Heptane	NA	ND (0.0050)	ND (0.0048)	ND (0.0048)	ND (0.0047)	ND (0.0051)	ND (0.0048)	ND (0.0048)	ND (0.0046)	ND (0.0048)	NA
Hexane	NA	ND (0.0043)	ND (0.0041)	ND (0.0041)	ND (0.0040)	ND (0.0044)	ND (0.0041)	ND (0.0042)	ND (0.0040)	ND (0.0041)	NA
Isopropylbenzene (Cumene)	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	ND (0.0061)	ND (0.0057)	ND (0.0058)	ND (0.0056)	ND (0.0057)	ND (0.008)
Methylene chloride	ND (0.008)	ND (0.0042)	ND (0.0040)	ND (0.0040)	ND (0.040)	ND (0.043)	ND (0.040)	ND (0.041)	ND (0.039)	ND (0.040)	ND (0.008)
Naphthalene	ND (0.008)	ND (0.025)	ND (0.024) UJ	ND (0.024) UJ	ND (0.024)	ND (0.026)	ND (0.024)	ND (0.025)	ND (0.024)	ND (0.024)	ND (0.008)
n-Propylbenzene	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0057)	ND (0.0056)	ND (0.0061)	ND (0.0057)	ND (0.0058)	ND (0.0056)	ND (0.0057)	ND (0.008)
Styrene	ND (0.008)	ND (0.0052)	ND (0.0050)	ND (0.0050)	ND (0.0049)	ND (0.0053)	ND (0.0050)	ND (0.0050)	ND (0.0048)	ND (0.0049)	ND (0.008)
Tetrachloroethene	ND (0.008)	ND (0.0082)	ND (0.0079)	ND (0.0079)	ND (0.0078)	ND (0.0085)	ND (0.0079)	ND (0.0080)	ND (0.0077)	ND (0.0079)	ND (0.008)
Toluene	ND (0.008)	ND (0.0046)	ND (0.0044)	ND (0.0044)	ND (0.0043)	0.015	ND (0.0044)	ND (0.0045)	0.0058	ND (0.0044)	ND (0.008)
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.0068)	ND (0.0065)	ND (0.0065)	ND (0.0065)	ND (0.0070)	ND (0.0065)	ND (0.0066)	ND (0.0064)	ND (0.0065)	ND (0.008)
Vinyl Chloride	ND (0.008)	ND (0.0031)	ND (0.0030)	ND (0.0030)	ND (0.0029)	ND (0.0032)	ND (0.0030)	ND (0.0030)	ND (0.0029)	ND (0.0030)	ND (0.008)
m,p-Xylene	NA	ND (0.0052)	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.031	ND (0.0050)	ND (0.0051)	ND (0.0049)	ND (0.0050)	NA
o-Xylene	NA	ND (0.0052)	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.017	ND (0.0050)	ND (0.0051)	ND (0.0049)	ND (0.0050)	NA
Xylenes (total)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)
Other VOCs	ND	ND	ND	ND	0.0081 [3]	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-8										SG-9		
Probe Location ID	SG-8										SG-9		
Sample Depth (feet bgs)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	5	5	5
EPA Analytical Method	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	8260B	8260B	8260B
Sample Date	4/26/10	10/13/10	6/28/11	10/3/11	11/7/12	4/19/13	10/16/13	4/8/2014	10/7/14	4/14/15	10/12/09	DUP 10/12/09	4/26/10
TPHg	5.73	ND (0.080)	ND (0.24)	ND (0.24)	ND (0.24)	1.1	ND (0.24)	ND (0.24)	ND (0.25)	ND (0.46)	0.180	0.195	6.76
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.008)	ND (0.035)	ND (0.034) UJ	ND (0.035)	ND (0.037)	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.034)	ND (0.008)	ND (0.008)	ND (0.008)
1,2,4-Trimethylbenzene	ND (0.008)	ND (0.008)	ND (0.0058)	ND (0.0056)	ND (0.0058)	0.054	ND (0.0058)	ND (0.0058)	ND (0.0060)	ND (0.0056)	0.058	0.070	0.360
1,3,5-Trimethylbenzene	0.319	ND (0.008)	ND (0.0058)	ND (0.0056)	ND (0.0058)	0.014	ND (0.0058)	ND (0.0058)	ND (0.0060)	ND (0.0056)	ND (0.008)	ND (0.008)	0.120
1,3-Butadiene	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0026)	ND (0.0027)	ND (0.0026)	ND (0.0026)	ND (0.0027)	ND (0.0025)	NA	NA	NA
2,2,4-Trimethylpentane	NA	NA	ND (0.0056)	ND (0.0054)	ND (0.0055)	0.014	ND (0.0055)	ND (0.0055)	ND (0.0057)	ND (0.0053)	NA	NA	NA
2-Butanone (MEK)	NA	NA	ND (0.014)	ND (0.014)	0.44 J+	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.013)	NA	NA	NA
4-Ethyltoluene	NA	NA	ND (0.0058)	ND (0.0056)	ND (0.0058)	0.038	ND (0.0058)	ND (0.0058)	ND (0.0060)	ND (0.0056)	NA	NA	NA
4-Isopropyltoluene	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	0.048	0.042	ND (0.008)
Acetone	NA	NA	0.015 UN	0.017 UN	0.074 J+	0.032	ND (0.028)	ND (0.028)	ND (0.029)	ND (0.027)	NA	NA	NA
Benzene	ND (0.008)	ND (0.008)	ND (0.0038)	ND (0.0037)	ND (0.0038)	ND (0.0039)	ND (0.0038)	ND (0.0038)	ND (0.0039)	ND (0.0036)	ND (0.008)	ND (0.008)	ND (0.008)
Bromodichloromethane	ND (0.008)	ND (0.008)	ND (0.0080)	ND (0.0077)	ND (0.0079)	ND (0.0083)	ND (0.0079)	ND (0.0079)	ND (0.0081)	ND (0.0076)	ND (0.008)	ND (0.008)	ND (0.008)
n-Butylbenzene	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)	ND (0.008)	0.011
sec-Butylbenzene	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	0.073	0.083	ND (0.008)
tert-Butylbenzene	ND (0.008)	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.008)	ND (0.008)	ND (0.008)
Carbon disulfide	NA	NA	ND (0.015)	ND (0.014)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.014)	NA	NA	NA
Carbon tetrachloride	ND (0.008)	ND (0.008)	ND (0.0075)	ND (0.0072)	ND (0.0074)	ND (0.0078)	ND (0.0074)	ND (0.0074)	ND (0.0076)	ND (0.0071)	ND (0.008)	ND (0.008)	ND (0.008)
Chloroform	ND (0.008)	ND (0.008)	ND (0.0058)	ND (0.0056)	ND (0.0058)	0.20	0.033	ND (0.0058)	ND (0.0059)	ND (0.0055)	ND (0.008)	ND (0.008)	ND (0.008)
Cyclohexane	NA	NA	ND (0.0041)	ND (0.0040)	ND (0.0041)	0.0046	ND (0.0041)	ND (0.0041)	0.0049	ND (0.0039)	NA	NA	NA
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.008)	ND (0.0059)	ND (0.0057)	ND (0.0059)	ND (0.0061)	ND (0.0058)	ND (0.0059)	ND (0.0060)	ND (0.0056)	ND (0.008)	ND (0.008)	ND (0.008)
Ethanol	NA	NA	ND (0.0090)	ND (0.0087)	ND (0.0089)	0.11	ND (0.0089)	ND (0.0089)	ND (0.0092)	0.0088	NA	NA	NA
Ethylbenzene	0.559	ND (0.008)	ND (0.0052)	ND (0.0050)	ND (0.0051)	0.011	ND (0.0051)	ND (0.0051)	ND (0.0053)	ND (0.0049)	ND (0.008)	ND (0.008)	1.25
Heptane	NA	NA	ND (0.0049)	ND (0.0047)	ND (0.0048)	ND (0.0051)	ND (0.0048)	ND (0.0048)	ND (0.0050)	ND (0.0046)	NA	NA	NA
Hexane	NA	NA	ND (0.0042)	ND (0.0040)	ND (0.0042)	ND (0.0044)	ND (0.0042)	ND (0.0042)	ND (0.0043)	ND (0.0040)	NA	NA	NA
Isopropylbenzene (Cumene)	ND (0.008)	ND (0.008)	ND (0.0058)	ND (0.0056)	ND (0.0058)	ND (0.0061)	ND (0.0058)	ND (0.0058)	ND (0.0060)	ND (0.0056)	ND (0.008)	ND (0.008)	ND (0.008)
Methylene chloride	ND (0.008)	ND (0.008)	0.0044 UN	ND (0.0040)	ND (0.041)	ND (0.043)	ND (0.041)	ND (0.041)	ND (0.042)	ND (0.039)	ND (0.008)	ND (0.008)	ND (0.008)
Naphthalene	0.199	ND (0.008)	ND (0.025)	ND (0.024) UJ	ND (0.025)	ND (0.026)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.024)	ND (0.008)	ND (0.008)	0.100
n-Propylbenzene	ND (0.008)	ND (0.008)	ND (0.0058)	ND (0.0056)	ND (0.0058)	0.0060	ND (0.0058)	ND (0.0058)	ND (0.0060)	ND (0.0056)	ND (0.008)	ND (0.008)	ND (0.008)
Styrene	ND (0.008)	ND (0.008)	ND (0.0051)	ND (0.0049)	ND (0.0050)	ND (0.0053)	ND (0.0050)	ND (0.0050)	ND (0.0052)	ND (0.0048)	ND (0.008)	ND (0.008)	ND (0.008)
Tetrachloroethene	ND (0.008)	ND (0.008)	ND (0.0081)	ND (0.0078)	ND (0.0080)	ND (0.0084)	ND (0.0080)	ND (0.0080)	ND (0.0082)	ND (0.0077)	ND (0.008)	ND (0.008)	ND (0.008)
Toluene	0.529	ND (0.008)	ND (0.0045)	ND (0.0043)	ND (0.0045)	0.028	ND (0.0044)	ND (0.0045)	ND (0.0046)	ND (0.0042)	ND (0.008)	ND (0.008)	0.431
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.008)	ND (0.0067)	ND (0.0065)	ND (0.0066)	ND (0.0069)	ND (0.0066)	ND (0.0066)	ND (0.0068)	ND (0.0063)	ND (0.008)	ND (0.008)	ND (0.008)
Vinyl Chloride	ND (0.008)	ND (0.008)	ND (0.0030)	ND (0.0029)	ND (0.0030)	ND (0.0032)	ND (0.0030)	ND (0.0030)	ND (0.0031)	ND (0.0029)	ND (0.008)	ND (0.008)	ND (0.008)
m,p-Xylene	NA	NA	ND (0.0052)	ND (0.0050)	ND (0.0051)	0.047	ND (0.0051)	ND (0.0051)	ND (0.0053)	ND (0.0049)	NA	NA	NA
o-Xylene	NA	NA	ND (0.0052)	ND (0.0050)	ND (0.0051)	0.020	ND (0.0051)	ND (0.0051)	ND (0.0053)	ND (0.0049)	NA	NA	NA
Xylenes (total)	1.83	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	ND (0.007)	ND (0.007)	2.49
Other VOCs	ND	ND	ND	ND	0.061 J+ [4]	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-9									
Probe Location ID	SG-9									
Sample Depth (feet bgs)	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/13/10	6/27/11	10/4/11	DUP 10/4/11	11/8/12	4/20/13	10/16/13	4/8/2014	10/8/14	4/15/15
TPHg	8.61	ND (0.23)	ND (0.24)	ND (0.25)	14	1.5	2.0	0.79	2.1	1.6
1,2,4-Trichlorobenzene	ND (0.008)	ND (0.034)	ND (0.035)	ND (0.036)	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.035)	ND (0.035)	ND (0.035)
1,2,4-Trimethylbenzene	0.718	ND (0.0056)	ND (0.0058)	ND (0.0059)	0.011	0.025	0.011	0.0060	0.0062	0.014
1,3,5-Trimethylbenzene	0.103	ND (0.0056)	ND (0.0058)	ND (0.0059)	ND (0.0058)	0.0087	ND (0.0059)	ND (0.0059)	ND (0.0058)	ND (0.0058)
1,3-Butadiene	NA	ND (0.0025)	ND (0.0026)	ND (0.0027)	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)
2,2,4-Trimethylpentane	NA	ND (0.0053)	ND (0.0055)	ND (0.0056)	ND (0.0055)	0.032	ND (0.0056)	ND (0.0056)	ND (0.0055)	ND (0.0056)
2-Butanone (MEK)	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	0.023	ND (0.014)
4-Ethyltoluene	NA	ND (0.0056)	ND (0.0058)	ND (0.0059)	0.012	0.022	0.0071	ND (0.0059)	0.0072	0.014
4-Isopropyltoluene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	ND (0.011)	0.014 UN	0.014 UN	ND (0.028)	ND (0.028)	0.048	0.058	ND (0.028)	ND (0.028)
Benzene	ND (0.008)	ND (0.0036)	ND (0.0038)	ND (0.0039)	0.0070	0.0042	ND (0.0038)	ND (0.0038)	ND (0.0038)	0.0054
Bromodichloromethane	ND (0.008)	ND (0.0077)	ND (0.0079)	ND (0.0081)	ND (0.0079)	ND (0.0079)	ND (0.0080)	ND (0.0080)	ND (0.0079)	ND (0.0080)
n-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ND (0.008)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	ND (0.014)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)
Carbon tetrachloride	ND (0.008)	ND (0.0072)	ND (0.0074)	ND (0.0076)	ND (0.0074)	ND (0.0074)	ND (0.0076)	ND (0.0075)	ND (0.0074)	ND (0.0075)
Chloroform	ND (0.008)	ND (0.0056)	ND (0.0057)	ND (0.0059)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0058)	ND (0.0057)	ND (0.0058)
Cyclohexane	NA	ND (0.0039)	ND (0.0040)	ND (0.0042)	0.027	0.022	0.026	0.025	0.015	0.0099
Dichlorodifluoromethane (Freon 12)	ND (0.008)	ND (0.0057)	ND (0.0058)	ND (0.0060)	ND (0.0059)	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0058)	ND (0.0059)
Ethanol	NA	ND (0.0086)	ND (0.0088)	ND (0.0091)	ND (0.0089)	0.11	ND (0.0090)	ND (0.0090)	ND (0.0088)	0.010
Ethylbenzene	0.285	ND (0.0050)	ND (0.0051)	ND (0.0052)	0.022	0.016	0.010	ND (0.0052)	0.0053	0.012
Heptane	NA	ND (0.0047)	ND (0.0048)	ND (0.0050)	0.062	0.0084	0.042	0.023	0.059	0.058
Hexane	NA	ND (0.0040)	ND (0.0041)	ND (0.0043)	0.024	0.005	0.019	0.013	0.027	0.027
Isopropylbenzene (Cumene)	0.031	ND (0.0056)	ND (0.0058)	ND (0.0059)	0.029	ND (0.0058)	0.010	ND (0.0059)	ND (0.0058)	0.011
Methylene chloride	ND (0.008)	ND (0.0040)	ND (0.0041)	ND (0.0042)	ND (0.041)	ND (0.041)	ND (0.042)	ND (0.042)	ND (0.041)	ND (0.041)
Naphthalene	0.217	ND (0.024)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.025)	ND (0.025)
n-Propylbenzene	ND (0.008)	ND (0.0056)	ND (0.0058)	ND (0.0059)	0.012	ND (0.0058)	ND (0.0059)	ND (0.0059)	ND (0.0058)	0.0071
Styrene	ND (0.008)	ND (0.0049)	ND (0.0050)	ND (0.0052)	ND (0.0050)	ND (0.0050)	ND (0.0051)	ND (0.0051)	ND (0.0050)	ND (0.0051)
Tetrachloroethene	ND (0.008)	ND (0.0078)	ND (0.0080)	ND (0.0082)	ND (0.0080)	ND (0.0080)	ND (0.0081)	ND (0.0081)	ND (0.0080)	ND (0.0081)
Toluene	0.156	ND (0.0043)	ND (0.0044)	ND (0.0046)	0.013	0.048	0.0060	ND (0.0045)	0.013	0.018
Trichlorofluoromethane (Freon 11)	ND (0.008)	ND (0.0064)	ND (0.0066)	ND (0.0068)	ND (0.0066)	ND (0.0066)	ND (0.0067)	ND (0.0067)	ND (0.0066)	ND (0.0067)
Vinyl Chloride	ND (0.008)	ND (0.0029)	ND (0.0030)	ND (0.0031)	ND (0.0030)	ND (0.0030)	ND (0.0031)	ND (0.0030)	ND (0.0030)	ND (0.0030)
m,p-Xylene	NA	ND (0.0050)	ND (0.0051)	ND (0.0052)	0.052	0.075	0.036	0.017	0.023	0.032
o-Xylene	NA	ND (0.0050)	ND (0.0051)	ND (0.0052)	0.026	0.025	0.011	ND (0.0052)	0.0064	0.017
Xylenes (total)	1.27	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	0.0044 [4]	0.0051 [8]	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-9												
Probe Location ID	SG-9A			SG-9									
Sample Depth (feet bgs)	10	10	10	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
EPA Analytical Method	TO-15	TO-15	TO-15	8260B	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/24/11	11/8/12	4/8/14	10/12/09	4/26/10	DUP 4/26/10	10/13/10	6/27/11	10/4/11	11/8/12	4/19/13	10/15/13	4/8/14
TPHg	NS	NS	NS	6.2	5.58	6.52	NS	3.7	NS	1.1	ND (0.22)	ND (0.25)	NS
1,2,4-Trichlorobenzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.034)	NS	ND (0.036)	ND (0.032)	ND (0.036)	NS
1,2,4-Trimethylbenzene	NS	NS	NS	ND (0.008)	0.229	0.251	NS	ND (0.0056)	NS	0.0090	0.0064	ND (0.0060)	NS
1,3,5-Trimethylbenzene	NS	NS	NS	ND (0.008)	0.070	0.085	NS	ND (0.0056)	NS	ND (0.0060)	ND (0.0054)	ND (0.0060)	NS
1,3-Butadiene	NS	NS	NS	NA	NA	NA	NS	ND (0.0025)	NS	ND (0.0027)	ND (0.0024)	ND (0.0027)	NS
2,2,4-Trimethylpentane	NS	NS	NS	NA	NA	NA	NS	ND (0.0053)	NS	ND (0.0057)	ND (0.0051)	ND (0.0057)	NS
2-Butanone (MEK)	NS	NS	NS	NA	NA	NA	NS	ND (0.014)	NS	ND (0.014)	ND (0.013)	ND (0.014)	NS
4-Ethyltoluene	NS	NS	NS	NA	NA	NA	NS	0.0088	NS	0.0070	ND (0.0054)	ND (0.0060)	NS
4-Isopropyltoluene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	NA	NS	NA	NA	NA	NS
Acetone	NS	NS	NS	NA	NA	NA	NS	0.012 UN	NS	ND (0.029)	ND (0.026)	ND (0.029)	NS
Benzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	0.0062	NS	ND (0.0039)	ND (0.0035)	ND (0.0039)	NS
Bromodichloromethane	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0077)	NS	ND (0.0082)	ND (0.0073)	ND (0.0081)	NS
n-Butylbenzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	NA	NS	NA	NA	NA	NS
sec-Butylbenzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	NA	NS	NA	NA	NA	NS
tert-Butylbenzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	NA	NS	NA	NA	NA	NS
Carbon disulfide	NS	NS	NS	NA	NA	NA	NS	ND (0.014)	NS	ND (0.015)	ND (0.014)	ND (0.015)	NS
Carbon tetrachloride	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0072)	NS	ND (0.0077)	ND (0.0069)	ND (0.0076)	NS
Chloroform	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0056)	NS	ND (0.0060)	ND (0.0053)	ND (0.0059)	NS
Cyclohexane	NS	NS	NS	NA	NA	NA	NS	0.020	NS	ND (0.0042)	ND (0.0038)	ND (0.0042)	NS
Dichlorodifluoromethane (Freon 12)	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0057)	NS	ND (0.0060)	ND (0.0054)	ND (0.0060)	NS
Ethanol	NS	NS	NS	NA	NA	NA	NS	ND (0.0086)	NS	0.011	0.038 UN	ND (0.0092)	NS
Ethylbenzene	NS	NS	NS	ND (0.008)	0.022	0.011	NS	0.017	NS	0.011	ND (0.0048)	ND (0.0053)	NS
Heptane	NS	NS	NS	NA	NA	NA	NS	0.036	NS	ND (0.0050)	ND (0.0045)	ND (0.0050)	NS
Hexane	NS	NS	NS	NA	NA	NA	NS	0.014	NS	ND (0.0043)	ND (0.0038)	ND (0.0043)	NS
Isopropylbenzene (Cumene)	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	0.029	NS	ND (0.0060)	ND (0.0054)	ND (0.0060)	NS
Methylene chloride	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0040)	NS	ND (0.042)	ND (0.038)	ND (0.042)	NS
Naphthalene	NS	NS	NS	ND (0.008)	0.195	0.170	NS	ND (0.024)	NS	ND (0.026)	ND (0.023)	ND (0.025)	NS
n-Propylbenzene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	0.0095	NS	ND (0.0060)	ND (0.0054)	ND (0.0060)	NS
Styrene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0049)	NS	ND (0.0052)	ND (0.0047)	ND (0.0052)	NS
Tetrachloroethene	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0078)	NS	ND (0.0083)	ND (0.0074)	ND (0.0082)	NS
Toluene	NS	NS	NS	ND (0.008)	0.340	0.371	NS	0.013	NS	0.018	ND (0.0041)	ND (0.0046)	NS
Trichlorofluoromethane (Freon 11)	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0064)	NS	ND (0.0068)	ND (0.0062)	ND (0.0068)	NS
Vinyl Chloride	NS	NS	NS	ND (0.008)	ND (0.008)	ND (0.008)	NS	ND (0.0029)	NS	ND (0.0031)	ND (0.0028)	ND (0.0031)	NS
m,p-Xylene	NS	NS	NS	NA	NA	NA	NS	0.047	NS	0.047	0.0052	ND (0.0053)	NS
o-Xylene	NS	NS	NS	NA	NA	NA	NS	0.028	NS	0.018	ND (0.0048)	ND (0.0053)	NS
Xylenes (total)	NS	NS	NS	ND (0.007)	1.79	1.88	NS	NA	NS	NA	NA	NA	NS
Other VOCs	NS	NS	NS	ND	ND	ND	NS	ND	NS	NS	ND	ND	NS

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-9		SG-10										
Probe Location ID	SG-9		SG-10										
Sample Depth (feet bgs)	14.5	14.5	5	5	5	5	5	5	5	5	5	5	5
EPA Analytical Method	TO-15	TO-15	8260B	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/8/14	4/15/15	10/12/09	4/26/10	10/13/10	DUP 10/13/10	6/27/11	REP 6/27/11	10/24/11	11/8/12	4/19/13	10/16/13	4/9/14
TPHg	ND (0.24)	ND (0.49)	1.26	3.22	1,480	1,300	ND (0.25)	ND (0.25)	ND (0.16)	ND (0.24)	0.47	ND (0.24)	ND (0.24)
1,2,4-Trichlorobenzene	ND (0.035)	ND (0.036)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.037)	ND (0.037)	ND (0.024)	ND (0.034)	ND (0.033)	ND (0.035)	ND (0.035)
1,2,4-Trimethylbenzene	ND (0.0059)	ND (0.0059)	0.113	0.092	43.5	39.8	ND (0.0061)	ND (0.0061)	ND (0.0039)	ND (0.0056)	0.0090	ND (0.0058)	ND (0.0058)
1,3,5-Trimethylbenzene	ND (0.0059)	ND (0.0059)	0.030	ND (0.008)	24.5	21.9	ND (0.0061)	ND (0.0061)	ND (0.0039)	ND (0.0056)	ND (0.0054)	ND (0.0058)	ND (0.0058)
1,3-Butadiene	ND (0.0026)	ND (0.0027)	NA	NA	NA	NA	ND (0.0027)	ND (0.0027)	ND (0.0018)	ND (0.0025)	ND (0.0024)	ND (0.0026)	ND (0.0026)
2,2,4-Trimethylpentane	ND (0.0056)	ND (0.0056)	NA	NA	NA	NA	ND (0.0058)	ND (0.0058)	ND (0.0037)	ND (0.0054)	ND (0.0052)	0.035	ND (0.0055)
2-Butanone (MEK)	ND (0.014)	ND (0.014)	NA	NA	NA	NA	ND (0.014)	ND (0.014)	ND (0.0094)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)
4-Ethyltoluene	ND (0.0059)	ND (0.0059)	NA	NA	NA	NA	ND (0.0061)	ND (0.0061)	ND (0.0039)	ND (0.0056)	0.0073	ND (0.0058)	ND (0.0058)
4-Isopropyltoluene	NA	NA	0.090	ND (0.008)	ND (0.008)	ND (0.4)	NA	NA	NA	NA	NA	NA	NA
Acetone	ND (0.028)	0.044	NA	NA	NA	NA	ND (0.012)	ND (0.012)	ND (0.0076)	ND (0.027)	0.027	ND (0.028)	ND (0.028)
Benzene	ND (0.0038)	ND (0.0038)	0.050	ND (0.008)	0.580	0.500	ND (0.0039)	ND (0.0039)	ND (0.0026)	ND (0.0037)	ND (0.0035)	ND (0.0038)	ND (0.0038)
Bromodichloromethane	ND (0.0080)	ND (0.0081)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0083)	ND (0.0083)	ND (0.0054)	ND (0.0077)	ND (0.0074)	ND (0.0079)	ND (0.0079)
n-Butylbenzene	NA	NA	0.060	ND (0.008)	ND (0.008)	ND (0.4)	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	0.120	ND (0.008)	ND (0.008)	ND (0.4)	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ND (0.015)	ND (0.015)	NA	NA	NA	NA	ND (0.015)	ND (0.015)	ND (0.010)	ND (0.014)	ND (0.014)	ND (0.015)	ND (0.015)
Carbon tetrachloride	ND (0.0075)	ND (0.0076)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0078)	ND (0.0078)	ND (0.0050)	ND (0.0072)	ND (0.0070)	ND (0.0074)	ND (0.0074)
Chloroform	ND (0.0058)	ND (0.0059)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0060)	ND (0.0060)	ND (0.0039)	ND (0.0056)	ND (0.0054)	ND (0.0058)	0.0069
Cyclohexane	ND (0.0041)	ND (0.0041)	NA	NA	NA	NA	ND (0.0042)	ND (0.0042)	ND (0.0028)	ND (0.0040)	0.0055	ND (0.0041)	ND (0.0041)
Dichlorodifluoromethane (Freon 12)	ND (0.0059)	ND (0.0060)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0061)	ND (0.0061)	ND (0.0040)	ND (0.0057)	ND (0.0055)	ND (0.0059)	ND (0.0058)
Ethanol	ND (0.0090)	ND (0.0091)	NA	NA	NA	NA	ND (0.0093)	ND (0.0093)	ND (0.0060)	ND (0.0087)	0.18	ND (0.0089)	ND (0.0089)
Ethylbenzene	ND (0.0052)	ND (0.0052)	0.201	0.283	152	132	ND (0.0054)	ND (0.0054)	ND (0.0035)	ND (0.0050)	ND (0.0048)	ND (0.0051)	ND (0.0051)
Heptane	ND (0.0049)	ND (0.0049)	NA	NA	NA	NA	ND (0.0051)	ND (0.0051)	ND (0.0033)	ND (0.0047)	ND (0.0045)	0.011	ND (0.0048)
Hexane	ND (0.0042)	ND (0.0042)	NA	NA	NA	NA	ND (0.0044)	ND (0.0044)	ND (0.0028)	ND (0.0040)	ND (0.0039)	0.014	ND (0.0042)
Isopropylbenzene (Cumene)	ND (0.0059)	ND (0.0059)	0.024	ND (0.008)	3.95	2.66	ND (0.0061)	ND (0.0061)	ND (0.0039)	ND (0.0056)	ND (0.0054)	ND (0.0058)	ND (0.0058)
Methylene chloride	ND (0.042)	ND (0.042)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	0.0056 UN	0.0050 UN	ND (0.0028)	ND (0.040)	ND (0.038)	ND (0.041)	ND (0.041)
Naphthalene	ND (0.025)	ND (0.025)	ND (0.008)	ND (0.008)	18.5	22.5	ND (0.026)	ND (0.026)	ND (0.017)	ND (0.024)	ND (0.023)	ND (0.025)	ND (0.025)
n-Propylbenzene	ND (0.0059)	ND (0.0059)	ND (0.008)	ND (0.008)	2.69	2.03	ND (0.0061)	ND (0.0061)	ND (0.0039)	ND (0.0056)	ND (0.0054)	ND (0.0058)	ND (0.0058)
Styrene	ND (0.0051)	ND (0.0051)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0053)	ND (0.0053)	ND (0.0034)	ND (0.0049)	ND (0.0047)	ND (0.0050)	ND (0.0050)
Tetrachloroethene	ND (0.0081)	ND (0.0082)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0084)	ND (0.0084)	ND (0.0054)	ND (0.0078)	ND (0.0075)	ND (0.0080)	ND (0.0080)
Toluene	ND (0.0045)	ND (0.0045)	0.129	0.290	60.3	54.6	ND (0.0046)	ND (0.0046)	ND (0.0030)	ND (0.0043)	0.020	ND (0.0045)	ND (0.0044)
Trichlorofluoromethane (Freon 11)	ND (0.0067)	ND (0.0068)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0069)	ND (0.0069)	ND (0.0045)	ND (0.0065)	ND (0.0062)	ND (0.0066)	ND (0.0066)
Vinyl Chloride	ND (0.0030)	ND (0.0031)	ND (0.008)	ND (0.008)	ND (0.008)	ND (0.4)	ND (0.0032)	ND (0.0032)	ND (0.0020)	ND (0.0029)	ND (0.0028)	ND (0.0030)	ND (0.0030)
m,p-Xylene	ND (0.0052)	ND (0.0052)	NA	NA	NA	NA	ND (0.0054)	ND (0.0054)	ND (0.0035)	ND (0.0050)	0.015	ND (0.0051)	ND (0.0051)
o-Xylene	ND (0.0052)	ND (0.0052)	NA	NA	NA	NA	ND (0.0054)	ND (0.0054)	ND (0.0035)	ND (0.0050)	0.0053	ND (0.0051)	ND (0.0051)
Xylenes (total)	NA	NA	0.291	0.963	360	322	NA	NA	NA	NA	NA	NA	NA
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Probe Group	SG-10													
Probe Location ID	SG-10													
Sample Depth (feet bgs)	5	5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
EPA Analytical Method	TO-15	TO-15	8260B	8260B	8260B	8260B	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Sample Date	10/9/14	4/16/15	10/12/09	DUP 10/12/09	4/26/10	10/13/10	6/27/11	10/24/11	11/18/12	4/19/13	10/16/13	4/9/14	10/9/14	4/16/15
TPHg	ND (0.24)	ND (0.47)	4.03	4.55	2.77	10.2	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	ND (0.035)	ND (0.034)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	ND (0.0058)	ND (0.0056)	ND (0.02)	ND (0.008)	ND (0.008)	0.552	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ND (0.0058)	ND (0.0056)	ND (0.02)	ND (0.008)	ND (0.008)	0.090	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Butadiene	ND (0.0026)	ND (0.0025)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
2,2,4-Trimethylpentane	ND (0.0056)	ND (0.0054)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	ND (0.014)	ND (0.014)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
4-Ethyltoluene	ND (0.0058)	ND (0.0056)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
4-Isopropyltoluene	NA	NA	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	ND (0.028)	ND (0.027)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	ND (0.0038)	ND (0.0037)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ND (0.0080)	ND (0.0077)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	NA	NA	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	NA	NA	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	NA	NA	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ND (0.015)	ND (0.014)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	ND (0.0075)	ND (0.0072)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	0.025	0.012	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexane	ND (0.0041)	ND (0.0040)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane (Freon 12)	ND (0.0059)	ND (0.0057)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Ethanol	ND (0.0090)	ND (0.0087)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	ND (0.0052)	ND (0.0050)	ND (0.02)	ND (0.008)	ND (0.008)	0.357	NS	NS	NS	NS	NS	NS	NS	NS
Heptane	ND (0.0049)	ND (0.0047)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Hexane	ND (0.0042)	ND (0.0040)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene (Cumene)	ND (0.0058)	ND (0.0056)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	ND (0.041)	ND (0.040)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ND (0.025)	ND (0.024)	ND (0.02)	ND (0.008)	0.034	1.73	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ND (0.0058)	ND (0.0056)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	ND (0.0051)	ND (0.0049)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ND (0.0081)	ND (0.0078)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	ND (0.0045)	ND (0.0043)	ND (0.02)	ND (0.008)	0.201	0.113	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane (Freon 11)	ND (0.0067)	ND (0.0065)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride	ND (0.0030)	ND (0.0029)	ND (0.02)	ND (0.008)	ND (0.008)	ND (0.008)	NS	NS	NS	NS	NS	NS	NS	NS
m,p-Xylene	ND (0.0052)	ND (0.0050)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ND (0.0052)	ND (0.0050)	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes (total)	NA	NA	0.205	0.191	0.771	1.07	NS	NS	NS	NS	NS	NS	NS	NS
Other VOCs	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Summary of TPHg and Detected VOCs in Soil Gas
Former Watsonville-1 MGP
Watsonville, California

Notes:
Analytical results are presented in micrograms per liter (ug/L).
"ND (##)" indicates the consitituent was not detected at or above the laboratory reporting limit.
On 2/12/08 and 2/13/08, a purge test was conducted on soil gas samples collected from 15 feet at probe SG-7. Sample volumes were collected at 1, 3 and 7 volumes (1P, 3P and 7P, respectively). The highest concentrations for the compounds of interest were detected in the 1-purge-volume sample. As a result, soil gas samples from all remaining probes were collected after purging 1 volume of air.
On 10/12/09, a purge test was conducted on soil gas samples collected from 5 feet and 15 feet at probe SG-6A. Sample volumes were collected at 1, 3 and 10 volumes (1P, 3P and 10P, respectively). The highest concentrations for the compounds of interest were detected in the 3-purge-volume and 10-purge-volume samples, respectively. As a result, soil gas samples from all remaining probes were collected after purging 3 volumes of air for the 5-foot samples and 10 volumes of air for the 9-foot or 15-foot samples.
On 4/26/10, a purge test was conducted on soil gas samples collected from 5 feet and 15 feet at probe SG-4A. Sample volumes were collected at 1, 3 and 10 volumes (1P, 3P and 10P, respectively). The highest concentrations for the compounds of interest were detected in the 3-purge-volume and 10-purge-volume samples, respectively. As a result, soil gas samples from all remaining probes were collected after purging 3 volumes of air for the 5-foot samples and 10 volumes of air for the 9-foot or 15-foot samples.
On 10/13/10, a purge test was conducted on soil gas samples collected from 5 feet and 15 feet at probe SG-4A. Sample volumes were collected at 1, 3, 7 and 10 volumes (1P, 3P, 7P and 10P, respectively). The highest concentrations for the compounds of interest were detected in the 3-purge-volume samples. As a result, soil gas samples from all remaining probes were collected after purging 3 volumes of air.
Samples taken since June 2011 were collected after purging 3 volumes of air per the TO-15 Method guidance.
CONF = confirmation sample
DUP = duplicate sample
REP = replicate sample
NA = not analyzed
TPHg = Total petroleum hydrocarbons quantified as gasoline
VOC = volatile organic compound
EPA = United States Environmental Protection Agency
JA = estimated value because of interference by non-target compounds
J- = Estimated value with a potential low bias.
J = estimated value; analyte detected at a concentration less than the reporting limit and greater than or equal to the method detection limit
J+ = estimated value; analyte detected at a concentration between 5 and 20 times the value detected in the associated field blank.
UN = Result is estimated due to possible contamination in the field QC blanks. Result is less than five times the amount reported in the blank(s).
NS = Not sampled due to no or low flow conditions or shallow water in probe tubing.
E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS
1 = Bromomethane (USEPA Method TO-15)
2 = Chloroethane (USEPA Method TO-15)
3 = Chlorobenzene (USEPA Method TO-15)
4 = Tetrahydrofuran (USEPA Method TO-15)
5 = 1,4-Dioxane (USEPA Method TO-15)
6 = Trichloroethene (USEPA Method TO-15)
7 = 2-Propanol (USEPA Method TO-15)
8 = Methyl tert-butyl ether (USEPA Method TO-15)

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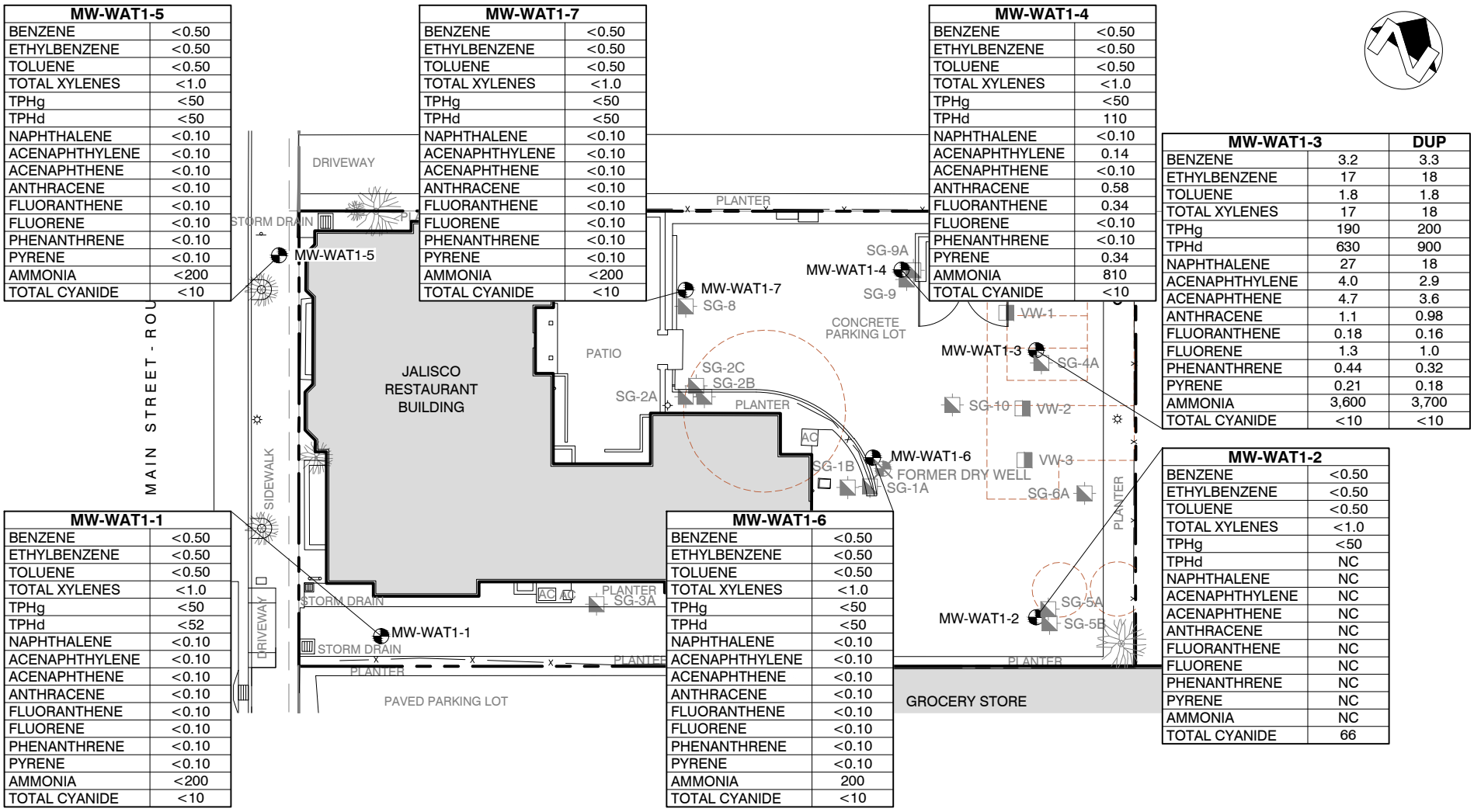


MW-WAT1-5	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	<50
NAPHTHALENE	<0.10
ACENAPHTHYLENE	<0.10
ACENAPHTHENE	<0.10
ANTHRACENE	<0.10
FLUORANTHENE	<0.10
FLUORENE	<0.10
PHENANTHRENE	<0.10
PYRENE	<0.10
AMMONIA	<200
TOTAL CYANIDE	<10

MW-WAT1-7	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	<50
NAPHTHALENE	<0.10
ACENAPHTHYLENE	<0.10
ACENAPHTHENE	<0.10
ANTHRACENE	<0.10
FLUORANTHENE	<0.10
FLUORENE	<0.10
PHENANTHRENE	<0.10
PYRENE	<0.10
AMMONIA	<200
TOTAL CYANIDE	<10

MW-WAT1-4	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	110
NAPHTHALENE	<0.10
ACENAPHTHYLENE	0.14
ACENAPHTHENE	<0.10
ANTHRACENE	0.58
FLUORANTHENE	0.34
FLUORENE	<0.10
PHENANTHRENE	<0.10
PYRENE	0.34
AMMONIA	810
TOTAL CYANIDE	<10

MW-WAT1-3		DUP
BENZENE	3.2	3.3
ETHYLBENZENE	17	18
TOLUENE	1.8	1.8
TOTAL XYLENES	17	18
TPHg	190	200
TPHd	630	900
NAPHTHALENE	27	18
ACENAPHTHYLENE	4.0	2.9
ACENAPHTHENE	4.7	3.6
ANTHRACENE	1.1	0.98
FLUORANTHENE	0.18	0.16
FLUORENE	1.3	1.0
PHENANTHRENE	0.44	0.32
PYRENE	0.21	0.18
AMMONIA	3,600	3,700
TOTAL CYANIDE	<10	<10

MW-WAT1-2	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	NC
NAPHTHALENE	NC
ACENAPHTHYLENE	NC
ACENAPHTHENE	NC
ANTHRACENE	NC
FLUORANTHENE	NC
FLUORENE	NC
PHENANTHRENE	NC
PYRENE	NC
AMMONIA	NC
TOTAL CYANIDE	66

MW-WAT1-1	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	<52
NAPHTHALENE	<0.10
ACENAPHTHYLENE	<0.10
ACENAPHTHENE	<0.10
ANTHRACENE	<0.10
FLUORANTHENE	<0.10
FLUORENE	<0.10
PHENANTHRENE	<0.10
PYRENE	<0.10
AMMONIA	<200
TOTAL CYANIDE	<10

MW-WAT1-6	
BENZENE	<0.50
ETHYLBENZENE	<0.50
TOLUENE	<0.50
TOTAL XYLENES	<1.0
TPHg	<50
TPHd	<50
NAPHTHALENE	<0.10
ACENAPHTHYLENE	<0.10
ACENAPHTHENE	<0.10
ANTHRACENE	<0.10
FLUORANTHENE	<0.10
FLUORENE	<0.10
PHENANTHRENE	<0.10
PYRENE	<0.10
AMMONIA	200
TOTAL CYANIDE	<10

EXPLANATION

- MW-WAT1-7 — MONITORING WELL
- SG-5B — PERMANENT SOIL GAS PROBE
- VW-3 — VAPOR WELL
- FORMER DRY WELL
- HISTORICAL FEATURE
- PROPERTY LINE

0 30 60 FEET
APPROXIMATE SCALE

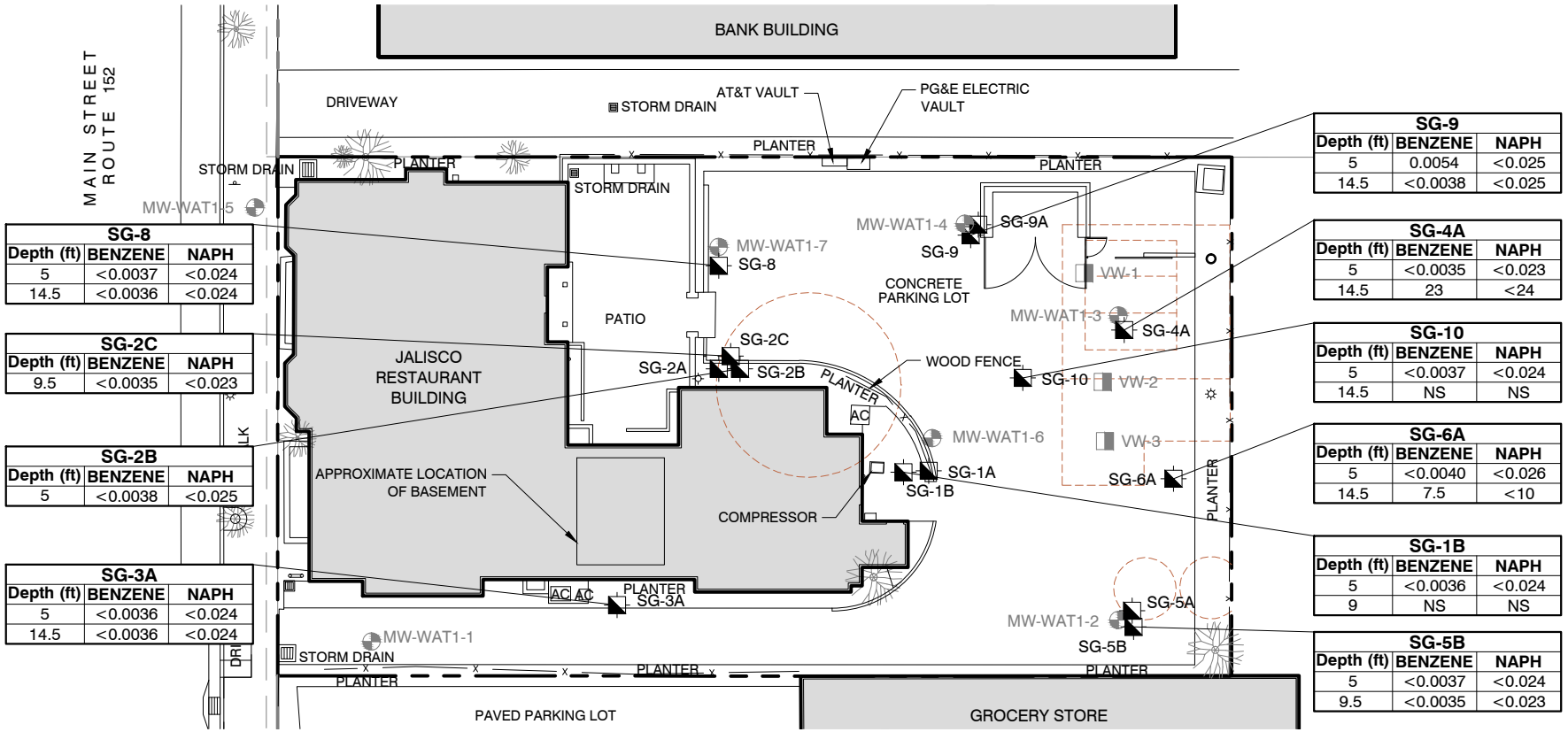
NOTES:
1. <"x" INDICATES NOT DETECTED AT OR ABOVE THE STATED LABORATORY REPORTING LIMIT OF "x"
2. ALL RESULTS PRESENTED IN MICROGRAMS PER LITER
3. ANALYTES TESTED FOR BUT NOT DETECTED IN ANY SAMPLES ARE NOT PRESENTED ON THIS FIGURE.
4. RESULTS PRESENTED ON THIS FIGURE MAY BE ESTIMATED; SEE TABLES 3 AND 4 FOR DATA QUALIFIER DEFINITIONS.
5. NC INDICATES SAMPLE WAS NOT COLLECTED DUE TO INSUFFICIENT WATER COLUMN.

FIGURE 4

DETECTED CHEMICAL CONCENTRATIONS IN GROUNDWATER APRIL 2015

FORMER WATSONVILLE-1 MANUFACTURED GAS PLANT
WATSONVILLE, CALIFORNIA

TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction



SG-8		
Depth (ft)	BENZENE	NAPH
5	<0.0037	<0.024
14.5	<0.0036	<0.024

SG-2C		
Depth (ft)	BENZENE	NAPH
9.5	<0.0035	<0.023

SG-2B		
Depth (ft)	BENZENE	NAPH
5	<0.0038	<0.025

SG-3A		
Depth (ft)	BENZENE	NAPH
5	<0.0036	<0.024
14.5	<0.0036	<0.024

SG-9		
Depth (ft)	BENZENE	NAPH
5	0.0054	<0.025
14.5	<0.0038	<0.025

SG-4A		
Depth (ft)	BENZENE	NAPH
5	<0.0035	<0.023
14.5	23	<24

SG-10		
Depth (ft)	BENZENE	NAPH
5	<0.0037	<0.024
14.5	NS	NS

SG-6A		
Depth (ft)	BENZENE	NAPH
5	<0.0040	<0.026
14.5	7.5	<10

SG-1B		
Depth (ft)	BENZENE	NAPH
5	<0.0036	<0.024
9	NS	NS

SG-5B		
Depth (ft)	BENZENE	NAPH
5	<0.0037	<0.024
9.5	<0.0035	<0.023

EXPLANATION

SG-5B — PERMANENT SOIL GAS PROBE

MW-WAT1-7 — MONITORING WELL

VW-3 — VAPOR WELL

HISTORICAL FEATURE

PROPERTY LINE

SG-6A		
Depth (ft)	BENZENE	NAPH
5	<0.0040	<0.026
14.5	7.5	<10

DEPTH IN FEET BELOW GROUND SURFACE

PROBE ID

NAPHTHALENE

CHEMICAL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER (µg/L)

0 30 60 FEET

APPROXIMATE SCALE

NOTES:
1. <"x" INDICATES NOT DETECTED AT OR ABOVE THE STATED LABORATORY REPORTING LIMIT OF "x".
2. NS INDICATES NOT SAMPLED DUE TO NO OR LOW FLOW CONDITIONS OR WATER IN THE TUBING.
3. RESULTS PRESENTED ON THIS FIGURE MAY BE ESTIMATED; SEE TABLE 5 FOR DATA QUALIFIER DEFINITIONS.

FIGURE 7

BENZENE AND NAPHTHALENE CONCENTRATIONS IN SOIL GAS APRIL 2015

FORMER WATSONVILLE-1
MANUFACTURED GAS PLANT
WATSONVILLE, CALIFORNIA

TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction

Table and Figure – Residual Soil PAHs (Post Removal Action)

Final Removal Action Completion Report,

Terra Pacific Group, dated October 27, 2011.

TABLE 10
SUMMARY OF REPRESENTATIVE POST-EXCAVATION CPAH DATA FOR ON-SITE SOIL
Former Watsonville-1 MGP Site
Watsonville, California

Sample ID [a]	Sample Depth (ft bgs)	Sample Date	Benzo(a)pyrene Equivalent [b] (mg/kg)
B-WAT1-1-10-11.5	11.5	6/23/1991	0.069
B-WAT1-1-15-16.5	16.5	6/23/1991	0.067
B-WAT1-1-3.5-5	5	6/23/1991	0.068
B-WAT1-2-1-10	10.0	3/13/2001	0.0055
B-WAT1-2-1-15	15.0	3/13/2001	0.0055
B-WAT1-2-1-6.5	6.5	3/13/2001	0.0055
B-WAT1-3-1-10	10.0	3/13/2001	0.0055
B-WAT1-3-1-15	15.0	3/13/2001	0.0055
B-WAT1-3-1-6.5	6.5	3/13/2001	0.0055
DSS-WAT1-1	0.0	6/24/1991	0.24
DSS-WAT1-4	0.0	6/24/1991	0.30
GP1-10-10.5	10.5	5/11/2004	0.43
GP1-15-15.5	15.5	5/11/2004	21
GP1-2.5-3	3	5/11/2004	1.6
GP1-20-20.5	20.5	5/11/2004	0.75
GP1-24-24.5	24.5	5/11/2004	0.0029
GP1-5-5.5	5.5	5/11/2004	0.073
GP2-10-10.5	10.5	5/11/2004	0.0029
GP2-15-15.5	15.5	5/11/2004	1.6
GP2-2.5-3	3	5/11/2004	6.4
GP2-5-5.5	5.5	5/11/2004	1.1
GP3-10-10.5	10.5	5/11/2004	0.0029
GP3-15-15.5	15.5	5/11/2004	0.0029
GP3-2.5-3	3	5/11/2004	0.0033
GP3-20-20.5	20.5	5/11/2004	7.4
GP3-23.5-24	24	5/11/2004	0.0058
GP3-5-5.5	5.5	5/11/2004	0.0029
GP4-10-10.5	10.5	5/11/2004	3.4
GP4-15-15.5	15.5	5/11/2004	18
GP4-2.5-3	3	5/11/2004	1.0
GP4-20-20.5	20.5	5/11/2004	0.0029
GP4-23.5-24	24	5/11/2004	0.0029
GP4-5-5.5	5.5	5/11/2004	3.8
HA1-0-0.5	0.5	5/10/2004	0.61
HA10-0-0.5	0.5	5/10/2004	0.32
HA10-1.5-2	2	5/10/2004	0.087
HA10-2.5-3	3	5/10/2004	0.017
HA1-2.5-3	3	5/10/2004	0.0087
HA1-4-4.5	4.5	5/10/2004	0.0029
HA2-0-0.5	0.5	5/10/2004	1.3
HA2-1-1.5	1.5	5/10/2004	0.010
HA2-2.5-3	3	5/10/2004	0.0036

TABLE 10
SUMMARY OF REPRESENTATIVE POST-EXCAVATION CPAH DATA FOR ON-SITE SOIL
Former Watsonville-1 MGP Site
Watsonville, California

Sample ID [a]	Sample Depth (ft bgs)	Sample Date	Benzo(a)pyrene Equivalent [b] (mg/kg)
HA2-4-4.5	4.5	5/10/2004	0.0029
HA3-2.5-3	3	5/10/2004	0.17
HA3-4-4.5	4.5	5/10/2004	0.0029
HA4-2.5-3	3	5/10/2004	0.0029
HA4-4-4.5	4.5	5/10/2004	0.0029
HA5-2.5-3	3	5/10/2004	0.0029
HA5-4-4.5	4.5	5/10/2004	0.0029
HA6-0-0.5	0.5	5/10/2004	0.78
HA6-1-1.5	1.5	5/10/2004	0.24
HA6-2.5-3	3	5/10/2004	0.015
HA6-3-3.5	3.5	5/10/2004	0.0084
HA6-4-4.5	4.5	5/10/2004	0.0029
HA7-2.5-3	3	5/10/2004	0.0029
HA7-4-4.5	4.5	5/10/2004	0.0029
HA8-0-0.5	0.5	5/10/2004	0.12
HA8-1.5-2	2	5/10/2004	0.86
HA8-2.5-3	3	5/10/2004	0.0029
HA8-4-4.5	4.5	5/10/2004	0.033
MW-WAT1-1-12-13	13.0	6/22/1991	0.067
MW-WAT1-1-18-19	19.0	6/22/1991	0.066
MW-WAT1-1-20-21.5	21.5	6/22/1991	0.065
MW-WAT1-1-3-5	5.0	6/22/1991	0.068
MW-WAT1-1-8-10	10.0	6/22/1991	0.068
MW-WAT1-2-10-11.5	11.5	6/23/1991	0.067
MW-WAT1-2-11.5-13	13	6/23/1991	0.067
MW-WAT1-2-13-15	15	6/23/1991	10
MW-WAT1-2-15-16.5	16.5	6/23/1991	0.067
MW-WAT1-2-4-5	5.0	6/23/1991	10
MW-WAT1-2-5-6.5	6.5	6/23/1991	5.9
MW-WAT1-3-10-11.5	11.5	6/24/1991	12
MW-WAT1-3-13-15	15	6/24/1991	17
MW-WAT1-3-15-16.5	16.5	6/24/1991	14
MW-WAT1-3-18-20	20	6/24/1991	0.67
MW-WAT1-3-20-21.5	21.5	6/24/1991	0.069
MW-WAT1-3-23-25	25	6/24/1991	0.067
MW-WAT1-3-25-26.5	26.5	6/24/1991	0.067
MW-WAT1-3-3.5-6	6	6/24/1991	0.068
MW-WAT1-4-1-10	10.0	3/13/2001	0.0058
MW-WAT1-4-1-15	15.0	3/13/2001	0.0055
MW-WAT1-4-1-20	20.0	3/13/2001	0.59
MW-WAT1-4-1-6.5	6.5	3/13/2001	0.0078
MW-WAT1-5-1-10	10.0	3/14/2001	0.0055

TABLE 10
SUMMARY OF REPRESENTATIVE POST-EXCAVATION CPAH DATA FOR ON-SITE SOIL
Former Watsonville-1 MGP Site
Watsonville, California

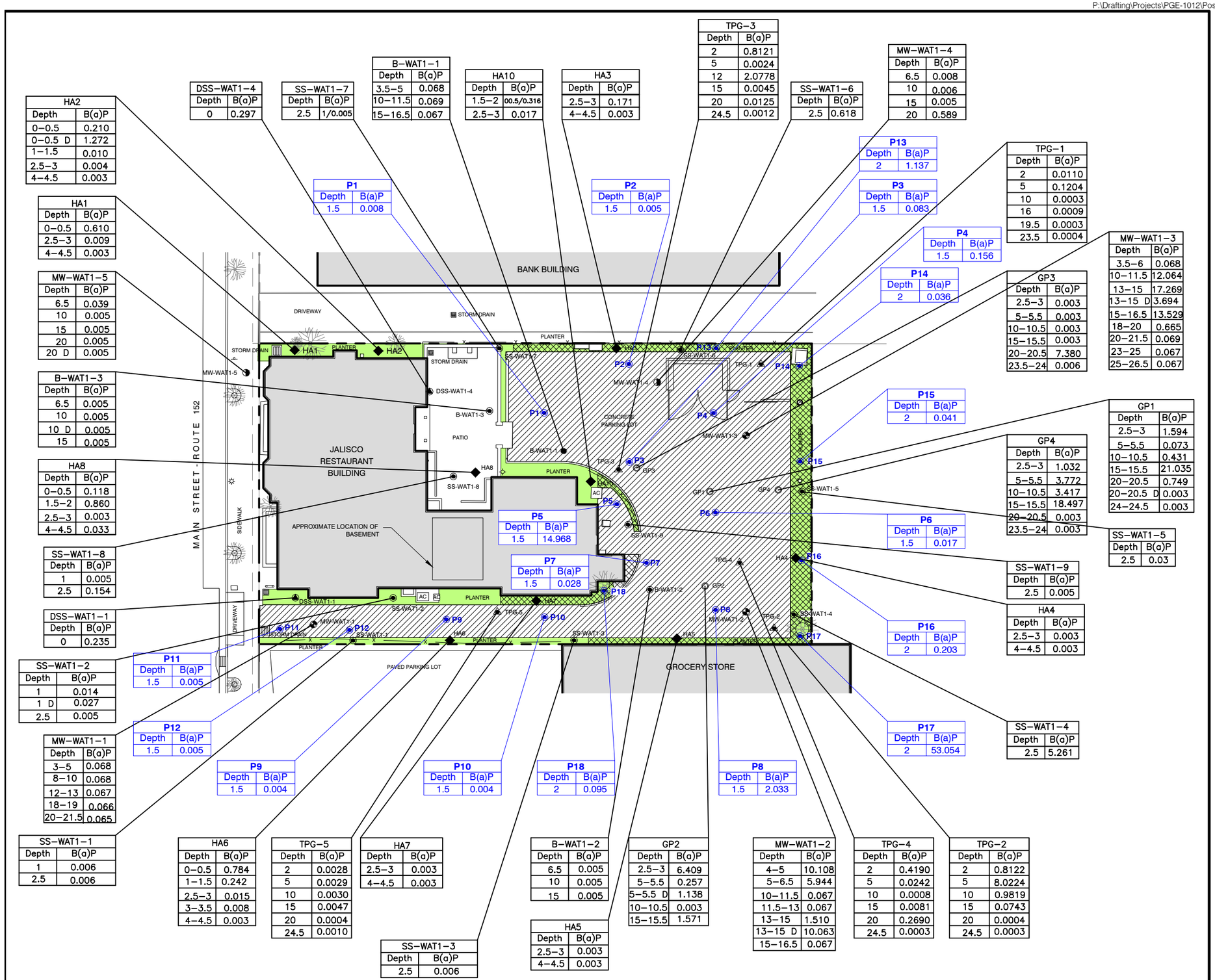
Sample ID [a]	Sample Depth (ft bgs)	Sample Date	Benzo(a)pyrene Equivalent [b] (mg/kg)
MW-WAT1-5-1-15	15.0	3/14/2001	0.0055
MW-WAT1-5-1-20	20.0	3/14/2001	0.0055
MW-WAT1-5-1-6.5	6.5	3/14/2001	0.039
P1-1.5	1.5	3/13/2012	0.0080
P2-1.5	1.5	3/13/2012	0.0050
P3-1.5	1.5	3/13/2012	0.083
P4-1.5	1.5	3/22/2012	0.16
P5-1.5	1.5	3/22/2012	15
P6-1.5	1.5	3/22/2012	0.017
P7-1.5	1.5	3/29/2012	0.028
P8-1.5	1.5	3/29/2012	2.0
P9-1.5	1.5	4/2/2012	0.0040
P10-1.5	1.5	4/2/2012	0.0040
P11-1.5	1.5	4/3/2012	0.0050
P12-1.5	1.5	4/3/2012	0.0050
P13-2	2.0	4/19/2012	1.1
P14-2	2.0	4/19/2012	0.036
P15-2	2.0	4/19/2012	0.041
P16-2	2.0	4/19/2012	0.20
P17-2	2.0	4/19/2012	53
P18-2	2.0	4/25/2012	0.095
SS-WAT1-0401	2.5	3/26/2001	5.3
SS-WAT1-0501	2.5	3/26/2001	0.030
SS-WAT1-1-1-12"	1.0	3/14/2001	0.0060
SS-WAT1-1-1-30"	2.5	3/14/2001	0.0060
SS-WAT1-2-1-30"	2.5	3/14/2001	0.0055
SS-WAT1-2-2-12"	1.0	3/14/2001	0.027
SS-WAT1-3-1-30"	2.5	3/14/2001	0.0060
SS-WAT1-6-1-30"	2.5	3/14/2001	0.62
SS-WAT1-7-1-12"	1.0	3/14/2001	0.0050
SS-WAT1-7-1-30"	2.5	3/14/2001	0.0090
SS-WAT1-8-1-12"	1.0	3/14/2001	0.0050
SS-WAT1-8-1-30"	2.5	3/14/2001	0.15
SS-WAT1-9-1-30"	2.5	3/14/2001	0.0050
TPG-1-10	10.0	2/13/2008	0.00032
TPG-1-16	16.0	2/13/2008	0.00091
TPG-1-19.5	19.5	2/13/2008	0.00034
TPG-1-2	2.0	2/13/2008	0.011
TPG-1-23.5	23.5	2/13/2008	0.00036
TPG-1-5	5.0	2/13/2008	0.12
TPG-2-10	10.0	2/13/2008	0.98
TPG-2-15	15.0	2/13/2008	0.074

TABLE 10
SUMMARY OF REPRESENTATIVE POST-EXCAVATION CPAH DATA FOR ON-SITE SOIL
Former Watsonville-1 MGP Site
Watsonville, California

Sample ID [a]	Sample Depth (ft bgs)	Sample Date	Benzo(a)pyrene Equivalent [b] (mg/kg)
TPG-2-2	2.0	2/13/2008	0.81
TPG-2-20	20.0	2/13/2008	0.00037
TPG-2-24.5	24.5	2/13/2008	0.00034
TPG-2-5	5.0	2/13/2008	8.0
TPG-3-12	12.0	2/12/2008	2.1
TPG-3-15	15.0	2/12/2008	0.0045
TPG-3-2	2.0	2/12/2008	0.81
TPG-3-20	20.0	2/12/2008	0.013
TPG-3-24.5	24.5	2/12/2008	0.0012
TPG-3-5	5.0	2/12/2008	0.0024
TPG-4-10	10.0	2/13/2008	0.00080
TPG-4-15	15.0	2/13/2008	0.0081
TPG-4-2	2.0	2/13/2008	0.42
TPG-4-20	20.0	2/13/2008	0.27
TPG-4-24.5	24.5	2/13/2008	0.00029
TPG-4-5	5.0	2/13/2008	0.024
TPG-5-10	10.0	2/13/2008	0.0030
TPG-5-15	15.0	2/13/2008	0.0047
TPG-5-2	2.0	2/13/2008	0.0028
TPG-5-20	20.0	2/13/2008	0.00039
TPG-5-24.5	24.5	2/13/2008	0.00098
TPG-5-5	5.0	2/13/2008	0.0029

Notes:
mg/kg = milligrams per kilogram
ft = feet
bgs = below ground surface
CPAH = Carcinogenic Polycyclic Aromatic Hydrocarbons (expressed in benzo(a)pyrene equivalents)
[a] Higher benzo(a)pyrene equivalent value from the primary or duplicate sample is included in the
[b] Values in bold and italics are based on non-detects for all seven carcinogenic polycyclic aromatic

P:\Drafting\Projects\PGE-1012\Post Remed\004-PGE-1012-Post Remed-PAH Conc Map-Fig4.dwg 12/10/2012 12:34:56 PM PST



HA2	
Depth	B(a)P
0–0.5	0.210
0–0.5 D	1.272
1–1.5	0.010
2.5–3	0.004
4–4.5	0.003

DSS–WAT1–4	
Depth	B(a)P
0	0.297

SS–WAT1–7	
Depth	B(a)P
2.5	1/0.005

B–WAT1–1	
Depth	B(a)P
3.5–5	0.068
10–11.5	0.069
15–16.5	0.067

HA10	
Depth	B(a)P
1.5–2	00.5/0.316
2.5–3	0.017

HA3	
Depth	B(a)P
2.5–3	0.171
4–4.5	0.003

TPG–3	
Depth	B(a)P
2	0.8121
5	0.0024
12	2.0778
15	0.0045
20	0.0125
24.5	0.0012

SS–WAT1–6	
Depth	B(a)P
2.5	0.618

MW–WAT1–4	
Depth	B(a)P
6.5	0.008
10	0.006
15	0.005
20	0.589

P1	
Depth	B(a)P
1.5	0.008

P2	
Depth	B(a)P
1.5	0.005

P13	
Depth	B(a)P
2	1.137

P3	
Depth	B(a)P
1.5	0.083

TPG–1	
Depth	B(a)P
2	0.0110
5	0.1204
10	0.0003
16	0.0009
19.5	0.0003
23.5	0.0004

P4	
Depth	B(a)P
1.5	0.156

P14	
Depth	B(a)P
2	0.036

GP3	
Depth	B(a)P
2.5–3	0.003
5–5.5	0.003
10–10.5	0.003
15–15.5	0.003
20–20.5	7.380
23.5–24	0.006

MW–WAT1–3	
Depth	B(a)P
3.5–6	0.068
10–11.5	12.064
13–15	17.269
13–15 D	3.694
15–16.5	13.529
18–20	0.665
20–21.5	0.069
23–25	0.067
25–26.5	0.067

P15	
Depth	B(a)P
2	0.041

GP4	
Depth	B(a)P
2.5–3	1.032
5–5.5	3.772
10–10.5	3.417
15–15.5	18.497
20–20.5	0.003
23.5–24	0.003

GP1	
Depth	B(a)P
2.5–3	1.594
5–5.5	0.073
10–10.5	0.431
15–15.5	21.035
20–20.5	0.749
20–20.5 D	0.003
24–24.5	0.003

SS–WAT1–5	
Depth	B(a)P
2.5	0.03

P5	
Depth	B(a)P
1.5	14.968

P6	
Depth	B(a)P
1.5	0.017

P7	
Depth	B(a)P
1.5	0.028

SS–WAT1–9	
Depth	B(a)P
2.5	0.005

HA4	
Depth	B(a)P
2.5–3	0.003
4–4.5	0.003

P16	
Depth	B(a)P
2	0.203

P17	
Depth	B(a)P
2	53.054

SS–WAT1–4	
Depth	B(a)P
2.5	5.261

HA1	
Depth	B(a)P
0–0.5	0.610
2.5–3	0.009
4–4.5	0.003

MW–WAT1–5	
Depth	B(a)P
6.5	0.039
10	0.005
15	0.005
20	0.005
20 D	0.005

B–WAT1–3	
Depth	B(a)P
6.5	0.005
10	0.005
10 D	0.005
15	0.005

HA8	
Depth	B(a)P
0–0.5	0.118
1.5–2	0.860
2.5–3	0.003
4–4.5	0.033

SS–WAT1–8	
Depth	B(a)P
1	0.005
2.5	0.154

DSS–WAT1–1	
Depth	B(a)P
0	0.235

SS–WAT1–2	
Depth	B(a)P
1	0.014
1 D	0.027
2.5	0.005

P11	
Depth	B(a)P
1.5	0.005

P12	
Depth	B(a)P
1.5	0.005

MW–WAT1–1	
Depth	B(a)P
3–5	0.068
8–10	0.068
12–13	0.067
18–19	0.066
20–21.5	0.065

P9	
Depth	B(a)P
1.5	0.004

P10	
Depth	B(a)P
1.5	0.004

P18	
Depth	B(a)P
2	0.095

P8	
Depth	B(a)P
1.5	2.033

SS–WAT1–1	
Depth	B(a)P
1	0.006
2.5	0.006

HA6	
Depth	B(a)P
0–0.5	0.784
1–1.5	0.242
2.5–3	0.015
3–3.5	0.008
4–4.5	0.003

TPG–5	
Depth	B(a)P
2	0.0028
5	0.0029
10	0.0030
15	0.0047
20	0.0004
24.5	0.0010

HA7	
Depth	B(a)P
2.5–3	0.003
4–4.5	0.003

SS–WAT1–3	
Depth	B(a)P
2.5	0.006

B–WAT1–2	
Depth	B(a)P
6.5	0.005
10	0.005
15	0.005

HA5	
Depth	B(a)P
2.5–3	0.003
4–4.5	0.003

GP2	
Depth	B(a)P
2.5–3	6.409
5–5.5	0.257
5–5.5 D	1.138
10–10.5	0.003
15–15.5	1.571

MW–WAT1–2	
Depth	B(a)P
4–5	10.108
5–6.5	5.944
10–11.5	0.067
11.5–13	0.067
13–15	1.510
13–15 D	10.063
15–16.5	0.067

TPG–4	
Depth	B(a)P
2	0.4190
5	0.0242
10	0.0008
15	0.0081
20	0.2690
24.5	0.0003

TPG–2	
Depth	B(a)P
2	0.8122
5	8.0224
10	0.9819
15	0.0743
20	0.0004
24.5	0.0003

EXPLANATION

- P18 — CONFIRMATION SOIL SAMPLE LOCATION
- MW-WAT1-1 — MONITORING WELL (CH2M HILL 1991)
- DSS-WAT1-9 — SURFACE SOIL SAMPLE LOCATION (CH2M HILL 1991)
- B-WAT1-1 — SOIL BORING (CH2M HILL 1991)
- MW-WAT1-5 — MONITORING WELL (IT CORP. 2001)
- B-WAT1-3 — SOIL BORING (IT CORP. 2001)
- GP4 — SOIL BORING (ENV AMERICA 2004)
- HA10 — HAND-AUGER BORING (ENV AMERICA 2004)
- TPG-5 — SOIL BORING (TPG 2008)

DSS–WAT1–1	
Depth	B(a)P
0	0.235

- DEPTH IN FEET BELOW GROUND SURFACE
- BORING/WELL ID.
- BENZO(a)PYRENE EQUIVALENT CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg)
- EXISTING FENCE
- PROPERTY LINE
- LANDSCAPED PLANTER AREA
- BUILDING
- 1.5-FOOT EXCAVATION
- 2-FOOT EXCAVATION/SOIL CAP

0 20 40 FEET

APPROXIMATE SCALE

FIGURE 4

PROPERTY PLAN SHOWING POST-REMEDIATION SOIL PAH CONCENTRATIONS

FORMER WATSONVILLE-1
MANUFACTURED GAS PLANT
WATSONVILLE, CALIFORNIA

TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction

Table – Risk-Based Soil Gas Screening Levels

Draft Screening Levels for Chemicals in Soil Gas, Sub-Slab Soil Gas, and Indoor Air,

Iris Environmental, dated September 29, 2009.

Table 8. Risk-based Soil Gas Screening Levels

Chemical of Potential Concern	Basement Scenario						Slab-on-grade Scenario					
	Screening Level at 10 ft bgs			Screening Level at 15 ft bgs			Screening Level at 5 ft bgs			Screening Level at 15 ft bgs		
	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)
Total Petroleum Hydrocarbons (TPH)												
C5-C8 Aliphatic	NC	1.2E+06	1.2E+06	NC	2.6E+06	2.6E+06	NC	2.1E+06	2.1E+06	NC	4.8E+06	4.8E+06
C9-C18 Aliphatic	NC	5.3E+05	5.3E+05	NC	1.1E+06	1.1E+06	NC	8.8E+05	8.8E+05	NC	2.0E+06	2.0E+06
C9-C16 Aromatic	NC	8.9E+04	8.9E+04	NC	1.8E+05	1.8E+05	NC	1.5E+05	1.5E+05	NC	3.4E+05	3.4E+05
TPH-g	NC	5.2E+05	5.2E+05	NC	1.1E+06	1.1E+06	NC	8.5E+05	8.5E+05	NC	2.0E+06	2.0E+06
Volatile Organic Compounds (VOCs)												
Acetone	NC	5.5E+07	5.5E+07	NC	1.0E+08	1.0E+08	NC	8.0E+07	8.0E+07	NC	1.8E+08	1.8E+08
Benzene	1.7E+03	5.3E+04	1.7E+03	3.8E+03	1.2E+05	3.8E+03	3.1E+03	9.5E+04	3.1E+03	7.3E+03	2.3E+05	7.3E+03
2-Butanone (methyl ethyl ketone)	NC	8.9E+06	8.9E+06	NC	2.0E+07	2.0E+07	NC	1.7E+07	1.7E+07	NC	4.0E+07	4.0E+07
Carbon disulfide	NC	1.2E+06	1.2E+06	NC	2.5E+06	2.5E+06	NC	2.0E+06	2.0E+06	NC	4.6E+06	4.6E+06
Cumene	NC	7.1E+05	7.1E+05	NC	1.9E+06	1.9E+06	NC	1.5E+06	1.5E+06	NC	3.9E+06	3.9E+06
Dichlorodifluoromethane (Freon 12)	NC	3.6E+05	3.6E+05	NC	9.2E+05	9.2E+05	NC	7.6E+05	7.6E+05	NC	1.9E+06	1.9E+06
Ethylbenzene	2.0E+04	1.8E+06	2.0E+04	4.8E+04	4.3E+06	4.8E+04	3.9E+04	3.5E+06	3.9E+04	9.7E+04	8.7E+06	9.7E+04
4-Ethyltoluene	NC	1.8E+05	1.8E+05	NC	4.5E+05	4.5E+05	NC	3.7E+05	3.7E+05	NC	9.4E+05	9.4E+05
Methylene chloride	5.0E+04	7.1E+05	5.0E+04	1.0E+05	1.5E+06	1.0E+05	8.2E+04	1.2E+06	8.2E+04	1.9E+05	2.7E+06	1.9E+05
Naphthalene	1.5E+03	5.3E+03	1.5E+03	4.1E+03	1.5E+04	4.1E+03	3.4E+03	1.2E+04	3.4E+03	8.8E+03	3.2E+04	8.8E+03
Styrene	NC	1.6E+06	1.6E+06	NC	4.0E+06	4.0E+06	NC	3.3E+06	3.3E+06	NC	8.2E+06	8.2E+06
Toluene	NC	5.3E+05	5.3E+05	NC	1.2E+06	1.2E+06	NC	9.6E+05	9.6E+05	NC	2.3E+06	2.3E+06
Trichlorofluoromethane (Freon 11)	NC	1.2E+06	1.2E+06	NC	2.8E+06	2.8E+06	NC	2.2E+06	2.2E+06	NC	5.3E+06	5.3E+06
1,2,4-Trimethylbenzene	NC	1.2E+04	1.2E+04	NC	3.4E+04	3.4E+04	NC	2.8E+04	2.8E+04	NC	7.3E+04	7.3E+04
1,3,5-Trimethylbenzene	NC	1.1E+04	1.1E+04	NC	2.9E+04	2.9E+04	NC	2.4E+04	2.4E+04	NC	6.3E+04	6.3E+04
Xylenes	NC	1.8E+05	1.8E+05	NC	4.0E+05	4.0E+05	NC	3.2E+05	3.2E+05	NC	7.8E+05	7.8E+05

Notes:

(1) For the basement scenario, risk-based soil gas screening levels developed for soil gas depths of 10 feet bgs (*i.e.* , just below the basement slab) and 15 feet bgs. These screening levels are appropriate for evaluating soil gas data collected at 5 and 15 feet bgs, respectively, at locations near the basement; the data collected near the basement at 5 feet bgs may be compared against the soil gas screening levels developed for 10 feet bgs. Note that this conservative approach also accounts for potential vapor intrusion through the sidewalls of the basement from soil gas present at 5 feet bgs.

(2) For the slab-on-grade scenario, risk-based soil gas screening levels developed for soil gas depths of 5 and 15 feet bgs. These screening levels are appropriate for evaluating soil gas data collected at 5 and 15 feet bgs, respectively, at locations away from the basement.

Table 8. Risk-based Soil Gas Screening Levels

Chemical of Potential Concern	Basement Scenario						Slab-on-grade Scenario					
	Screening Level at 10 ft bgs			Screening Level at 15 ft bgs			Screening Level at 5 ft bgs			Screening Level at 15 ft bgs		
	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)	Cancer ($\mu g/m^3$)	Noncancer ($\mu g/m^3$)	Controlling ($\mu g/m^3$)

Notes (continued):

(3) Each risk-based soil gas screening level is calculated from 1) the risk-based target concentration of the chemical in indoor air (see Table 3) and 2) the appropriate J&E-modeled attenuation factor (see Table 7):

$SL_{SG,c} = CA_c / \alpha$

$SL_{SG,nc} = CA_{nc} / \alpha$

(4) Cancer-based screening levels are based on a target risk of $1x10^{-5}$. Noncancer-based screening levels are based on a target hazard quotient of 1.0.

(5) "NC" = noncarcinogenic.

(6) The noncancer-based soil gas screening level for TPH-g is calculated as a weighted average of the noncancer-based soil gas screening levels for the TPH-g subgroups by the following equation (see text for details):

$$SL_{SG,nc,TPH-g} = \frac{1}{\sum \frac{x_i}{SL_{SG,nc,i}}}$$

where:

$SL_{SG,nc,TPH-g}$ = noncancer-based soil gas screening level for TPH-g ($\mu g/m^3$)

x_i = mass fraction of TPH-g within subgroup *i* (unitless); and

$SL_{SG,nc,i}$ = noncancer-based soil gas screening level for subgroup *i* ($\mu g/m^3$)

APPENDIX C

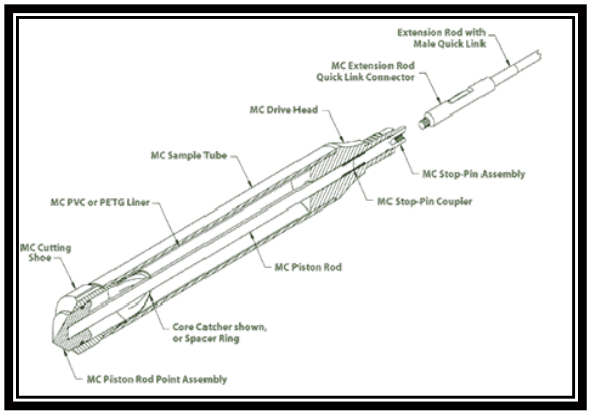
SEMI-ANNUAL GROUNDWATER & SOIL VAPOR SAMPLING FIELD DOCUMENTATION

- ***Field Methodology for Hydraulic Driven Probe Sampling***
- ***Field Methodology for Active Soil Gas Sampling***
- ***Field Notes***
- ***Investigative Waste Disposal Documentation – Bayside Oil Inc. Invoice***

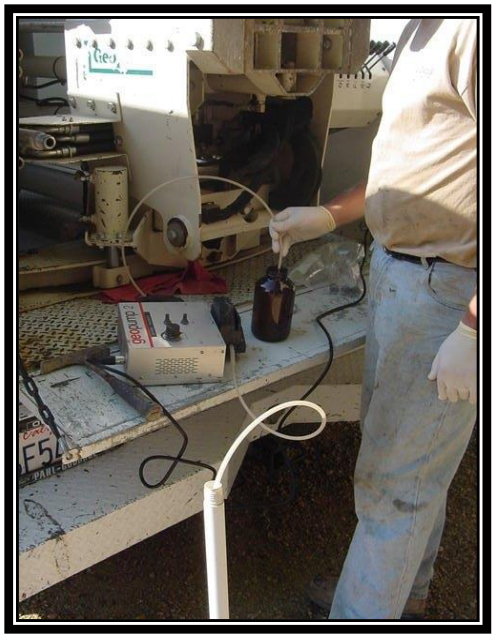
Field Methodology for Hydraulic Driven Probes

Using Macro-Core®, Large Bore® or Dual Tube® Hydraulic Driven Probes

Direct push exploratory borings are "drilled" with a Hydraulic Driven Probe drill rig, which hydraulically vibrates and drives steel probes into the soil. This sampling technology has the ability for either continuous or discrete sampling using a 4-foot long nickel-plated sampling probes fitted with clear acetate liners. During coring operations, the sampler remains open as it is driven into undisturbed soil over its entire 4-foot sampling interval.



The soil cores are logged by an experienced geologist using the Unified Soil Classification System (USCS), noting in particular, the lithology of the soils, moisture content, and any unusual odor or discoloration. Relatively undisturbed soil samples are obtained for both lithologic logging and laboratory analysis. A portion of individual soil cores are stored in sealed plastic bags for field screening of hydrocarbons and/or volatile organic compounds by a Photoionization Detector (PID). Vapor readings in parts per million (ppm) are recorded on the boring logs. The PID is also used during drilling for monitoring the work area for site safety.



All drilling equipment is decontaminated prior to arriving on-site to prevent possible transfer of contamination from another site. The sampling probe and all other soil sampling equipment are thoroughly cleaned between each borehole by washing in a Liqui-Nox or Alconox solution followed by a double rinsing with distilled water to prevent the transfer of contamination.

Following sample collection the borehole borehole is completely sealed with neat cement grout from the bottom of the borehole upward via a tremi-pipe to ensure no voids or bridging of the sealing material. If the borehole remains open to within 2 feet of the total exploration depth following retraction of the sample barrel, then a PVC tremi-pipe will be inserted to the total borehole depth and neat cement grout will be added through the tremi-pipe as it is slowly

retracted from the borehole. If the borehole collapses to depths greater than 2 feet above the base of the total borehole depth following retraction of the sample barrel, then a hollow drill pipe equipped with an expendable "knock-out" point will be advanced to the original borehole depth and neat cement grout will be added through the drill pipe as it is slowly retracted from the borehole.

Samples Targeted for Laboratory Analysis:

Soil samples targeted for laboratory analysis are immediately cut from the acetate sample liner and protected at both ends with Teflon tape, sealed with non-reactive caps, taped, labeled, placed in a plastic Ziploc baggie, and immediately stored in an insulated container chilled to a temperature of 4 degree Celsius. Soil samples selected for Volatile Organic Compound (VOC) analysis may follow field preservation protocols according to EPA Method 5035, as described in DTSC's *Guidance Document for the Implementation of United States Environmental Protection Agency Method 5035: Methodologies for Collection, Preservation, Storage, and Preparation of Soils to be Analyzed for Volatile Organic Compounds*, dated November 2004.

Discrete groundwater samples are collected after temporary PVC casing is placed in the hole and at least one borehole volume of groundwater in the PVC casing is purged and groundwater is visually observed to be free of sediment. Relatively representative groundwater samples are either: 1) collected with a peristaltic pump and dedicated polyethylene tubing and dispensed directly into containers specifically prepared for the analyses (groundwater encountered at depths of less than 27 feet bgs) or 2) collected by mechanically lifting groundwater through a clean stainless steel foot valve and dedicated polyethylene and dispensed directly into containers specifically prepared for the analyses (groundwater encountered at depths greater than 27 feet bgs where a peristaltic pump cannot be used). Samples being analyzed for dissolved metals will be preserved and acidified by the testing laboratory following their receipt of samples. Once collected, groundwater sample containers are placed in Ziploc bags and are stored in an insulated container chilled to a temperature of 4 degree Celsius.

All samples are transported in chilled coolers to a State-certified laboratory under appropriate chain-of-custody documents. Soil samples that may be put on "hold" for potential future analysis will be stored in a dedicated sample freezer, be frozen, and stored under chain-of-custody documentation. Hold times will be confirmed with the testing laboratory to ensure that potential analysis of any "hold" samples will be analyzed within the laboratory hold times.

Field Methodology for Active Soil Gas Sampling

The active soil gas / soil vapor (we use the terms interchangeably) sampling field methodology is conducted in general accordance with the procedures outlined in the CalEPA's/DTSC/LARWQCB/SFRWQCB *Advisory – Active Soil Gas Investigations* (July 2015), and the DTSC/CalEPA's final *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)* (October 2011). We use the terms soil gas and soil vapor interchangeably. The field methodology for soil vapor sampling entails:

- Constructing Soil Vapor Sample Points and Purge Test Points (if necessary);
- Purge volume testing at the Purge Test Point(s);
- Setting up the sampling and leak testing equipment; and
- Soil Vapor Sampling

Constructing & Decommissioning Soil Vapor Sample and Purge Test Probes

Soil vapor sample probes can be either semi-permanent or temporary. A semi-permanent sample probe is constructed with a secure surface completion consisting of bolt-down flush-mounted well vault so it can be reused. A field geologist or engineer logs the soils encountered using the Unified Soil Classification System (USCS), unless the site is already well characterized geologically.

Shallow soil vapor probe installation via GeoProbe drill rig

Shallow Soil Vapor Probe: The soil vapor/gas probe is installed to the target sampling depth via a Geo-Probe drill rig, which hydraulically drives and vibrates steel probes into the soil. The soil is cored out using a 4-foot long nickel-plated sampling barrel fitted with a clear acetate liner. During coring operations, the sample barrel remains open as it is driven into undisturbed soil over its entire 4-foot sampling interval. Alternatively, the soil gas probe borehole can be created via a hollow stem auger or hand auger. Shallow soil gas / soil vapor sample depths will be no less than 5 feet deep (if possible) in order to avoid breakthrough of ambient air from the surface. Shallow and deeper soil gas probes are constructed in a similar manner. Once the probe hole is cored to the desired sample depth, a length of 3/16–inch inner diameter Teflon or Nylaflo tubing having a porous media tip (i.e., ceramic filter stone) attached at the down-hole end of the tubing is inserted through a 1-inch diameter tremi-pipe that runs the entire length of the borehole. This sample tubing is placed approximately 6-inches above the base of the

borehole. A minimum of a one-foot sand pack is emplaced at the base of the borehole (the grain size of the sand pack is larger than the grain size of the adjacent formation), followed by at least one foot of dry granular bentonite. The probe tip is emplaced midway within the sand pack. The tremi-pipe is used to insert the sand pack and granular bentonite to ensure that no bridging occurs. The remainder of the borehole is sealed to the ground surface with hydrated bentonite gel for temporary probes or neat cement mixed with 1% – 5% bentonite, which are both pre-mixed at the ground surface; this ensures a sound surface seal and/or seal between multi-depth nested probe sample intervals.

Decommissioning Shallow Soil Vapor Probes: Following sample collection the vapor probe is properly decommissioned by one of the following regulatory approved techniques:

- The sample tubing is completely removed from the ground surface (if possible) allowing the bentonite gel slurry to flow into the small vertical void thereby sealing the borehole. Subsequently, approximately 6-inches of bentonite slurry is removed below the ground surface and the surface is patched to match the existing grade.
- The sample tubing is properly destroyed by injecting neat cement grout into the tubing via a syringe. The volume of grout injected into the tubing is monitored to ensure that the entire tubing is completely sealed. Subsequently, the tubing is cut off approximately 6-inches below the ground surface and the surface is patched to match the existing grade.
- The vapor probe is properly destroyed by over-drilling the sample tubing and annular seal material. Once the material has been removed, the subsequent borehole is filled with neat cement grout to within about 6-inches of the ground surface and the surface is patched to match the existing grade.

Sub-Slab Soil Vapor Probe: The emplacement of the sub-slab soil vapor sampling probe is conducted by coring a 1 to 1-1/4-inch diameter hole via an electric hand rotary hammer drill through the slab foundation. The sub-slab borehole is advanced approximately 3 to 4-inches below the base of the slab and into the sub-slab material. Once the probe hole is cored to the desired sample depth a length of 3/16–inch inner diameter Teflon or Nylaflo or inert, cleaned metal tubing with a porous media tip (i.e., ceramic filter stone) attached at the down-hole end of the tubing is inserted into the borehole. The probe tip is emplaced 1 to 2-inches above the base of the bore hole. A minimum of 2 to 4-inches of sand pack is emplaced at the base of the borehole followed by at least 1 to 2-inches of dry granular bentonite to above the base of the slab. The probe tip is emplaced midway within the sand pack. The remainder of the borehole is sealed to the ground surface with hydrated bentonite for temporary probes or hydrated bentonite followed by neat cement for permanent probes to ensure a sound surface seal. Permanent probes have a flush-mount inert metal fitting for providing a good seal when

connecting the above-ground sample tubing and for plugging between sampling events. Following sample collection from a temporary probe the sample tubing is removed and the subsequent void is sealed with hydrated bentonite and the surface is patched with concrete.

Purging

Prior to soil gas sample collection, a purge volume or "dead space volume" will be calculated in order to purge ambient or stagnant air from the sampling system to ensure that collected samples are representative.

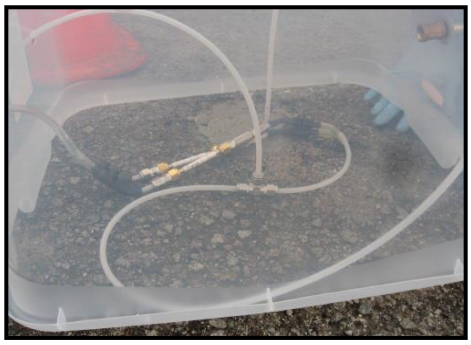
Per the procedures outlined in the CalEPA's Advisory, a default of three purge volumes will be extracted prior to sampling. The purge volume consists of approximately three system volumes (i.e. tubing and annular space) of soil gas, while capturing the purge effluent. One system volume is calculated by summing the inner diameter (id) tubing volume (i.e., id area times the length of tubing) and the annular pore space volume (i.e., area of the borehole times the length of sand pack and granular bentonite surrounding the ceramic filter stone tip times an estimated sand-pack pore space volume of 33.8%). The purge rate will be conducted at the same rate soil gas is sampled (approximately 200-mL/min flow). We note that Cal-EPA guidance recommends purging or sampling at rates between 100 to 200-mL/min for soil vapor probes at all depths, including sub-slab vapor probes, to limit air stripping and to prevent ambient air form diluting the sample. After the specific pre-determined purge volume is removed, a soil vapor/gas sample is collected for laboratory analyses for the site specific target compounds as discussed below.

Sample Collection

Before purging the appropriate "dead space volume" from the soil vapor/gas probe, the probe seal is allowed to cure and the subsurface is allowed to equilibrate for the appropriate amount of time per the procedures outlined in the CalEPA's Advisory. We note that an equilibration time of 2-hours is required for soil vapor/gas probes installed via a direct push drill rig and 48-hours for soil vapor/gas probes installed via a hollow stem auger drill rig, hand-auger, or an electric hand rotary hammer drill. Once the appropriate "dead space volume" has been purged, the sample tubing will be attached to a laboratory prepared soil vapor manifold and 1 or 6-liter Summa canister or sorbent sampling media depending on required laboratory analysis. We note that the choice between using a 1-L or 6-L canister is typically dependent on the purpose of the site investigation. However, for soil vapor/gas samples collected at a depth less than 5-feet, including sub-slab vapor probes, a 1-L canister should be used to avoid excessive air removal and to prevent ambient air from entering the sub-surface and sample. When sampling for ambient indoor air, a 6-L canister is nearly always required because of the extremely low detection limits required to meet Indoor Air ESLs. For soil vapor collection, a 1-L

canister may be all that is necessary if the site is known to contain high concentrations of contaminants of interest that make achieving low detection limits a secondary concern. In those cases, only a small volume of the 1-L collected is necessary for analysis of both the TO-15 and the TO-3 compounds. However, if a site does not have historical data indicating that it is significantly contaminated, or if multiple analytical runs become necessary to achieve reporting limit/CHHSL/ESL goals, it becomes critical to have a larger initial volume of collected sample. A 6-L volume allows the laboratory to provide the lowest possible detection for the compounds of interest for full list TO-15 while providing enough volume for the additional analysis of individual compounds that may require dilution to bring them within the instrument calibration range. The 6-L volume will provide enough residual sample to analyze for additional contaminants (e.g., EPA Method TO-3) and/or fixed Gases (ASTM D1946) including Helium, which may be used as a tracer or leak check compound in the investigation. A consultation with the selected testing laboratory will be conducted for each investigation to ensure that appropriate sample volumes are obtained.

Sample collection with Summa canisters



Sample collection with sorbent tube

The following sample collection procedures are followed for each sample collection media:

- The Summa canisters will be supplied by the analytical laboratory with a vacuum of approximately 30-inches of mercury and outfitted with a 200-mL/min flow control valve. The tubing will be connected to the soil vapor manifold and Summa canister using airtight stainless-steel or brass fittings. The flow control valve will then be opened slowly to draw the vapor sample from the target depth.
- Laboratory sorbent media and canister with a vacuum of approximately 30-inches of mercury and outfitted with a 200- mL/min flow control valve or sampling pump (10 to 200 mL/min) will be supplied by the analytical laboratory. The tubing will be connected to the sorbent media sample tube, upstream of the vacuum canister/sample pump/syringe using airtight stainless-steel or brass fittings. The sample vacuum canister/ pump/syringe will then be activated to draw approximately 1 to 3-L of sample volume for TO-17 analysis from the target depth at a flow rate of 200- mL/min or less per sorbent media sample tube manufacturer and/or laboratory guidelines.

Schematic diagrams of sample configurations for the different sampling media (i.e., Summa canister and sorbent media) and probe construction (i.e., shallow soil and sub-slab) are included as attachments 1, 2, and 3 of this field methodology.

Leak Detection Monitoring

Monitoring leak check compound within shroud during sample collection

Leak detection monitoring will be conducted during soil gas sampling by applying a tracer compound (i.e., isopropyl alcohol [isopropanol, IPA] or helium) to the sample system connections and bentonite seal. Specifically, a shroud will be used to encapsulate the entire system (i.e., the sample canister and surface bentonite seal) so as to trap the applied tracer compound. The leak detection monitoring configuration is graphically depicted on attachments 1, 2, and 3 of this field methodology. The concentration of the leak check compound within the shroud will be monitored periodically throughout the sample collection period with a PID calibrated to the specific tracer gas compound and these values will be recorded into the field notes. The tracer compound (i.e., IPA or helium) is maintained within the shroud at a concentration of approximately two (2) orders of magnitude higher than the detection limit of the field meter used throughout the duration of sample collection. The testing laboratory will screen for this compound in all analyzed air samples when IPA is used. If helium is used the laboratory can screen for this compound if collected in Summa canisters, or the sample effluent after passing through the sorbent media will be field screened for the presence of the helium.

Prior to purging and sample collection, a “shut-in test” is performed to check the above-ground sample system connections downstream from the top of the soil vapor/gas probe, including the laboratory provided sample manifold (“sample train”). The “shut-in test” is completed in the field by closing off all valves to the laboratory provided soil vapor manifold and the soil vapor/gas probe tubing, and subsequently opening the valve to the connected “purge” Summa canister to increase the vacuum in the sample train to a minimum of 100-inches of water, at which point the purge canister is closed. Then the vacuum gauge on the sample train is observed for at least 1-minute to confirm it remains stable.

Low Flow Sampling Conditions

A low flow sampling condition is characterized as a condition where the sample probe cannot sustain a flow rate of 100-mL/min for more than three minutes while maintaining an applied vacuum of less than 100-inches of water (or 7.4-inches of mercury). The vacuum applied to the

sample probe will be measured and monitored via a vacuum gauge installed between the sample probe and the sample collection flow regulator. If the vacuum measured within the sample probe exceeds 100-inches of water during dead space volume purging, then one of the following sample collection procedures will be employed:

- If the lithology observed during sample probe installation indicates potential for low permeability / low flow conditions a representative soil sample at the soil vapor sample depth will be collected and put on ice for possible laboratory analysis.
- If extreme low flow conditions are observed during purging, specifically excessive time will be required to purge and collect a sample, we will contact the regulating agency to confirm collecting a purge volume approximating one dead space volume (i.e., volume of the sample tube plus the volume of the sand pack pore space and granular bentonite pore space surrounding the probe tip) will be evacuated prior to sample collection. Sample collection will proceed until the sample probe vacuum equals 100-inches of water. The sample system will then be closed off to allow the probe to relax and equilibrate. Over time the vacuum will eventually dissipate, the rate of which can be monitored via an in-line vacuum gauge installed as described above. Once the vacuum in the sample probe has dissipated, sampling will resume as described above. This process will be repeated until an adequate sample volume has been obtained for the required laboratory analysis.
- If during low flow sampling as stated above, the sample system when closed off to allow the probe to relax and equilibrate the probe vacuum does not reduce by 13.5 inches of water (1 inch of mercury) in 3-minutes, soil vapor sampling will cease and the previously collected soil sample will be submitted to the laboratory for potential analysis for site specific constituents.

Sample Storage and Transport

Once collected, the soil gas samples are then transported to a State-certified laboratory under appropriate chain-of-custody documentation. Sorbent media are wrapped in foil and placed in individual zip-lock type bags and immediately placed in a chilled cooler (chilled to 4 degrees Celsius) for storage and transport to the testing laboratory. Summa canisters are placed in laboratory provided cardboard boxes and stored at ambient temperature for transport to the testing laboratory.

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INDICATE ATTACHMENTS THAT APPLY
- ___ Site Map
- ___ Data Sheets
- ___ Geologic Logs
- ___ Photo Sheets
- ___ COC's
- ___ Chargeable Materials

Client: **Phil & Martha Oneto**	Date: **March 23, 2017**
Site Location: **25 E. Fifth Street, Watsonville, CA**	Study #: **2X404.Q**
Field Tasks: ☐ Drilling ☐ Sampling ☐ Other (see below): **Semi-Annual Grab Groundwater Sampling - Spring 2017**	Weather Conditions: Partly Cloudy, 65°F
Personnel / Company On-Site: **Jered Chaney (Weber, Hayes and Associates: WHA)**	

TIME:

0745 => Arrive onsite
- ECA (Driller - Jeff Edmond) onsite.
- Prep for drilling & grab groundwater sampling (GW-1, -2, & -3)

0815 => Stage rig at GW-2 location (clean, up gradient boring)
-> Will "hydropunch" to 34' bgs, then pull rods and insert 10' of new 3/4" 0.01-inch slotted PVC.

0920 => Pushed hydropunch rods to 34'.
- Retract rods - insert casing; borehole caved to 22'
- Screened from 12-22' - tag water at 16.8' bgs
- Will tag water again prior to purging & Sample collection.

0940 => Stage rig at GW-1; commence hydropunch to 34' bgs.

0945 => Prep to purge/sample GW-2 w/ new poly tubing and peristaltic pump.

- Depth to Water @ GW-2 : 17.3' bgs

0955 => Begin purging.

1000 => Scott Carson (SCHSA inspector/case officer) onsite.

1015 => GW-2 dewatering; purged only ~ 500 mL of turbid groundwater.

1020 => Scott Carson leaves site. Because GW-2 caved to 22', wants it redrilled and sealed to no less than 10% depth of original depth.

1040 => GW-2 remains dry - will need to attempt to install deeper

1050 => Drill rig refusal in GW-1 @ 29' → Pull rods and insert 10' screened section → Screened successfully * From 19-29' bgs
- Initially tag water @ ~ 25'.
- Prep to purge/sample.
- Remove casing from GW-2 → Will attempt to drill deeper.

1115 => Tag water in GW-1 @ 23.5' bgs
→ Begin purge/sampling

1145 => Purged ~ 1 gallon - No turbidity. → Collect samples

1150 => GW-2 re-drilled w/ 4' stainless steel drop screen to 34' bgs.
- Pull back - screen from 23-27' bgs.
- Tag water @: 22.4' bgs

3/23/17
Signature of Field Personnel & Date

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
PH: (831) 722-3580 FAX: (831) 722-1159
www.weber-hayes.com

INDICATE ATTACHMENTS THAT APPLY
- ___ Site Map
- ___ Data Sheets
- ___ Geologic Logs
- ___ Photo Sheets
- ___ COC's
- ___ Chargeable Materials

Client: **Phil & Martha Oneto**	Date: **March 22, 2017**
Site Location: **25 E. Fifth Street, Watsonville, CA**	Study #: **2X404.Q**
Field Tasks: ☑ Drilling ☑ Sampling ☐ Other (see below):	Weather Conditions:
Semi-Annual Grab Groundwater Sampling - Spring 2017	Mostly Sunny, 77°F
Personnel / Company On-Site: **Jered Chaney (Weber, Hayes and Associates: WHA)**	

TIME:

1220 => Begin purging / sampling GW-2

→ Tremie grout GW-1 - borehole open to 29' bgs.

1250 => Grab groundwater sampling at GW-2 complete.
- Purged ~1 gallon - water reasonably turbid free prior to sample collection.

1300 => Advance hydropunch rods from 27 to 34' in GW-2 (to original depth). Then, pour grout through rods while retracting rods.

1330 => GW-2 completely sealed

↳ Stage rig @ GW-3 → Will attempt to push to 34' w/ hydropunch; then screen w/ 10' 0.020 slot screen.

1350 => Commence ~~coring~~ hydropunch @ GW-3.

↳ In an effort to avoid not loosing the borehole, drilled to 30', then pulled back to expose hydropunch, stainless steel screen ~~from~~ 24-27' bgs

1420 → Tag water level @: 26.5' bgs; Slowly entering borehole.

1435 => Tag water @ 25.8' bgs → attempt purge / sample.

1510 => Sample collection complete. Purge ~ 1 gallon - relatively turbid free.

↳ Push rods to 30' (original push depth) → grout through rods and retract rods.

1520 => Leave site → Driller will finish up.
→ Transport ~ gallons of decon / purge water to WHA storage shed. Will properly dispose of at Bay Side Oil pending acquisition of EPA ID #.

1530 => Arrive at Soil control Lab → Relinquish Samples for A(as N) analysis.

1630 => Arrive at FedEx in Santa Cruz → Shipping Samples to ESC Labs.

3/22/17
Signature of Field Personnel & Date

Explanation of Symbols

GW-2 Proposed Semi-Annual Grab Groundwater Sample Location

On-Site Sample Locations (WHA, 2016)

GW-2 Grab Groundwater Sample

DP-7 Grab Groundwater Sample (June 29, 2010)

Former Watsonville-1 MGP Site Existing Sample Locations

Groundwater Monitoring Well (Terra Pacific Group)

Soil Vapor Well (Terra Pacific Group)

Approximate Limits of Groundwater Contaminant Plume Exceeding ESLs/MCLs

DP-2

Temporary Screen Interval:	23'-28'
Depth to Groundwater:	28'

No concentrations were detected that exceeded Environmental Screening Level Thresholds

DP-1

Temporary Screen Interval:	25'-30'
Depth to Groundwater:	30'

No concentrations were detected that exceeded Environmental Screening Level Thresholds

GW-2

Temporary Screen Interval:	26'-34'
Depth to Groundwater:	27'
Naphthalene:	0.454
Ammonia (as N):	< 280

GW-1

Temporary Screen Interval:	22'-32'
Depth to Groundwater:	27.9'
Naphthalene:	9.27
Diesel Range C12-C22:	546
Ammonia (as N):	55,000

GW-3

Temporary Screen Interval:	24'-34'
Depth to Groundwater:	26.5'
Anthracene:	5.91
Fluorene:	7.35
Naphthalene:	34.7
Phenanthrene:	7.38
Pyrene:	3.11
Benzo[a]pyrene:	0.377
Benzo[a]anthracene:	0.733
Benzo[b]fluoranthene:	0.309
Benzo[k]fluoranthene:	0.159
Chrysene:	0.45
Dibenzo[a,h]anthracene:	0.0367 J
Indeno[1,2,3-cd]pyrene:	0.0886
Diesel Range C12-C22:	870
Cyanide:	237
Ammonia (as N):	6,400

GW-4

Temporary Screen Interval:	20'-30'
Depth to Groundwater:	26.6'
Ammonia (as N):	17,000

No concentrations were detected that exceeded Environmental Screening Level Threshold

DP-5

Temporary Screen Interval:	20.5'-25.5'
Depth to Groundwater:	25.5'

No concentrations were detected that exceeded Environmental Screening Level Thresholds

DP-7

Temporary Screen Interval:	19'-24'
Depth to Groundwater:	24'
Gasoline Range C5-C12:	150

GW-5

Temporary Screen Interval:	24'-34'
Depth to Groundwater:	22.5'
Ammonia (as N):	4,000

No concentrations were detected that exceeded Environmental Screening Level Threshold

Parcel Boundary
APN: 081-151-39

0' 30'

Approximate Scale
Base Map Generated from http://gis.co.santa-cruz.ca.us

APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
(Based on groundwater monitoring conducted at Former Watsonville-1 Manufactured Gas Plant)

Baker Bros. Appliance

Tile & Marble Outlet

Watsonville Cyclery

Chase Bank

Jalisco Restaurant

Former Watsonville-1 Manufactured Gas Plant Site Cleanup & monitoring conducted under the direction of DTSC

La Rosa Supermercado

Laundromat

Residence

MAIN STREET

EAST FIFTH STREET

MW-WAT1-1 MW-WAT1-2 MW-WAT1-3 MW-WAT1-4 MW-WAT1-5 MW-WAT1-6 MW-WAT1-7

SG-1A SG-1B SG-2A SG-2B SG-2C SG-3 SG-3A SG-4A SG-5A SG-5B SG-6A SG-9 SG-9A SG-10

21 march Start
USA ticket:
w707460261

FIGURE 2
Project 2X404

SITE MAP WITH PROPOSED SEMI-ANNUAL GRAB GROUNDWATER SAMPLING LOCATIONS & PREVIOUS GRAB GROUNDWATER ANALYTICAL RESULTS

SITE: COMMERCIALLY-ZONED WAREHOUSE PROPERTY
ADDRESS: 25 EAST FIFTH STREET, WATSONVILLE, CA

DATE: MARCH 2017

FILE:REPORT\2017 SEMI-ANNUAL MONITORING\PROPOSED MONITORING\FIGURES

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
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120 Westgate Dr., Watsonville, CA 95076
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www.weber-hayes.com

INDICATE ATTACHMENTS THAT APPLY
- ___ Site Map
- 5 Data Sheets
- ___ Geologic Logs
- ___ Photo Sheets
- ___ COC's
- ___ Chargeable Materials

Client: **Oneto**	Date: **March 30, 2017**
Site Location: **25 East 5th Street, Watsonville, CA**	Study #: **2X404.Q**
Field Tasks: [ ] Drilling [X] Sampling [X] Other (see below): **Semi-Annual Soil Vapor Monitoring of Multi-Depth SV Probes**	Weather Conditions: MOSTLY CLEAR; COOL w/ BREEZE
Personnel / Company On-Site: **Josh Hannaleck (Weber, Hayes & Associates; WHA);**	

TIME:

0915 # ON-SITE → PREP FOR SV SAMPLING OF MULTI-DEPTH (5' + 10' BGS) SV PROBES.

PURGE #s = (3) DEAD SPACE #s:
* 5' = 572mL * 3 = 1714mL = 8.6" Hg Δ
* 10' = 599mL * 3 = 1795mL = 9.0" Hg Δ

SV-4-10 → SHUT-IN TEST → OK → PURGE → 1795mL = 9.0" Hg Δ
→ SV PROBE REACHES -7" Hg w/ IN 15 SEC.
→ WAIT FOR EQUILIBRATION
→ STILL -7" Hg AFTER 20 MIN
→ NO FLOW

SV-4-5 → SHUT-IN TEST → OK → PURGE → 1714mL = 8.6" Hg Δ

1018-24 SAMPLE

SV-3-10 → SHUT-IN TEST → OK → PURGE → 1795mL = 9.0" Hg Δ
→ SV PROBE TO -7" Hg w/ IN 30 SEC
→ WAIT FOR EQUILIBRATE
→ STILL -7" Hg AFTER 10 MIN
→ NO FLOW

SV-3-5 → SHUT-IN TEST → OK → PURGE → 1714mL = 8.6" Hg Δ
→ SV PROBE TO -7" Hg w/ IN 30 SEC
→ WAIT FOR EQUILIBRATE
→ STILL -7" Hg AFTER 10 MIN

1110 SV-2-10 → SHUT-IN TEST → OK → PURGE → 1795mL = 9.0" Hg Δ
→ SV PROBE TO -7" Hg AFTER 15 SEC
→ WAIT FOR EQUILIBRATE

SV-2-5 → SHUT-IN TEST → OK → PURGE → 1714mL = 8.6" Hg Δ
1120 → SV PROBE STABALIZES @ -5" Hg

1138-48 SAMPLE

1150 SCOTT CARLSON (SCC-HSA) ON-SITE
EXPLAIN NO FLOW SITUATIONS + MAY COME BACK IN ~1 MONTH TO CHECK AS MAY BE DUE TO HIGH SOIL MOISTURE FROM HEAVY RAINS THIS WINTER

1214 SV-1-10 → SHUT-IN TEST → OK → PURGE → 1795 mL = 9.0" Hg Δ
→ SV PROBE STABALIZES @ -6" Hg
→ THEN PULLS H_2O (LARGE SLUGS) → STOP
→ PLANT TO ATTEMPT TO PURGE H_2O w/ PERISTALTIC PUMP, THEN RETURN @ A LATER DATE TO SAMPLE

SC (SCC-HSA) → NOT OPPOSED, BUT KEEP INFORMED IN WRITING

1230 SC LEAVES SITE

3/30/17
Signature of Field Personel & Date

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax(831) 722-1159
www.weber-hayes.com

INDICATE ATTACHMENTS THAT APPLY
___ Site Map
___ Data Sheets
___ Geologic Logs
___ Photo Sheets
___ COC's
___ Chargeable Materials

Client: **Oneto**	Date: **March 30, 2017**
Site Location: **25 East 5th Street, Watsonville, CA**	Study #: **2X404.Q**
Field Tasks: [ ] Drilling [X] Sampling [X] Other (see below): **Semi-Annual Soil Vapor Monitoring of Multi-Depth SV Probes**	Weather Conditions:
Personnel / Company On-Site: **Josh Hannaleck (Weber, Hayes & Associates; WHA);**	

TIME:

SV-1-5 → SHUT-IN TEST → OK → PURGE = 1714mL = 8.6" Hg Δ
↳ SV PROBE TO ~2" Hg, THEN DROPS AFTER ~1 min

1255-130 SAMPLE

1305 SA (WHA) ON-SITE w/ PERISTALTIC PUMP

1310 HOOK UP TO SV-1-10 + PURGE H_2O → STOP AFTER ~300mL REMOVED
1315 + STEADY H_2O SLUGS (~1Ft LONG OR MORE) STILL FLOWING

1325 SA (WHA) LEAVES w/ PUMP

SV-5-10 → SHUT-IN TEST → OK → PURGE = 1795mL = 9.0" Hg Δ
↳ SV PROBE TO ~7" Hg w/IN ~30SEC → WAIT TO EQUILIBRATE → ~5 min
- COMPLETE "MILK METHOD" FOR PURGING + SAMPLING

1500-55 SAMPLE (DRAW ~30SEC, REST ~5 min) REPEAT

SV-5-5 → SHUT-IN TEST → OK → PURGE = 1714mL = 8.6" Hg Δ

1419-25 SAMPLE

BREAKDOWN LOAD UP

1615 - LEAVE SITE

1625 ARRIVE @ WHA - UNLOAD
→ PACK SAMPLES / EQUIP. FOR RETURN SHIPPING TO BC LABS

3/30/17
Signature of Field Personel & Date

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Oneto / 2X404.Q* **Date:** *March 30, 2017*

Sample I.D.: SV-1-5 **Canister No:** 5160 **Manifold No:** 1075 : 1150

Samplers Name: *Josh Hannaleck* **Recorded by:** JH

Sample Analysis Information

~~Requested Analyses (circle~~ all that apply):

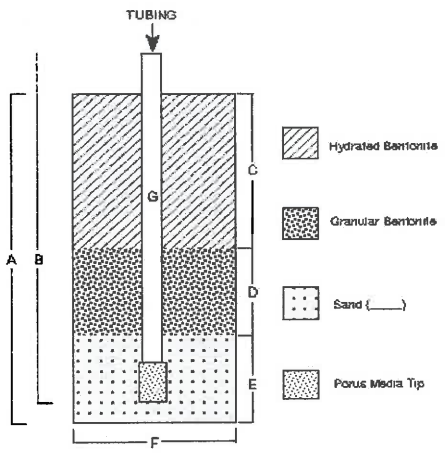
(VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15)

TPH-gas by EPA Method TO-15 GRO CO_2 & O_2 by ASTM D-1946 (IPA by TO-15)

Sample Collection Media: *1.4-L Summa Canister*

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (NylaFlow): 1/8-inch (id) tubing = 2.4 mL/ft

(3/16-inch (id) tubing = 5.4 mL/ft)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

(2.25-inch boring = 264 mL/ft)

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [(D+E) x Annulus Volume Conversion] 264 x 2 = 528 mL

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 5.4 x 8 = 43.2 mL

Total Dead Space Volume (Tubing + Annular): 571.2 mL

System Purge Information

Required **System Volume** to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume **x** # of System Volumes = 1714 mL = 8.6 "Hg Δ

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

TVOC

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1255	0	0.8	~	-30
1257	2	6.7-51.2	<1	-21
1259	4	4.4-34.8	↓	-12
1301	6	0.8-10.0	↓	-4
	Average:	15.5 ppm		

initial canister vacuum: -30 "Hg

final canister vacuum: -4 "Hg

Post-Sample PID Reading: 0 ppm

Comments:

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Oneto / 2X404.Q* **Date:** *March 30, 2017*

Sample I.D.: SV-2-5 **Canister No:** 1940 **Manifold No:** 1109 : 1007

Samplers Name: *Josh Hannaleck* **Recorded by:** JH

Sample Analysis Information

~~Requested Analyses (circle~~ all that apply):

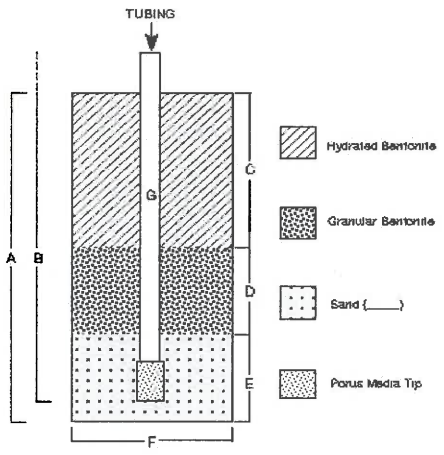
VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 GRO CO_2 & O_2 by ASTM D-1946 IPA by TO-15

Sample Collection Media: *1.4-L Summa Canister*

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (NylaFlow): 1/8-inch (id) tubing = 2.4 mL/ft

3/16-inch (id) tubing = 5.4 mL/ft

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

2.25-inch boring = 264 mL/ft

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [(D+E) x Annulus Volume Conversion] 264 x 2 = 528 mL

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 5.4 x 8 = 43.2 mL

Total Dead Space Volume (Tubing + Annular): 571.2 mL

System Purge Information

Required **System Volume** to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1714 mL = 8.6 "Hg Δ

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

TVOC

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1136	0	2.1	—	-30
1140	2	5.4 - 83.0	-4.5	-23
1142	4	8.9 - 61.3	-4	-16
1144	6	12.0 - 58.1	-4	-11
1146	8	10.8 - 50.3	-3	-6
1148	10	7.8 - 33.0	-3	-4
	Average:	30.3 ppm		

initial canister vacuum: -30 "Hg

final canister vacuum: -4 "Hg

Post-Sample PID Reading: 0 ppm

Comments:

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Oneto / 2X404.Q* **Date:** *March 30, 2017*

Sample I.D.: SV-4-5 **Canister No:** 2860 **Manifold No:** 1077 : 1129

Samplers Name: *Josh Hannaleck* **Recorded by:** JH

Sample Analysis Information

~~Requested Analyses (circle~~ all that apply):

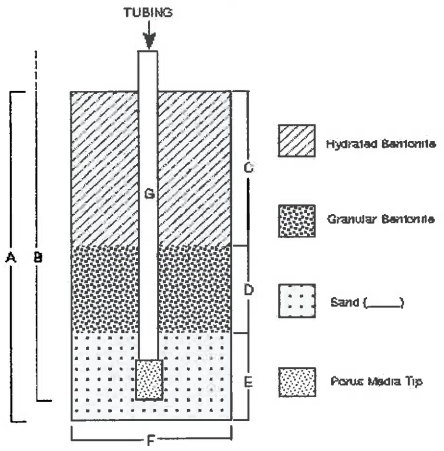
(VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15)

TPH-gas by EPA Method TO-15 GRO CO_2 & O_2 by ASTM D-1946 (IPA by TO-15)

Sample Collection Media: *1.4-L Summa Canister*

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (NylaFlow): 1/8-inch (id) tubing = 2.4 mL/ft

(3/16-inch (id) tubing = 5.4 mL/ft)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

(2.25-inch boring = 264 mL/ft)

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [(D+E) x Annulus Volume Conversion] 264 x 2 = 528 ~L

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 5.4 x 8 = 43.2 ~L

Total Dead Space Volume (Tubing + Annular): 571.2 ~L

System Purge Information

Required **System Volume** to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume **x** # of System Volumes = 1714 ~L = 8.6 "Hg Δ

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

TVOC

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1018	0	2.2	—	-30
1020	2	4.1-16.9	<1	-20
1022	4	4.2-21.2	↓	-10
1024	6	4.3-31.5	↓	-2.5
	Average:	12.1 ppm		

initial canister vacuum: -30 "Hg

final canister vacuum: -2.5 "Hg

Post-Sample PID Reading: 0 ppm

Comments:

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.:	*Oneto / 2X404.Q*	**Date:**	*March 30, 2017*
Sample I.D.:	SV-5-5	**Canister No:** 2861	**Manifold No:** 1119:1006
Samplers Name:	*Josh Hannaleck*	**Recorded by:**	

Sample Analysis Information

~~Requested Analyses (circle~~ all that apply):

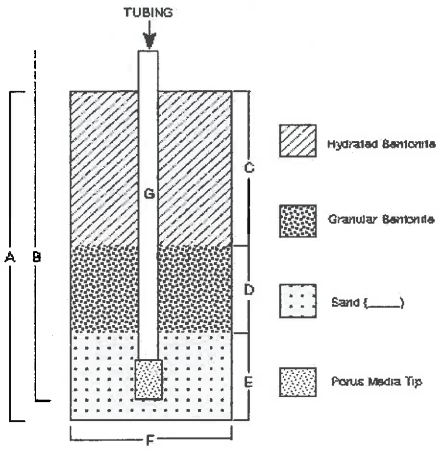
(VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15)

TPH-gas by EPA Method TO-15 GRO CO_2 & O_2 by ASTM D-1946 (IPA by TO-15)

Sample Collection Media: *1.4-L Summa Canister*

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (NylaFlow): 1/8-inch (id) tubing = 2.4 mL/ft

(3/16-inch (id) tubing = 5.4 mL/ft)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

(2.25-inch boring = 264 mL/ft)

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume [(D+E) x Annulus Volume Conversion]: 264x2 = 528 mL

Tubing Dead Space Volume [B x Tubing Volume Conversion]: 5.4x8 = 43.2 mL

Total Dead Space Volume (Tubing + Annular): 571.2 mL

System Purge Information

Required **System Volume** to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume **x** # of System Volumes = 1714 mL = 8.6 "Hg Δ

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

TVOC

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)	
1419	0	7.2	—	-30	initial canister vacuum: -30 "Hg
1421	2	16.2 - 61.4	<1	-20	
1423	4	6.7 - 16.5	↓	-10	
1425	6	0.8 - 2.1	↓	-2.5	final canister vacuum: -2.5 "Hg
	Average:	15.8 ppm			

Post-Sample PID Reading: 0 ppm

Comments: HEAVY OIL STAINING REMAIN AROUND VAULT

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.:	*Oneto / 2X404.Q*	**Date:**	*March 30, 2017*
Sample I.D.:	SV-5-10	**Canister No:** 2864	**Manifold No:** 1210 : 1116
Samplers Name:	*Josh Hannaleck*	**Recorded by:**	JH

Sample Analysis Information

~~Requested Analyses (circle~~ all that apply):

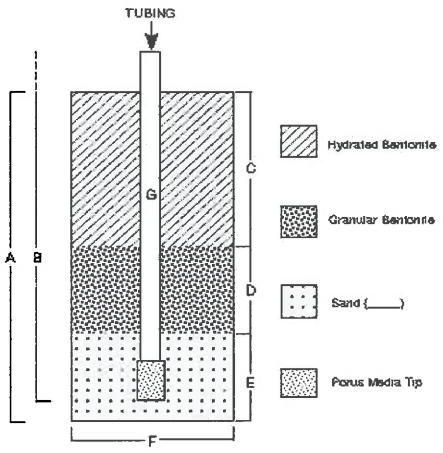
VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 GRO CO_2 & O_2 by ASTM D-1946 IPA by TO-15

Sample Collection Media: *1.4-L Summa Canister*

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 10'

A: 10.5'

B: 13'

C: 8.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (NylaFlow): 1/8-inch (id) tubing = 2.4 mL/ft

3/16-inch (id) tubing = 5.4 mL/ft

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

2.25-inch boring = 264 mL/ft

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume [(D+E) x Annulus Volume Conversion]: 264x2 = 528 mL

Tubing Dead Space Volume [B x Tubing Volume Conversion]: 5.4 x 13 = 70.2 mL

Total Dead Space Volume (Tubing + Annular): 598.2 mL

System Purge Information

Required **System Volume** to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume **x** # of System Volumes = 1795mL = 9.0 "Hg Δ

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration: TVOC

Time	Elapsed Time (ACTUAL) TOTAL	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)	
					initial canister vacuum: -30 "Hg
1508	(0.5) 0	8.7	~10-7	-30	
1513	(1) 5	3.2-79.4	-2--7	-24	
1520	(1.5) 13	1.2-76.9	-2--7	-20	
1525	(2) 18	0.5-48.6	-2--7	-17	
1533	(2.5) 26	0.9-40.3	-2--7	-14	
1543	(3) 36	0.2-128	-2--7	-11	
1551	(3.5) 44	1.2-29.9	-2--7	-7	
1558	(10.5) 51	16.4-82.4	-6--2	-2	
					final canister vacuum: -2 "Hg
		Average: 34.5 ppm			

Post-Sample PID Reading:

Comments: HEAVY OIL STAINS REMAIN AROUND VALVE

- LOW-FLOW/LOW-FLOW METHOD SAMPLING (SAMPLE FOR ~30 SEC; STOP/EQUILIBRATE FOR ~5 MIN)

Bayside Oil II, Inc.
210 Encinal Street
Santa Cruz, CA 95060

Voice: 831-427-3773
Fax: 831-427-9502

EPA # CAD088838222
Hauler # 3488

INVOICE

Invoice Number: 24843
Invoice Date: Apr 14, 2017
Page: 1

Duplicate

Bill To:
WEBER HAYES & ASSOCIATES
120 WESTGATE DRIVE
WATSONVILLE, CA 95076

Generator Location:
oneto commercial w/h prop.
25 e fifth st
epa# cal000426568
WATSONVILLE, CA 95076
831-722-3580

Contact Person: _____

Customer ID	Customer PO	Sales Order	Payment Terms
WAA02			Net 30 Days

Sales Rep	Shipping Method	Ship Date	Due Date
KG	Our Truck	4/14/17	5/14/17

Quantity	UOM	Item	Description	Unit Price	Amount
7.00	EA	52	OIL MIXED W/WATER APPROX GALS. - NON RCRA HAZARDOUS WASTE LIQUID (134/223) MANIFEST# 003296739	2.20	15.40

If a large generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable. I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment. If a small generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. Bayside Oil II, Inc. hereby advises generator that shipments of used oil may be transported to a facility that is required to comply with federal regulations applicable to management of used oil, but that is not required to comply with the more stringent requirements applicable to hazardous waste management facilities. California facilities that handle or process used oil are required to meet those more stringent requirements and some out of state facilities that process used oil also meet those requirements. These include more stringent leak detection and prevention requirements, engineering certification of tank integrity and financial assurances for closure and accidental releases. It is lawful to send used oil to out of state facilities that comply only with federal used oil management standards and not these more stringent requirements. This is for information purposes only. _____ _____
Designated Facility: Bayside Oil II Inc. 210 Encinal St. Santa Cruz, Ca. 95060

Tested: Clor-D-tect Sniffer Pass Fail PPM Manifest # 0032 96739 GBF Sample # _____

Driver - Signature	Truck #	Date
		4/14/17

Customer - Signature	Customer Print & Date
	Jared Chaney 4/14/17

Terms Net 15 from date of invoice - Finance Charge 2.0 % per month. If account is unpaid when due, customer agrees to pay interest at 18% per annum and attorney fees if referred to an attorney for collection. The signee hereby states he/she is authorized to bind the principal to the terms hereof.

Subtotal	15.40
Sales Tax	
Total Invoice Amount	15.40
Payment/Credit Applied	
TOTAL	**$15.40**

APPENDIX D

LABORATORY ANALYTICAL REPORTS & CHAIN OF CUSTODY DOCUMENTATION

- **GROUNDWATER ANALYSIS – ESC LAB SCIENCES REPORT L897804**
- **GROUNDWATER ANALYSIS (AMMONIA AS NITROGEN) – SOIL CONTROL LAB REPORT 7030703**
- **SOIL VAPOR ANALYSIS (TO-15 ANALYSIS) – BC LABORATORIES LAB REPORT 1708578**

ANALYTICAL REPORT

March 31, 2017

Weber, Hayes & Associates - CA

Sample Delivery Group:	L897804
Samples Received:	03/23/2017
Project Number:	2X404
Description:	Oneto

Report To: Jered Chaney
120 Westgate Drive
Watsonville, CA 95076

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Technical Service Representative

TABLE OF CONTENTS

GW-1 L897804-01 GW

Collected by: Jered Chaney
Collected date/time: 03/22/17 00:00
Received date/time: 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9012B	WG963868	1	03/24/17 08:39	03/24/17 15:26	DR
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 07:16	03/30/17 07:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG964095	1	03/28/17 02:48	03/28/17 02:48	ACG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG964181	1	03/25/17 22:28	03/29/17 14:18	TRF
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 07:16	03/30/17 07:16	BMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG964392	1	03/26/17 19:18	03/28/17 15:39	FMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG964392	1	03/26/17 19:18	03/30/17 21:01	FMB

GW-2 L897804-02 GW

Collected by: Jered Chaney
Collected date/time: 03/22/17 00:00
Received date/time: 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9012B	WG963868	1	03/24/17 08:39	03/24/17 15:27	DR
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 07:39	03/30/17 07:39	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG964095	1	03/28/17 03:04	03/28/17 03:04	ACG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG964181	1	03/25/17 22:28	03/29/17 13:44	TRF
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 07:39	03/30/17 07:39	BMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG964392	1	03/26/17 19:18	03/28/17 16:01	FMB

GW-3 L897804-03 GW

Collected by: Jered Chaney
Collected date/time: 03/22/17 00:00
Received date/time: 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9012B	WG963868	10	03/24/17 08:39	03/24/17 16:02	DR
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 08:01	03/30/17 08:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG964095	1	03/28/17 03:20	03/28/17 03:20	ACG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG964181	1	03/25/17 22:28	03/29/17 14:01	TRF
Volatile Organic Compounds (GC) by Method 8015	WG963909	1	03/30/17 08:01	03/30/17 08:01	BMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG964392	1	03/26/17 19:18	03/28/17 16:23	FMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne R Richards

Daphne Richards
Technical Service Representative

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	28.2		1.80	5.00	1	03/24/2017 15:26	WG963868

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	250		30.4	100	1	03/30/2017 07:16	WG963909
(S) α,α,α-Trifluorotoluene(FID)	*98.4*			*77.0-122*		*03/30/2017 07:16*	WG963909

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	0.827	J	0.331	1.00	1	03/28/2017 02:48	WG964095
Toluene	1.57		0.412	1.00	1	03/28/2017 02:48	WG964095
Ethylbenzene	2.87		0.384	1.00	1	03/28/2017 02:48	WG964095
Total Xylenes	19.9		1.06	3.00	1	03/28/2017 02:48	WG964095
Methyl tert-butyl ether	U		0.367	1.00	1	03/28/2017 02:48	WG964095
1,2-Dibromoethane	U		0.381	1.00	1	03/28/2017 02:48	WG964095
(S) Toluene-d8	*102*			*80.0-120*		*03/28/2017 02:48*	WG964095
(S) Dibromofluoromethane	*98.3*			*76.0-123*		*03/28/2017 02:48*	WG964095
(S) α,α,α-Trifluorotoluene	*101*			*80.0-120*		*03/28/2017 02:48*	WG964095
(S) 4-Bromofluorobenzene	*107*			*80.0-120*		*03/28/2017 02:48*	WG964095

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C12-C22 Hydrocarbons	1490		33.0	100	1	03/29/2017 14:18	WG964181
C22-C32 Hydrocarbons	425		33.0	100	1	03/29/2017 14:18	WG964181
C32-C40 Hydrocarbons	91.0	J	33.0	100	1	03/29/2017 14:18	WG964181
(S) o-Terphenyl	*131*			*52.0-156*		*03/29/2017 14:18*	WG964181

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.267		0.0140	0.0500	1	03/28/2017 15:39	WG964392
Acenaphthene	10.3		0.0100	0.0500	1	03/28/2017 15:39	WG964392
Acenaphthylene	4.93		0.0120	0.0500	1	03/28/2017 15:39	WG964392
Benzo(a)anthracene	U		0.00410	0.0500	1	03/28/2017 15:39	WG964392
Benzo(a)pyrene	U		0.0116	0.0500	1	03/28/2017 15:39	WG964392
Benzo(b)fluoranthene	U		0.00212	0.0500	1	03/28/2017 15:39	WG964392
Benzo(g,h,i)perylene	0.00326	B J	0.00227	0.0500	1	03/28/2017 15:39	WG964392
Benzo(k)fluoranthene	U		0.0136	0.0500	1	03/28/2017 15:39	WG964392
Chrysene	U		0.0108	0.0500	1	03/28/2017 15:39	WG964392
Dibenz(a,h)anthracene	U		0.00396	0.0500	1	03/28/2017 15:39	WG964392
Fluoranthene	U		0.0157	0.0500	1	03/28/2017 15:39	WG964392
Fluorene	0.488		0.00850	0.0500	1	03/28/2017 15:39	WG964392
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500	1	03/28/2017 15:39	WG964392
Naphthalene	84.5		0.0198	0.250	1	03/30/2017 21:01	WG964392
Phenanthrene	0.243		0.00820	0.0500	1	03/28/2017 15:39	WG964392
Pyrene	0.0380	J	0.0117	0.0500	1	03/28/2017 15:39	WG964392
1-Methylnaphthalene	10.1		0.00821	0.250	1	03/28/2017 15:39	WG964392
2-Methylnaphthalene	0.861		0.00902	0.250	1	03/28/2017 15:39	WG964392
2-Chloronaphthalene	U		0.00647	0.250	1	03/28/2017 15:39	WG964392
(S) Nitrobenzene-d5	*106*			*31.0-160*		*03/28/2017 15:39*	WG964392
(S) Nitrobenzene-d5	*116*			*31.0-160*		*03/30/2017 21:01*	WG964392

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 2-Fluorobiphenyl	*90.4*			*48.0-148*		*03/28/2017 15:39*	WG964392
(S) 2-Fluorobiphenyl	*100*			*48.0-148*		*03/30/2017 21:01*	WG964392
(S) p-Terphenyl-d14	*98.4*			*37.0-146*		*03/28/2017 15:39*	WG964392
(S) p-Terphenyl-d14	*103*			*37.0-146*		*03/30/2017 21:01*	WG964392

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	2.86	J	1.80	5.00	1	03/24/2017 15:27	WG963868

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	U		30.4	100	1	03/30/2017 07:39	WG963909
(S) α,α,α-Trifluorotoluene(FID)	*98.3*			*77.0-122*		*03/30/2017 07:39*	WG963909

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/28/2017 03:04	WG964095
Toluene	U		0.412	1.00	1	03/28/2017 03:04	WG964095
Ethylbenzene	U		0.384	1.00	1	03/28/2017 03:04	WG964095
Total Xylenes	U		1.06	3.00	1	03/28/2017 03:04	WG964095
Methyl tert-butyl ether	U		0.367	1.00	1	03/28/2017 03:04	WG964095
1,2-Dibromoethane	U		0.381	1.00	1	03/28/2017 03:04	WG964095
(S) Toluene-d8	*101*			*80.0-120*		*03/28/2017 03:04*	WG964095
(S) Dibromofluoromethane	*97.3*			*76.0-123*		*03/28/2017 03:04*	WG964095
(S) α,α,α-Trifluorotoluene	*99.5*			*80.0-120*		*03/28/2017 03:04*	WG964095
(S) 4-Bromofluorobenzene	*103*			*80.0-120*		*03/28/2017 03:04*	WG964095

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C12-C22 Hydrocarbons	48.8	J	33.0	100	1	03/29/2017 13:44	WG964181
C22-C32 Hydrocarbons	U		33.0	100	1	03/29/2017 13:44	WG964181
C32-C40 Hydrocarbons	U		33.0	100	1	03/29/2017 13:44	WG964181
(S) o-Terphenyl	*116*			*52.0-156*		*03/29/2017 13:44*	WG964181

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	U		0.0140	0.0500	1	03/28/2017 16:01	WG964392
Acenaphthene	U		0.0100	0.0500	1	03/28/2017 16:01	WG964392
Acenaphthylene	U		0.0120	0.0500	1	03/28/2017 16:01	WG964392
Benzo(a)anthracene	U		0.00410	0.0500	1	03/28/2017 16:01	WG964392
Benzo(a)pyrene	U		0.0116	0.0500	1	03/28/2017 16:01	WG964392
Benzo(b)fluoranthene	U		0.00212	0.0500	1	03/28/2017 16:01	WG964392
Benzo(g,h,i)perylene	0.00386	B J	0.00227	0.0500	1	03/28/2017 16:01	WG964392
Benzo(k)fluoranthene	U		0.0136	0.0500	1	03/28/2017 16:01	WG964392
Chrysene	U		0.0108	0.0500	1	03/28/2017 16:01	WG964392
Dibenz(a,h)anthracene	U		0.00396	0.0500	1	03/28/2017 16:01	WG964392
Fluoranthene	U		0.0157	0.0500	1	03/28/2017 16:01	WG964392
Fluorene	U		0.00850	0.0500	1	03/28/2017 16:01	WG964392
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500	1	03/28/2017 16:01	WG964392
Naphthalene	0.128	B J	0.0198	0.250	1	03/28/2017 16:01	WG964392
Phenanthrene	0.00848	J	0.00820	0.0500	1	03/28/2017 16:01	WG964392
Pyrene	U		0.0117	0.0500	1	03/28/2017 16:01	WG964392
1-Methylnaphthalene	0.0124	J	0.00821	0.250	1	03/28/2017 16:01	WG964392
2-Methylnaphthalene	0.0120	J	0.00902	0.250	1	03/28/2017 16:01	WG964392
2-Chloronaphthalene	U		0.00647	0.250	1	03/28/2017 16:01	WG964392
(S) Nitrobenzene-d5	*101*			*31.0-160*		*03/28/2017 16:01*	WG964392
(S) 2-Fluorobiphenyl	*96.5*			*48.0-148*		*03/28/2017 16:01*	WG964392

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) p-Terphenyl-d14	*101*			*37.0-146*		*03/28/2017 16:01*	WG964392

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	604		18.0	50.0	10	03/24/2017 16:02	WG963868

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	U		30.4	100	1	03/30/2017 08:01	WG963909
(S) α,α,α-Trifluorotoluene(FID)	*97.9*			*77.0-122*		*03/30/2017 08:01*	WG963909

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/28/2017 03:20	WG964095
Toluene	U		0.412	1.00	1	03/28/2017 03:20	WG964095
Ethylbenzene	U		0.384	1.00	1	03/28/2017 03:20	WG964095
Total Xylenes	U		1.06	3.00	1	03/28/2017 03:20	WG964095
Methyl tert-butyl ether	U		0.367	1.00	1	03/28/2017 03:20	WG964095
1,2-Dibromoethane	U		0.381	1.00	1	03/28/2017 03:20	WG964095
(S) Toluene-d8	*102*			*80.0-120*		*03/28/2017 03:20*	WG964095
(S) Dibromofluoromethane	*99.7*			*76.0-123*		*03/28/2017 03:20*	WG964095
(S) α,α,α-Trifluorotoluene	*99.0*			*80.0-120*		*03/28/2017 03:20*	WG964095
(S) 4-Bromofluorobenzene	*102*			*80.0-120*		*03/28/2017 03:20*	WG964095

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C12-C22 Hydrocarbons	336		33.0	100	1	03/29/2017 14:01	WG964181
C22-C32 Hydrocarbons	152		33.0	100	1	03/29/2017 14:01	WG964181
C32-C40 Hydrocarbons	64.0	J	33.0	100	1	03/29/2017 14:01	WG964181
(S) o-Terphenyl	*123*			*52.0-156*		*03/29/2017 14:01*	WG964181

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Anthracene	0.185		0.0140	0.0500	1	03/28/2017 16:23	WG964392
Acenaphthene	0.250		0.0100	0.0500	1	03/28/2017 16:23	WG964392
Acenaphthylene	0.126		0.0120	0.0500	1	03/28/2017 16:23	WG964392
Benzo(a)anthracene	0.0531		0.00410	0.0500	1	03/28/2017 16:23	WG964392
Benzo(a)pyrene	0.0158	J	0.0116	0.0500	1	03/28/2017 16:23	WG964392
Benzo(b)fluoranthene	0.0184	J	0.00212	0.0500	1	03/28/2017 16:23	WG964392
Benzo(g,h,i)perylene	0.00732	B J	0.00227	0.0500	1	03/28/2017 16:23	WG964392
Benzo(k)fluoranthene	U		0.0136	0.0500	1	03/28/2017 16:23	WG964392
Chrysene	0.0328	J	0.0108	0.0500	1	03/28/2017 16:23	WG964392
Dibenz(a,h)anthracene	U		0.00396	0.0500	1	03/28/2017 16:23	WG964392
Fluoranthene	0.173		0.0157	0.0500	1	03/28/2017 16:23	WG964392
Fluorene	0.280		0.00850	0.0500	1	03/28/2017 16:23	WG964392
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500	1	03/28/2017 16:23	WG964392
Naphthalene	2.78		0.0198	0.250	1	03/28/2017 16:23	WG964392
Phenanthrene	0.297		0.00820	0.0500	1	03/28/2017 16:23	WG964392
Pyrene	0.156		0.0117	0.0500	1	03/28/2017 16:23	WG964392
1-Methylnaphthalene	0.878		0.00821	0.250	1	03/28/2017 16:23	WG964392
2-Methylnaphthalene	0.310		0.00902	0.250	1	03/28/2017 16:23	WG964392
2-Chloronaphthalene	U		0.00647	0.250	1	03/28/2017 16:23	WG964392
(S) Nitrobenzene-d5	*100*			*31.0-160*		*03/28/2017 16:23*	WG964392
(S) 2-Fluorobiphenyl	*98.1*			*48.0-148*		*03/28/2017 16:23*	WG964392

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) p-Terphenyl-d14	*101*			*37.0-146*		*03/28/2017 16:23*	WG964392

Method Blank (MB)

(MB) R3205829-3 03/24/17 15:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Cyanide	U		1.80	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3205829-4 03/24/17 15:08 • (LCSD) R3205829-5 03/24/17 15:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Cyanide	100	102	106	102	106	85-115			4	20

L897833-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897833-02 03/24/17 15:32 • (MS) R3205829-6 03/24/17 15:33 • (MSD) R3205829-7 03/24/17 15:34

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Cyanide	200	U	101	87.5	51	44	1	75-125	J6	J6	14	20

Method Blank (MB)

(MB) R3207028-3 03/29/17 23:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPHG C5 - C12	U		30.4	100
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207028-1 03/29/17 22:32 • (LCSD) R3207028-2 03/29/17 22:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPHG C5 - C12	5500	5770	6050	105	110	71.0-130			4.82	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*103*	*77.0-122*				

L897678-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897678-01 03/30/17 00:57 • (MS) R3207028-4 03/30/17 01:19 • (MSD) R3207028-5 03/30/17 01:41

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPHG C5 - C12	5500	31.0	2580	2190	46.4	39.3	1	18.0-158			16.5	20
(S) a,a,a-Trifluorotoluene(FID)					*94.0*	*94.3*		*77.0-122*				

Method Blank (MB)

(MB) R3206393-3 03/27/17 21:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.331	1.00
1,2-Dibromoethane	U		0.381	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*103*			*80.0-120*
(S) Dibromofluoromethane	*98.2*			*76.0-123*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206393-1 03/27/17 19:26 • (LCSD) R3206393-2 03/27/17 19:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	25.0	19.4	19.1	77.7	76.5	69.0-123			1.56	20
1,2-Dibromoethane	25.0	28.5	28.3	114	113	77.0-123			0.460	20
Ethylbenzene	25.0	28.3	28.3	113	113	77.0-120			0.0500	20
Methyl tert-butyl ether	25.0	17.9	18.1	71.8	72.6	64.0-123			1.11	20
Toluene	25.0	22.7	22.5	90.6	89.8	77.0-120			0.860	20
Xylenes, Total	75.0	86.1	84.8	115	113	77.0-120			1.52	20
(S) Toluene-d8				*96.1*	*95.8*	*80.0-120*				
(S) Dibromofluoromethane				*89.8*	*89.7*	*76.0-123*				
(S) a,a,a-Trifluorotoluene				*104*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*107*	*106*	*80.0-120*				

L897905-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897905-12 03/28/17 04:55 • (MS) R3206393-4 03/28/17 01:45 • (MSD) R3206393-5 03/28/17 02:01

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Benzene	25.0	ND	253	388	50.7	77.6	20	34.0-147		J3	42.1	20
1,2-Dibromoethane	25.0	ND	317	545	63.5	109	20	54.0-140		J3	52.7	20
Ethylbenzene	25.0	462	850	1030	77.4	113	20	42.0-147			18.8	20
Methyl tert-butyl ether	25.0	ND	222	353	44.4	70.5	20	42.0-142		J3	45.4	20
Toluene	25.0	839	1170	1210	66.6	73.5	20	42.0-141			2.89	20
Xylenes, Total	75.0	1390	2530	3050	75.9	110	20	41.0-148		J3	18.6	20
(S) Toluene-d8					*99.9*	*97.0*		*80.0-120*				

L897905-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897905-12 03/28/17 04:55 • (MS) R3206393-4 03/28/17 01:45 • (MSD) R3206393-5 03/28/17 02:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane					*95.5*	*90.0*		*76.0-123*				
(S) α,α,α-Trifluorotoluene					*101*	*104*		*80.0-120*				
(S) 4-Bromofluorobenzene					*106*	*105*		*80.0-120*				

Method Blank (MB)

(MB) R3206265-1 03/27/17 16:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C12-C22 Hydrocarbons	U		33.0	100
C22-C32 Hydrocarbons	U		33.0	100
C32-C40 Hydrocarbons	U		33.0	100
(S) o-Terphenyl	*116*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206265-2 03/27/17 16:53 • (LCSD) R3206265-3 03/27/17 17:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
C22-C32 Hydrocarbons	750	965	966	129	129	50.0-150			0.120	20
C12-C22 Hydrocarbons	750	1060	1050	141	140	50.0-150			0.710	20
(S) o-Terphenyl				*124*	*127*	*52.0-156*				

Method Blank (MB)

(MB) R3206881-3 03/28/17 14:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0140	0.0500
Acenaphthene	U		0.0100	0.0500
Acenaphthylene	U		0.0120	0.0500
Benzo(a)anthracene	U		0.00410	0.0500
Benzo(a)pyrene	U		0.0116	0.0500
Benzo(b)fluoranthene	U		0.00212	0.0500
Benzo(g,h,i)perylene	0.00255	J	0.00227	0.0500
Benzo(k)fluoranthene	U		0.0136	0.0500
Chrysene	U		0.0108	0.0500
Dibenz(a,h)anthracene	U		0.00396	0.0500
Fluoranthene	U		0.0157	0.0500
Fluorene	U		0.00850	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500
Naphthalene	0.0568	J	0.0198	0.250
Phenanthrene	U		0.00820	0.0500
Pyrene	U		0.0117	0.0500
1-Methylnaphthalene	U		0.00821	0.250
2-Methylnaphthalene	U		0.00902	0.250
2-Chloronaphthalene	U		0.00647	0.250
(S) Nitrobenzene-d5	*103*			*31.0-160*
(S) 2-Fluorobiphenyl	*102*			*48.0-148*
(S) p-Terphenyl-d14	*105*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206881-1 03/28/17 13:29 • (LCSD) R3206881-2 03/28/17 13:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	2.22	2.19	111	110	64.0-142			1.48	20
Acenaphthene	2.00	2.09	2.09	105	104	66.0-132			0.250	20
Acenaphthylene	2.00	2.17	2.15	109	108	65.0-132			0.840	20
Benzo(a)anthracene	2.00	2.19	2.20	109	110	59.0-134			0.670	20
Benzo(a)pyrene	2.00	2.27	2.27	114	113	61.0-145			0.380	20
Benzo(b)fluoranthene	2.00	2.22	2.32	111	116	57.0-136			4.53	20
Benzo(g,h,i)perylene	2.00	2.43	2.39	122	119	54.0-140			1.78	20
Benzo(k)fluoranthene	2.00	2.28	2.14	114	107	57.0-141			6.41	20
Chrysene	2.00	2.13	2.16	107	108	63.0-140			1.47	20
Dibenz(a,h)anthracene	2.00	2.42	2.35	121	117	49.0-141			2.97	20
Fluoranthene	2.00	2.18	2.14	109	107	65.0-143			1.63	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206881-1 03/28/17 13:29 • (LCSD) R3206881-2 03/28/17 13:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	2.04	2.04	102	102	64.0-129			0.0600	20
Indeno(1,2,3-cd)pyrene	2.00	2.47	2.41	123	121	53.0-141			2.34	20
Naphthalene	2.00	2.18	2.17	109	108	68.0-129			0.440	20
Phenanthrene	2.00	2.19	2.18	110	109	62.0-132			0.490	20
Pyrene	2.00	2.13	2.15	106	107	58.0-156			0.860	20
1-Methylnaphthalene	2.00	2.17	2.18	109	109	68.0-137			0.290	20
2-Methylnaphthalene	2.00	2.03	2.03	102	102	68.0-134			0.0100	20
2-Chloronaphthalene	2.00	2.04	2.03	102	102	65.0-129			0.180	20
(S) Nitrobenzene-d5				*101*	*102*	*31.0-160*				
(S) 2-Fluorobiphenyl				*93.5*	*96.2*	*48.0-148*				
(S) p-Terphenyl-d14				*99.1*	*99.6*	*37.0-146*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

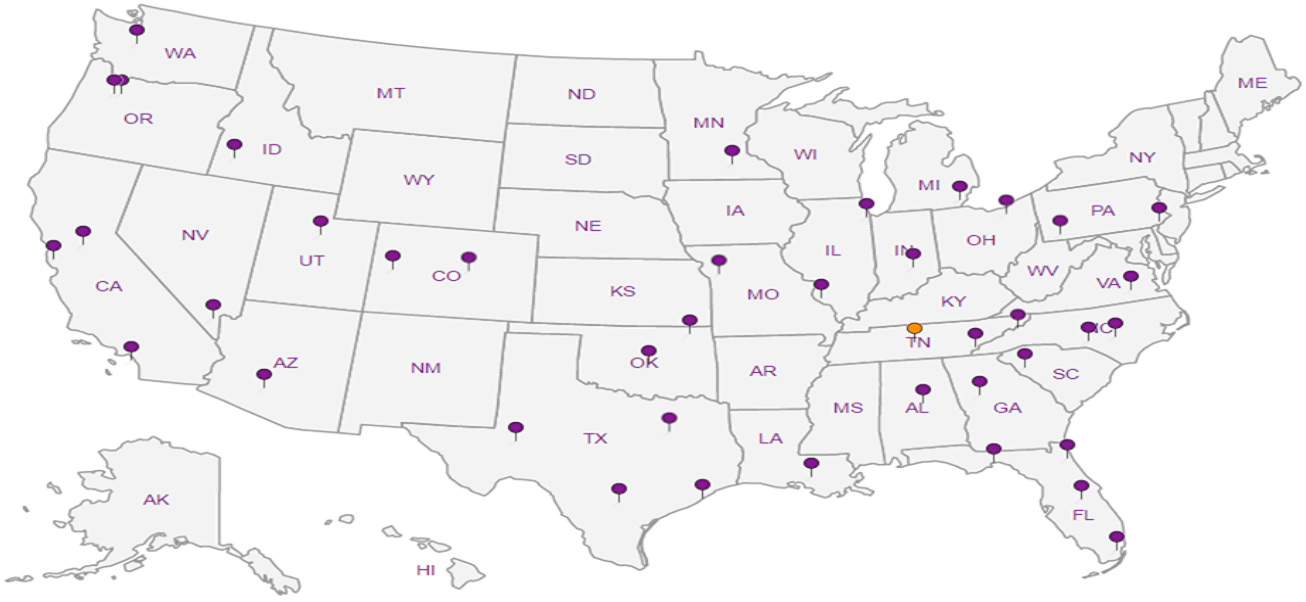
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Weber, Hayes & Associates
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www.weber-hayes.com

CHAIN -OF-CUSTODY RECORD

C240

1 OF 1

PROJECT NAME AND JOB #: Oneto / 2X404.Q

SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: ESC Labs

TURNAROUND TIME: Standard 48hr Rush

GLOBAL I.D.: T10000008129

Sampler: Jered Chaney

Date: 3/22/17

L897804

GeoTracker I.D.	Sample I.D.	Date Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (w/ HCL)	40 mL VOAs	250 mL HDPE (w/ NaOH)	Liner Acetate	REQUESTED ANALYSIS: Total Petroleum Hydrocarbons: GRO / DRO / ORO EPA Method# 8015M	TPH-diesel & motor oil EPA Method 8015M	TPH-Gas by EPA Method 8260B	VOCs: BTEXM & EDB by EPA Method 8260B	PAHs by EPA Method 8270 SIM	Additional Analysis: Amonia as Nitrogen by EPA Method 350.1	CAM 17 Metals by EPA Methods 6010/7470	Cyanide by EPA Method 9012	
GW-1	GW-1	3/22/17	Aq.	6	2	1		X			X	X			X	01
GW-2	GW-2	↓	↓	6	2	1		X			X	X			X	02
GW-3	GW-3			6	2	1		X			X	X			X	03

RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time
1.)	3/22/17 1633	→	Fedex	3/22/17 1633
2.)		→		
3.)		→	783 8322 0665	
4.)		→		
5.)		→	32317 0900	

SAMPLE CONDITION: (circle 1)

Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

[X] Please use MDL (Minimum Detection Limit) for any diluted samples.

ADDITIONAL COMMENTS

Note: Date mislabeled on all sample bottles as 3/23/17, not 3/22/17. All samples collected on 3/22/17

CONT. 27 +TB 8.2° NV

NCF

PH >12

ESC LAB SCIENCES
Cooler Receipt Form

Client: WEBHAYWCA		SDG#	L897804
Cooler Received/Opened On: 3/23/17	Temperature:	8.2	
Received By: Mike Lowe			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?		✓	

ESC Lab Sciences
Non-Conformance Form

Login #: L897804	Client: WEBHAYWCA	Date: 3/23/17	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
X	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received out of temperature at 8.2°c.

Client informed by:		Call		Email	x	Voice Mail		Date:03/23/17	Time:1330
TSR Initials:bjf	Client Contact: Jered Chaney								

Login Instructions:

Proceed and qualify as needed. Add a comment "Received at >6 Deg C"

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Weber Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Jered Chaney

Work Order #: 7030703
Reporting Date: April 6, 2017

Date Received:	March 22, 2017
Project # / Name:	2X404.Q / Oneto, Global ID:T10000008129
Sample Identification:	GW-1, sampled 3/22/2017 11:40:00AM
Sampler Name / Co.:	Jered Chaney / Weber Hayes & Assoc.
Matrix:	Water
Laboratory #:	7030703-01

	Results	Units	RL	Analysis Method	Date Analyzed	Flags
Ammonia as N	50	mg/L	0.28	EPA 350.2	04/04/17	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Galloway

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
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SOIL CONTROL LAB

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WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Weber Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Jered Chaney

Work Order #: 7030703
Reporting Date: April 6, 2017

Date Received:	March 22, 2017
Project # / Name:	2X404.Q / Oneto, Global ID:T10000008129
Sample Identification:	GW-2, sampled 3/22/2017 12:30:00PM
Sampler Name / Co.:	Jered Chaney / Weber Hayes & Assoc.
Matrix:	Water
Laboratory #:	7030703-02

	Results	Units	RL	Analysis Method	Date Analyzed	Flags
Ammonia as N	ND	mg/L	0.28	EPA 350.2	04/04/17	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Galloway

ANALYTICAL CHEMISTS
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SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Weber Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Jered Chaney

Work Order #: 7030703
Reporting Date: April 6, 2017

Date Received:	March 22, 2017
Project # / Name:	2X404.Q / Oneto, Global ID:T10000008129
Sample Identification:	GW-3, sampled 3/22/2017 1:00:00PM
Sampler Name / Co.:	Jered Chaney / Weber Hayes & Assoc.
Matrix:	Water
Laboratory #:	7030703-03

	Results	Units	RL	Analysis Method	Date Analyzed	Flags
Ammonia as N	1.1	mg/L	0.28	EPA 350.2	04/04/17	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Galloway

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

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Reporting Date: April 6, 2017

Nitrogen - Quality Control

Soil Control Lab

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch PD70020 - Default Prep GenChem											
Blank (PD70020-BLK1)					Prepared & Analyzed: 04-Apr-17						
Ammonia as N	ND		0.28	mg/L							
Duplicate (PD70020-Dup1)		**Source: 7030933-03**			Prepared & Analyzed: 04-Apr-17						
Ammonia as N	ND		0.28	mg/L		ND				20	
Matrix Spike (PD70020-MS1)		**Source: 7030933-03**			Prepared & Analyzed: 04-Apr-17						
Ammonia as N	19.51		0.28	mg/L	20.0	ND	97.6	80-120			
Matrix Spike Dup (PD70020-MSD1)		**Source: 7030933-03**			Prepared & Analyzed: 04-Apr-17						
Ammonia as N	18.31		0.28	mg/L	20.0	ND	91.6	80-120	6.34	20	
Reference (PD70020-SRM1)					Prepared & Analyzed: 04-Apr-17						
Ammonia as N	17.19		0.28	mg/L	17.4		98.8	80-120			

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Galloway

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax: (831) 722-1159
www.weber-hayes.com

CHAIN -OF-CUSTODY RECORD 7030703

1 OF 1

Soil Control Labs

PROJECT NAME AND JOB #: Oneto / 2X404.Q

SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: [redacted]

TURNAROUND TIME: Standard 48hr Rush

GLOBAL I.D.: T10000008129

Sampler: *Jered Chaney*

Date: 3/22/17

GeoTracker I.D.	Sample I.D.	Date Sampled	Matrix	SAMPLE CONTAINERS: 40mL VOAs (w/ HCL) Time	40 mL VOAs	250 mL HDPE (w/ H2SO4)	Liner Acetate	REQUESTED ANALYSIS: Total Petroleum Hydrocarbons: GRO / DRO / ORO EPA Method# 8015M	TPH-diesel & motor oil EPA Method 8015M	TPH-Gas by EPA Method 8260B	VOCs: BTEXM & EDB by EPA Method 8260B	PAHs by EPA Method 8270 SIM	Additional Analysis: Amonia as Nitrogen by EPA Method 350.2	CAM 17 Metals by EPA Methods 6010/7470	Cyanide by EPA Method 9012
-01 GW-1	GW-1	3/23/17	Aq.	1140		1							X		
-02 GW-2	GW-2	↓	↓	1230		1							X		
-03 GW-3	GW-3	↓	↓	1300		1							X		

	RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time	SAMPLE CONDITION: (circle 1)		
1.)	[signature]	3/22/17 1535	→	[signature]	3/22/17 1535	Ambient	Refrigerated	Frozen
2.)			→			Ambient	Refrigerated	Frozen
3.)			→			Ambient	Refrigerated	Frozen
4.)			→			Ambient	Refrigerated	Frozen
5.)			→			Ambient	Refrigerated	Frozen

NOTES:

[X] *Please use MDL (Minimum Detection Limit) for any diluted samples.*

ADDITIONAL COMMENTS

Date of Report: 04/10/2017

Jered Chaney

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Client Project:	Oneto / 2X404.Q
BCL Project:	Air Samples - COELT
BCL Work Order:	1708578
Invoice ID:	B264093

Enclosed are the results of analyses for samples received by the laboratory on 4/4/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton
Client Service Rep

Authorized Signature

Table of Contents

WHA
Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax: (831) 722-1159
www.weber-hayes.com

17-08578

RUSH! CHAIN -OF-CUSTODY RECORD

PAGE 1 OF 1

PROJECT NAME AND JOB #: Oneto / 2X404.Q
SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attn: Jered Chaney
ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: BC Labs
TURNAROUND TIME: Standard 5-Day | 24hr Rush | 48hr Rush | 72hr Rush
GLOBAL I.D.: T10000008129

Sampler: Josh Hannaleck
Date: 3/30/17

GeoTracker Field Point Name (FPN)	Sample ID	Date Sampled	Matrix	SAMPLE CONTAINERS: 6 Liter Summa	1.4 Liter Summa	Tube Sorbent Tube	Liner Acetate or Brass	REQUESTED ANALYSIS: Total Petroleum Hydrocarbons: Extractable as Diesel & Motor Oil with Silica Gel Cleanup	Gasoline by TO-15 GRO	Gasoline by TO-17 GRO	Volatile Organics: Full List VOCs EPA Method# TO-15	CVOCs EPA Method# TO-15	IPA (LCC) EPA Method# TO-15	Additional Analysis: Helium (LCC) ASTM D-1946	Oxygen ASTM D-1946	HOLD
SV-1	SV-1-5	3/30/17	Air		1						X		X			
SV-2	SV-2-5				1											
SV-4	SV-4-5				1											
SV-5	SV-5-5				1											
SV-5	SV-5-10				1											

JH) ATM JHW

RELEASED BY:	Date & Time	RECEIVED BY:	Date & Time
1.)	3/30/17 1700	WHA OFFICE	3/30/17 1700
2.) WHA OFFICE (JOSH HANNALECK)	4/3/17 1655	Wendell Stewart	4/3/17 1655
3.)			4/4/17 0930
4.)			
5.)			

SAMPLE CONDITION: (circle 1)

Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

[X] *Please use MDL (Minimum Detection Limit) for any diluted samples.*

Lowest Required MDL: Naphthalene - 7.2 ug/m³

Lowest Required MDL: Benzene - 8.4 ug/m³

ADDITIONAL COMMENTS

* Please email Results to: lab@weber-hayes.com & jered@weber-hayes.com
* Please completeTO-15 analysis to meet regulatory screening levels & INCLUDE IPA analysis.
* Please Report all Results in ug/m³.

\\WHAFILESERVER01\d\A-User-Files\Josh\1-Mocs\Field\COCs - Summa

Chain of Custody and Cooler Receipt Form for 1708578 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 17-08578

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ Ontrac ☒ Hand Delivery ☐	Ice Chest ☐ None ☐ Box ☒	YES ☐ NO ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Other ☐ (Specify)_____	W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: — Container: Canister Thermometer ID: — Date/Time 4/4/17

Temperature: (A) ROOM °C / (C) TEMP MAD °C 4/4/17 Analyst Init MAM 0930

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
0ml EPA 547										
0ml EPA 531.1										
oz EPA 548										
T EPA 549										
T EPA 8015M										
T EPA 8270										
z / 16oz / 32oz AMBER										
z / 16oz / 32oz JAR										
IL SLEEVE										
B VIAL										
ASTIC BAG										
EDLAR BAG										
RROUS IRON										
NCORE										
ART KIT										
MMA CANISTER	A	A	A	A	A					

nments:_____

ple Numbering Completed By: JDL Date/Time: 4.4.17 0950

: Actual / C = Corrected

Rev 21 05/23/2016

[S:\WPDocsWordPerfect\LAB_DOCS\FORMS\SAMREC rev 20]

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1708578-01	**COC Number:**	---	**Receive Date:**	04/04/2017 09:30
	Project Number:	Oneto	**Sampling Date:**	03/30/2017 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-1-5	**Lab Matrix:**	Air
	Sampled By:	Josh Hannaleck of WHAW	**Sample Type:**	Vapor or Air
1708578-02	**COC Number:**	---	**Receive Date:**	04/04/2017 09:30
	Project Number:	Oneto	**Sampling Date:**	03/30/2017 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-2-5	**Lab Matrix:**	Air
	Sampled By:	Josh Hannaleck of WHAW	**Sample Type:**	Vapor or Air
1708578-03	**COC Number:**	---	**Receive Date:**	04/04/2017 09:30
	Project Number:	Oneto	**Sampling Date:**	03/30/2017 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-4-5	**Lab Matrix:**	Air
	Sampled By:	Josh Hannaleck of WHAW	**Sample Type:**	Vapor or Air
1708578-04	**COC Number:**	---	**Receive Date:**	04/04/2017 09:30
	Project Number:	Oneto	**Sampling Date:**	03/30/2017 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-5-5	**Lab Matrix:**	Air
	Sampled By:	Josh Hannaleck of WHAW	**Sample Type:**	Vapor or Air
1708578-05	**COC Number:**	---	**Receive Date:**	04/04/2017 09:30
	Project Number:	Oneto	**Sampling Date:**	03/30/2017 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-5-10	**Lab Matrix:**	Air
	Sampled By:	Josh Hannaleck of WHAW	**Sample Type:**	Vapor or Air

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-01 | **Client Sample Name:** Oneto, SV-1-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	38	2.3	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	15	2.6	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	15	2.2	EPA-TO-15	ND	A01	1
t-Amyl Methyl ether	ND	ug/m3	38	16	EPA-TO-15	ND	A01	1
Benzene	**69**	**ug/m3**	**15**	**3.2**	**EPA-TO-15**	ND	**A01**	1
Benzyl chloride	ND	ug/m3	75	2.0	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	38	6.1	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	75	4.8	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	15	4.7	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	15	3.0	EPA-TO-15	ND	A01	1
t-Butyl alcohol	ND	ug/m3	38	4.1	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	15	2.8	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	38	6.2	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	15	4.8	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	38	5.6	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	15	3.0	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	38	10	EPA-TO-15	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	ug/m3	38	3.7	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	38	7.0	EPA-TO-15	ND	A01	1
Dibromomethane	ND	ug/m3	38	9.8	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	38	2.3	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	38	2.6	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	38	2.3	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	38	4.3	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	38	4.0	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	38	4.8	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	15	2.9	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	15	3.9	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	38	5.2	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	38	2.0	EPA-TO-15	ND	A01	1

Weber, Hayes & Associates
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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-01 | **Client Sample Name:** Oneto, SV-1-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
trans-1,3-Dichloropropene	ND	ug/m3	38	2.5	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	38	7.4	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	38	15	EPA-TO-15	ND	A01	1
Diisopropyl ether	ND	ug/m3	38	4.1	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	15	3.3	EPA-TO-15	ND	A01	1
Ethanol	ND	ug/m3	15	4.6	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	15	3.5	EPA-TO-15	ND	A01	1
Ethylbenzene	**64**	**ug/m3**	**38**	**2.1**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	ND	ug/m3	38	3.5	EPA-TO-15	ND	A01	1
Ethyl t-butyl ether	ND	ug/m3	38	1.7	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	15	3.8	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	75	4.0	EPA-TO-15	ND	A01	1
Hexachloroethane	ND	ug/m3	15	6.9	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	38	3.4	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	38	1.6	EPA-TO-15	ND	A01	1
Isooctane	ND	ug/m3	38	4.6	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	15	3.5	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	75	5.5	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	15	2.0	EPA-TO-15	ND	A01	1
Methyl iodide	ND	ug/m3	75	7.0	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	38	4.0	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	15	2.0	EPA-TO-15	ND	A01	1
Naphthalene	ND	ug/m3	150	82	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	38	1.6	EPA-TO-15	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	38	4.4	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	38	7.1	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	15	2.7	EPA-TO-15	ND	A01	1
Toluene	**59**	**ug/m3**	**15**	**2.4**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	75	54	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	38	6.2	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	38	6.6	EPA-TO-15	ND	A01	1

Weber, Hayes & Associates
120 Westgate Drive
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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-01 | **Client Sample Name:** Oneto, SV-1-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/m3	38	5.2	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	38	12	EPA-TO-15	ND	A01	1
1,2,3-Trichloropropane	ND	ug/m3	38	5.0	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	38	7.5	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	38	1.9	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	38	2.5	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	15	3.8	EPA-TO-15	ND	A01	1
Vinyl bromide	ND	ug/m3	38	10	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	15	3.7	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**130**	**ug/m3**	**38**	**4.6**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**47**	**ug/m3**	**38**	**1.9**	**EPA-TO-15**	ND	**A01**	1
Total Xylenes	**170**	**ug/m3**	**75**	**6.4**	**EPA-TO-15**	ND	**A01**	1
TPH - Gasoline	ND	ug/m3	1500	290	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	106	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	04/07/17	04/07/17 17:00	MJB	MS-A2	7.500	B[D0564

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-02 | **Client Sample Name:** Oneto, SV-2-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	39	2.4	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	16	2.7	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	16	2.3	EPA-TO-15	ND	A01	1
t-Amyl Methyl ether	ND	ug/m3	39	16	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	16	3.3	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	78	2.0	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	39	6.4	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	78	5.0	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	16	4.9	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	16	3.1	EPA-TO-15	ND	A01	1
t-Butyl alcohol	ND	ug/m3	39	4.3	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	16	3.0	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	39	8.6	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	39	6.5	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	16	5.0	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	39	5.8	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	16	3.1	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	16	2.2	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	39	11	EPA-TO-15	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	ug/m3	39	3.8	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	39	7.3	EPA-TO-15	ND	A01	1
Dibromomethane	ND	ug/m3	39	10	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	39	2.4	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	39	2.7	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	39	2.4	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	39	8.6	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	39	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	39	4.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	39	5.0	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	16	3.1	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	16	4.1	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	39	5.5	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	39	2.0	EPA-TO-15	ND	A01	1

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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-02 | **Client Sample Name:** Oneto, SV-2-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
trans-1,3-Dichloropropene	ND	ug/m3	39	2.6	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	39	7.7	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	39	16	EPA-TO-15	ND	A01	1
Diisopropyl ether	ND	ug/m3	39	4.3	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	16	3.5	EPA-TO-15	ND	A01	1
Ethanol	ND	ug/m3	16	4.8	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	16	3.7	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	39	2.2	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	39	3.7	EPA-TO-15	ND	A01	1
Ethyl t-butyl ether	ND	ug/m3	39	1.8	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	16	3.9	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	78	4.2	EPA-TO-15	ND	A01	1
Hexachloroethane	ND	ug/m3	16	7.2	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	39	3.6	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	39	1.6	EPA-TO-15	ND	A01	1
Isooctane	ND	ug/m3	39	4.8	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	16	3.7	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	78	5.7	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	16	2.1	EPA-TO-15	ND	A01	1
Methyl iodide	ND	ug/m3	78	7.3	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	39	4.2	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	16	2.0	EPA-TO-15	ND	A01	1
Naphthalene	ND	ug/m3	160	86	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	16	2.2	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	39	1.7	EPA-TO-15	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	ug/m3	39	8.6	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	39	4.6	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	39	7.5	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	16	2.8	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	16	2.5	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	78	57	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	39	6.4	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	39	6.9	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-02 | **Client Sample Name:** Oneto, SV-2-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/m3	39	5.5	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	39	13	EPA-TO-15	ND	A01	1
1,2,3-Trichloropropane	ND	ug/m3	39	5.3	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	39	7.8	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	39	2.0	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	39	2.6	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	16	3.9	EPA-TO-15	ND	A01	1
Vinyl bromide	ND	ug/m3	39	11	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	16	3.8	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	39	4.8	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	39	2.0	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	78	6.8	EPA-TO-15	ND	A01	1
TPH - Gasoline	ND	ug/m3	1600	310	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	94.8	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	04/07/17	04/07/17 17:33	MJB	MS-A2	7.850	B[D0564

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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-03 | **Client Sample Name:** Oneto, SV-4-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	36	2.2	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	14	2.5	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	14	2.1	EPA-TO-15	ND	A01	1
t-Amyl Methyl ether	ND	ug/m3	36	15	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	14	3.0	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	71	1.8	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	36	5.8	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	71	4.5	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	14	4.5	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	14	2.8	EPA-TO-15	ND	A01	1
t-Butyl alcohol	ND	ug/m3	36	3.9	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	14	2.7	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	36	7.8	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	36	5.9	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	14	4.5	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	36	5.3	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	14	2.8	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	14	2.0	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	36	9.9	EPA-TO-15	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	ug/m3	36	3.5	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	36	6.6	EPA-TO-15	ND	A01	1
Dibromomethane	ND	ug/m3	36	9.2	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	36	2.2	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	36	2.5	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	36	2.2	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	36	7.8	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	36	4.0	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	36	3.8	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	36	4.5	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	14	2.8	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	14	3.7	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	36	5.0	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	36	1.8	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-03 | **Client Sample Name:** Oneto, SV-4-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
trans-1,3-Dichloropropene	ND	ug/m3	36	2.3	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	36	7.0	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	36	14	EPA-TO-15	ND	A01	1
Diisopropyl ether	ND	ug/m3	36	3.9	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	14	3.1	EPA-TO-15	ND	A01	1
Ethanol	ND	ug/m3	14	4.3	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	14	3.3	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	36	2.0	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	36	3.3	EPA-TO-15	ND	A01	1
Ethyl t-butyl ether	ND	ug/m3	36	1.6	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	14	3.6	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	71	3.8	EPA-TO-15	ND	A01	1
Hexachloroethane	ND	ug/m3	14	6.5	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	36	3.3	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	36	1.5	EPA-TO-15	ND	A01	1
Isooctane	ND	ug/m3	36	4.3	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	14	3.3	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	71	5.2	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	14	1.9	EPA-TO-15	ND	A01	1
Methyl iodide	ND	ug/m3	71	6.6	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	36	3.8	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	14	1.8	EPA-TO-15	ND	A01	1
Naphthalene	ND	ug/m3	140	78	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	14	2.0	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	36	1.6	EPA-TO-15	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	ug/m3	36	7.8	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	36	4.1	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	36	6.7	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	14	2.6	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	14	2.3	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	71	51	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	36	5.8	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	36	6.2	EPA-TO-15	ND	A01	1

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Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-03 | **Client Sample Name:** Oneto, SV-4-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/m3	36	5.0	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	36	11	EPA-TO-15	ND	A01	1
1,2,3-Trichloropropane	ND	ug/m3	36	4.8	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	36	7.1	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	36	1.8	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	36	2.3	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	14	3.6	EPA-TO-15	ND	A01	1
Vinyl bromide	ND	ug/m3	36	9.9	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	14	3.5	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	36	4.3	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	36	1.8	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	71	6.1	EPA-TO-15	ND	A01	1
TPH - Gasoline	ND	ug/m3	1400	280	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	95.8	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	04/07/17	04/07/17 18:06	MJB	MS-A2	7.100	B[D0564

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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-04 | **Client Sample Name:** Oneto, SV-5-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**36**	**ug/m3**	**38**	**2.3**	**EPA-TO-15**	ND	**J,A01**	1
Acrylonitrile	ND	ug/m3	15	2.6	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	15	2.2	EPA-TO-15	ND	A01	1
t-Amyl Methyl ether	ND	ug/m3	38	16	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	15	3.2	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	75	2.0	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	38	6.1	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	75	4.8	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	15	4.7	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	15	3.0	EPA-TO-15	ND	A01	1
t-Butyl alcohol	ND	ug/m3	38	4.1	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	15	2.8	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	38	6.2	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	15	4.8	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	38	5.6	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	15	3.0	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	38	10	EPA-TO-15	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	ug/m3	38	3.7	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	38	7.0	EPA-TO-15	ND	A01	1
Dibromomethane	ND	ug/m3	38	9.8	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	38	2.3	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	38	2.6	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	38	2.3	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	38	4.3	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	38	4.0	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	38	4.8	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	15	2.9	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	15	3.9	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	38	5.2	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	38	2.0	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
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Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-04 | **Client Sample Name:** Oneto, SV-5-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
trans-1,3-Dichloropropene	ND	ug/m3	38	2.5	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	38	7.4	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	38	15	EPA-TO-15	ND	A01	1
Diisopropyl ether	ND	ug/m3	38	4.1	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	15	3.3	EPA-TO-15	ND	A01	1
Ethanol	ND	ug/m3	15	4.6	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	15	3.5	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	38	2.1	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	38	3.5	EPA-TO-15	ND	A01	1
Ethyl t-butyl ether	ND	ug/m3	38	1.7	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	15	3.8	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	75	4.0	EPA-TO-15	ND	A01	1
Hexachloroethane	ND	ug/m3	15	6.9	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	38	3.4	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	38	1.6	EPA-TO-15	ND	A01	1
Isooctane	ND	ug/m3	38	4.6	EPA-TO-15	ND	A01	1
Isopropyl alcohol	**19000**	**ug/m3**	**1500**	**350**	**EPA-TO-15**	ND	**A01**	2
Methylene chloride	ND	ug/m3	75	5.5	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	15	2.0	EPA-TO-15	ND	A01	1
Methyl iodide	ND	ug/m3	75	7.0	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	38	4.0	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	15	2.0	EPA-TO-15	ND	A01	1
Naphthalene	ND	ug/m3	150	82	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	38	1.6	EPA-TO-15	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	ug/m3	38	8.2	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	38	4.4	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	38	7.1	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	15	2.7	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	15	2.4	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	75	54	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	38	6.2	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	38	6.6	EPA-TO-15	ND	A01	1

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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-04 | **Client Sample Name:** Oneto, SV-5-5, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/m3	38	5.2	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	38	12	EPA-TO-15	ND	A01	1
1,2,3-Trichloropropane	ND	ug/m3	38	5.0	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	38	7.5	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	38	1.9	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	38	2.5	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	15	3.8	EPA-TO-15	ND	A01	1
Vinyl bromide	ND	ug/m3	38	10	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	15	3.7	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	38	4.6	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	38	1.9	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	75	6.4	EPA-TO-15	ND	A01	1
TPH - Gasoline	ND	ug/m3	1500	290	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	97.8	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	94.0	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	04/07/17	04/07/17 18:39	MJB	MS-A2	7.500	B[D0564
2	EPA-TO-15	04/07/17	04/08/17 23:50	MJB	MS-A2	750	B[D0564

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Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-05 | **Client Sample Name:** Oneto, SV-5-10, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	37	2.3	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	15	2.6	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
t-Amyl Methyl ether	ND	ug/m3	37	15	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	15	3.1	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	74	1.9	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	37	6.0	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	74	4.7	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	15	4.6	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	15	2.9	EPA-TO-15	ND	A01	1
t-Butyl alcohol	ND	ug/m3	37	4.0	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	15	2.8	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	37	8.1	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	37	6.1	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	15	4.7	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	37	5.4	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	15	2.9	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	37	10	EPA-TO-15	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	ug/m3	37	3.6	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	37	6.8	EPA-TO-15	ND	A01	1
Dibromomethane	ND	ug/m3	37	9.6	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	37	2.3	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	37	2.6	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	37	2.3	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	37	8.1	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	37	4.2	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	37	3.9	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	37	4.7	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	15	2.9	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	15	3.8	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	37	5.1	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	37	1.9	EPA-TO-15	ND	A01	1

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Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-05 | **Client Sample Name:** Oneto, SV-5-10, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
trans-1,3-Dichloropropene	ND	ug/m3	37	2.4	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	37	7.2	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	37	15	EPA-TO-15	ND	A01	1
Diisopropyl ether	ND	ug/m3	37	4.0	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	15	3.2	EPA-TO-15	ND	A01	1
Ethanol	ND	ug/m3	15	4.5	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	15	3.5	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	37	2.1	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	37	3.5	EPA-TO-15	ND	A01	1
Ethyl t-butyl ether	ND	ug/m3	37	1.7	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	15	3.7	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	74	4.0	EPA-TO-15	ND	A01	1
Hexachloroethane	ND	ug/m3	15	6.8	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	37	3.4	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	37	1.5	EPA-TO-15	ND	A01	1
Isooctane	ND	ug/m3	37	4.5	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	15	3.5	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	74	5.4	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	15	2.0	EPA-TO-15	ND	A01	1
Methyl iodide	ND	ug/m3	74	6.8	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	37	4.0	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	15	1.9	EPA-TO-15	ND	A01	1
Naphthalene	ND	ug/m3	150	81	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	15	2.1	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	37	1.6	EPA-TO-15	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	ug/m3	37	8.1	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	37	4.3	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	37	7.0	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	15	2.6	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	15	2.4	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	74	53	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	37	6.0	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	37	6.5	EPA-TO-15	ND	A01	1

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 1708578-05 | **Client Sample Name:** Oneto, SV-5-10, 3/30/2017 12:00:00AM, Josh Hannaleck

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/m3	37	5.1	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	37	12	EPA-TO-15	ND	A01	1
1,2,3-Trichloropropane	ND	ug/m3	37	4.9	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	37	7.4	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	37	1.8	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	37	2.4	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	15	3.7	EPA-TO-15	ND	A01	1
Vinyl bromide	ND	ug/m3	37	10	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	15	3.6	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	37	4.5	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	37	1.8	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	74	6.3	EPA-TO-15	ND	A01	1
TPH - Gasoline	ND	ug/m3	1500	290	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	94.3	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	04/07/17	04/07/17 19:11	MJB	MS-A2	7.350	B[D0564

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Project Number: Oneto / 2X404.Q
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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[D0564						
Acetone	B[D0564-BLK1	ND	ug/m3	5.0	0.31	
Acrylonitrile	B[D0564-BLK1	ND	ug/m3	2.0	0.35	
Allyl chloride	B[D0564-BLK1	ND	ug/m3	2.0	0.29	
t-Amyl Methyl ether	B[D0564-BLK1	ND	ug/m3	5.0	2.1	
Benzene	B[D0564-BLK1	ND	ug/m3	2.0	0.42	
Benzyl chloride	B[D0564-BLK1	ND	ug/m3	10	0.26	
Bromodichloromethane	B[D0564-BLK1	ND	ug/m3	5.0	0.81	
Bromoform	B[D0564-BLK1	ND	ug/m3	10	0.64	
Bromomethane	B[D0564-BLK1	ND	ug/m3	2.0	0.63	
1,3-Butadiene	B[D0564-BLK1	ND	ug/m3	2.0	0.40	
t-Butyl alcohol	B[D0564-BLK1	ND	ug/m3	5.0	0.55	
Carbon disulfide	B[D0564-BLK1	ND	ug/m3	2.0	0.38	
Carbon tetrachloride	B[D0564-BLK1	ND	ug/m3	5.0	1.1	
Chlorobenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.83	
Chloroethane	B[D0564-BLK1	ND	ug/m3	2.0	0.64	
Chloroform	B[D0564-BLK1	ND	ug/m3	5.0	0.74	
Chloromethane	B[D0564-BLK1	ND	ug/m3	2.0	0.40	
Cyclohexane	B[D0564-BLK1	ND	ug/m3	2.0	0.28	
Dibromochloromethane	B[D0564-BLK1	ND	ug/m3	5.0	1.4	
1,2-Dibromo-3-chloropropane	B[D0564-BLK1	ND	ug/m3	5.0	0.49	
1,2-Dibromoethane	B[D0564-BLK1	ND	ug/m3	5.0	0.93	
Dibromomethane	B[D0564-BLK1	ND	ug/m3	5.0	1.3	
1,2-Dichlorobenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.31	
1,3-Dichlorobenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.35	
1,4-Dichlorobenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.31	
Dichlorodifluoromethane	B[D0564-BLK1	ND	ug/m3	5.0	1.1	
1,1-Dichloroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.57	
1,2-Dichloroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.53	
1,1-Dichloroethene	B[D0564-BLK1	ND	ug/m3	5.0	0.64	
cis-1,2-Dichloroethene	B[D0564-BLK1	ND	ug/m3	2.0	0.39	
trans-1,2-Dichloroethene	B[D0564-BLK1	ND	ug/m3	2.0	0.52	
1,2-Dichloropropane	B[D0564-BLK1	ND	ug/m3	5.0	0.70	
cis-1,3-Dichloropropene	B[D0564-BLK1	ND	ug/m3	5.0	0.26	
trans-1,3-Dichloropropene	B[D0564-BLK1	ND	ug/m3	5.0	0.33	

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[D0564						
1,2-Dichloro-1,1,2,2-tetrafluoroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.98	
1,1-Difluoroethane	B[D0564-BLK1	ND	ug/m3	5.0	2.0	
Diisopropyl ether	B[D0564-BLK1	ND	ug/m3	5.0	0.55	
1,4-Dioxane	B[D0564-BLK1	ND	ug/m3	2.0	0.44	
Ethanol	B[D0564-BLK1	ND	ug/m3	2.0	0.61	
Ethyl acetate	B[D0564-BLK1	ND	ug/m3	2.0	0.47	
Ethylbenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.28	
1-Ethyl-4-methylbenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.47	
Ethyl t-butyl ether	B[D0564-BLK1	ND	ug/m3	5.0	0.23	
n-Heptane	B[D0564-BLK1	ND	ug/m3	2.0	0.50	
Hexachlorobutadiene	B[D0564-BLK1	ND	ug/m3	10	0.54	
Hexachloroethane	B[D0564-BLK1	ND	ug/m3	2.0	0.92	
Hexane	B[D0564-BLK1	ND	ug/m3	5.0	0.46	
2-Hexanone	B[D0564-BLK1	ND	ug/m3	5.0	0.21	
Isooctane	B[D0564-BLK1	ND	ug/m3	5.0	0.61	
Isopropyl alcohol	B[D0564-BLK1	ND	ug/m3	2.0	0.47	
Methylene chloride	B[D0564-BLK1	ND	ug/m3	10	0.73	
Methyl ethyl ketone	B[D0564-BLK1	ND	ug/m3	2.0	0.27	
Methyl iodide	B[D0564-BLK1	ND	ug/m3	10	0.93	
Methyl isobutyl ketone	B[D0564-BLK1	ND	ug/m3	5.0	0.54	
Methyl t-butyl ether	B[D0564-BLK1	ND	ug/m3	2.0	0.26	
Naphthalene	B[D0564-BLK1	ND	ug/m3	20	11	
Propylene	B[D0564-BLK1	ND	ug/m3	2.0	0.28	
Styrene	B[D0564-BLK1	ND	ug/m3	5.0	0.22	
1,1,1,2-Tetrachloroethane	B[D0564-BLK1	ND	ug/m3	5.0	1.1	
1,1,2,2-Tetrachloroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.58	
Tetrachloroethene	B[D0564-BLK1	ND	ug/m3	5.0	0.95	
Tetrahydrofuran	B[D0564-BLK1	ND	ug/m3	2.0	0.36	
Toluene	B[D0564-BLK1	ND	ug/m3	2.0	0.32	
1,2,4-Trichlorobenzene	B[D0564-BLK1	ND	ug/m3	10	7.2	
1,1,1-Trichloroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.82	
1,1,2-Trichloroethane	B[D0564-BLK1	ND	ug/m3	5.0	0.88	
Trichloroethene	B[D0564-BLK1	ND	ug/m3	5.0	0.70	
Trichlorofluoromethane	B[D0564-BLK1	ND	ug/m3	5.0	1.6	

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[D0564						
1,2,3-Trichloropropane	B[D0564-BLK1	ND	ug/m3	5.0	0.67	
1,1,2-Trichloro-1,2,2-trifluoroethane	B[D0564-BLK1	ND	ug/m3	5.0	1.0	
1,2,4-Trimethylbenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.25	
1,3,5-Trimethylbenzene	B[D0564-BLK1	ND	ug/m3	5.0	0.33	
Vinyl acetate	B[D0564-BLK1	ND	ug/m3	2.0	0.50	
Vinyl bromide	B[D0564-BLK1	ND	ug/m3	5.0	1.4	
Vinyl chloride	B[D0564-BLK1	ND	ug/m3	2.0	0.49	
p- & m-Xylenes	B[D0564-BLK1	ND	ug/m3	5.0	0.61	
o-Xylene	B[D0564-BLK1	ND	ug/m3	5.0	0.25	
Total Xylenes	B[D0564-BLK1	ND	ug/m3	10	0.86	
TPH - Gasoline	B[D0564-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	**B[D0564-BLK1**	**97.3**	%	**70 - 130 (LCL - UCL)**		

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Reported: 04/10/2017 12:16
Project: Air Samples - COELT
Project Number: Oneto / 2X404.Q
Project Manager: Jered Chaney

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[D0564										
Benzene	B[D0564-BS1	LCS	16.421	15.974	ug/m3	103		70 - 130		
	B[D0564-BSD1	LCSD	16.485	15.974	ug/m3	103	0.4	70 - 130	30	
Chloroform	B[D0564-BS1	LCS	26.659	24.413	ug/m3	109		70 - 130		
	B[D0564-BSD1	LCSD	26.463	24.413	ug/m3	108	0.7	70 - 130	30	
Ethylbenzene	B[D0564-BS1	LCS	23.534	21.711	ug/m3	108		70 - 130		
	B[D0564-BSD1	LCSD	23.621	21.711	ug/m3	109	0.4	70 - 130	30	
Tetrachloroethene	B[D0564-BS1	LCS	33.913	33.913	ug/m3	100		70 - 130		
	B[D0564-BSD1	LCSD	34.184	33.913	ug/m3	101	0.8	70 - 130	30	
Toluene	B[D0564-BS1	LCS	20.274	18.842	ug/m3	108		70 - 130		
	B[D0564-BSD1	LCSD	20.312	18.842	ug/m3	108	0.2	70 - 130	30	
Trichloroethene	B[D0564-BS1	LCS	28.696	26.869	ug/m3	107		70 - 130		
	B[D0564-BSD1	LCSD	28.803	26.869	ug/m3	107	0.4	70 - 130	30	
Trichlorofluoromethane	B[D0564-BS1	LCS	29.721	28.092	ug/m3	106		70 - 130		
	B[D0564-BSD1	LCSD	29.889	28.092	ug/m3	106	0.6	70 - 130	30	
1,1,2-Trichloro-1,2,2-trifluoroethane	B[D0564-BS1	LCS	41.230	38.318	ug/m3	108		70 - 130		
	B[D0564-BSD1	LCSD	41.154	38.318	ug/m3	107	0.2	70 - 130	30	
p- & m-Xylenes	B[D0564-BS1	LCS	47.503	43.421	ug/m3	109		70 - 130		
	B[D0564-BSD1	LCSD	47.720	43.421	ug/m3	110	0.5	70 - 130	30	
o-Xylene	B[D0564-BS1	LCS	23.795	21.711	ug/m3	110		70 - 130		
	B[D0564-BSD1	LCSD	24.099	21.711	ug/m3	111	1.3	70 - 130	30	
Total Xylenes	B[D0564-BS1	LCS	71.298	65.132	ug/m3	109		70 - 130		
	B[D0564-BSD1	LCSD	71.819	65.132	ug/m3	110	0.7	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	B[D0564-BS1	LCS	74.4	71.6	ug/m3	104		70 - 130		
	B[D0564-BSD1	LCSD	74.4	71.6	ug/m3	104	0.1	70 - 130		

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/10/2017 12:16
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Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.

APPENDIX E

SITE HEALTH & SAFETY PLAN

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
(831) 722-3580 // www.weber-hayes.com

SITE SAFETY PLAN (SSP)

For Remedial Excavation

This Site Health and Safety Plan has been prepared pursuant to the California Occupational Health and Safety Administration Title 8, Section 5192 *Hazardous Waste Operations and Emergency Response* and the U.S. Occupational Health and Safety Administration 29 CRF 1910.120, *Hazardous Waste Operations and Emergency Response*

Job Name and Job Number: Oneto / 2X404
Client: Phil & Martha Oneto c/o: Robert Bosso (Bosso Williams)
Site Location: 25 E. Fifth Street, Watsonville, CA
Type of Facility/Current Usage of Property: Commercial Warehouse Property

Subcontractors On-Site

Haz-Certified Excavation Contractor

Randazzo Enterprises Inc.
Attn: Bill Lynch
Phone: (831) 595-0264

Grading & Paving Contractor

Watsonville Grading & Excavation
Attn: Matt Costello
Phone: (831) 588-0090

Regulatory Agencies

Lead Regulatory Agency
Santa Cruz County Environmental Health Services
Case Officer: Scott Carson
701 Ocean Street, Room 312
Santa Cruz, CA
Phone Number: (831) 454-2022

SCOPE OF WORK

Remedial Excavation & Off-Site Disposal of Contaminated Soil, and Parking Lot Restoration:

Removal of well defined soil impacts from two areas within the parking lot totaling approximately 5,200 ft^2 to a depth of 1.5 feet below grade. The removal effort will result in approximately 291 yds^3 off soils that will be directed loaded onto end dump trucks for transport to designated landfills. The excavation and loading will be conducted using conventional earthworks equipment (i.e., excavator and front-end loader).

Prior to soil removal efforts, the following existing surface features / coverings within the prescribed excavation areas will be removed and hauled to an approximate recycling and/or disposal facility:

- A cinderblock trash enclosure and associated concrete pad
- Two planter areas / tree wells including the associated landscaping
- A concrete swale
- Asphalt

Following completion of the prescribed remedial excavation, we will subcontract with a licensed grading and paving company to restore the parking lot as follows:

- Emplace 15 inches of compacted base rock into the excavation areas followed by 3 inches of asphaltic concrete
- Replace a concert swale that channels parking lot surface water to a storm drain inlet along E. Fifth Street
- Replace a cinder block trash enclosure and concrete pad that is situated at the northwestern corner of the site
- Apply a slurry seal to the unaffected areas of the parking lot to improve asphalt pavement integrity and minimize surface water infiltration

Key Field Personnel

(OSHA training for Hazardous Waste Operations is required on this job)

Jered Chaney – *Weber, Hayes and Associates*	Environmental Geologist & Site Safety Officer	Office: (831) 722-3580 Cell: (831) 254-1747
Mike Lane – *Randazzo Enterprises Inc.*	Haz-Certified Excavation Contractor / Operator	Cell: (831) 214-0942

Anticipated Physical Hazards

- **Traffic:** Truck and heavy equipment traffic hazards within exclusion zone will be avoided by maintaining eye contact and using hand signals. All heavy equipment will be required to have working audible reverse signals. Trucks will move on and off site with aid of traffic flaggers at all times.
- **Heavy Equipment:** Potential physical hazards associated with excavation equipment and noise will be mitigated with proper class D PPE and exclusion of personnel other than those authorized in the earthwork areas.
- **Underground Hazards:** Utilities to be cleared by Underground Service Alert (USA)
- **Open Excavation:** Open excavations will be secured with delineators and caution tape during off-work hours and exclusion of personnel other than those authorized in the earthwork areas.

Anticipated Chemical Hazards:

Hazardous/Regulated Substances Anticipated? ❒ No; ☒ Yes; (SVOCs, Metals, TPH)

Name (CAS # if applicable)	EXPECTED CONCENTRATION ☒ Soil ❒ Water ❒ Air	HEALTH EFFECTS
➢ Benzo(a)pyrene Equivalent ➢ TPH-diesel ➢ TPH-motor oil ➢ Lead	➢ Up to 89.894 mg/kg ➢ Up to 2,260 mg/kg ➢ Up to 6,980 mg/kg ➢ Up to 376 mg/kg	See attached NIOSH chemical information sheets

Medical Surveillance

Medical surveillance practices for all on-site employees will be maintained in accordance with Title 8 California Code of Regulations, Section 5192(c)(4)(B). **No personnel will be exposed to potential chemical hazards for more than 30 days, so no medical surveillance is required.**

Site Control Measures

Dust Control & Suppression Measures:

- Dust suppression will be performed to keep dust from migrating beyond the work zone by lightly spraying or misting the work areas (such as the excavation, soil handling areas and haul roads) with water. Misting may also be used on soil placed in the transport trucks.
- Efforts will be made to minimize the soil drop height from the excavator's bucket onto the soil pile or into the transport trucks.
- All soil being hauled offsite will be covered to prevent soil from spilling out of the truck during transport to the disposal facility. Temporary soil stockpile(s) will be covered or misted with water if nuisance dust is observed.

Ingestion Exposure & Control Measures:

- Ingestion of impacted materials is a primary exposure route of concern. This exposure pathway can be controlled with the implementation of proper hygienic practices (i.e., wearing gloves and washing before eating, smoking, or using the restroom).

Traffic Control Measures (pedestrian and vehicle):

- No pedestrians will be allowed in the work area other than authorized personnel;
- Trucks will move on and off site with aid of traffic flaggers at all times;

- Truck and heavy equipment traffic hazards within exclusion zone will be avoided by maintaining eye contact and using hand signals. All heavy equipment will be required to have working audible reverse signals

PERSONAL PROTECTIVE EQUIPMENT AND SITE MONITORING

Personal Protective Equipment

(see required Personal Protective Equipment below)

Based on the scope and nature of this field program the following aappropriate level of personal protective equipment is required A: ❒ B: ❒ C: ❒ D ✗

R = required, A = As needed

Hard Hat **R**	Eyewear (type) **A**
Safety Boots **R**	Respirator (type) **A** *(½-face minimum)*
Orange Vest **R**	Filter (type) **A** (organic vapor & particulate)
Hearing Protection **A**	Gloves (type) **A** nitrile
Tyvek Coveralls **A**	

Site Monitoring:

Air Monitoring:

- Particulate monitoring equipment (i.e., DustTrak 8533 Dust Monitor) will be set up at the Site for continuous monitoring of particulate concentrations throughout each workday. Specifically, one downwind perimeter particulate monitoring station will be set up to gauge nuisance dust that may be migrating to the community. Wind direction will be determined by deploying small windsocks throughout the site and the dust monitors will be adjusted accordingly. Dust within the work zone will be visually monitored and will be suppressed as needed.

  Particulate monitoring data will be reviewed at the close of each workday to determine whether or not the lowest set Dust Action Level (i.e., 2.5 mg/m^3)[1] has been exceeded, and if so, dust control measures will be reevaluated prior to the start of work the following day in order to mitigate impacts.

- If soils exhibiting discoloration and/or chemical odors are encountered, a PID with a lamp of 10.2 ev will be used to periodically monitor the air quality in the work zone. PID reading of 100 parts per million in the breathing zone for more than 1 minute will require donning of Level C equipment - which includes ½-face respirators, goggles, and chemical resistant gloves **– NOT ANTICIPATED.**

[1] The Dust Action Level is defined as ½ the OSHA Permissible Exposure Limit of the respirable fraction for particulates which is set at 5 µg/m^3

Personnel Monitoring:

- Personnel monitoring will be conducted by means of the "buddy system". Appropriate precautions and/or medical/emergency response will be implemented if signs of co-worker distress or fatigue are apparent or injury occurs.

Confined Space Entry Procedures

Confined space entry is not a component of this field investigation.

PERSONELL TRAINING REQUIREMENTS

All personnel performing on-Site activities who may be exposed to chemical hazards are required to be trained in accordance with CCR, Title 8, Section 5192. As a minimum, all Site personnel will have completed 40-Hour Hazardous Waste Operations (HAZWOPER) training; 24 hours of supervised on the job training; have an eight-hour HAZWOPER refresher course if in initial HAZWOPER 40 hour training course was completed more than one year prior to the start date of Site operations.

Personnel who are only on-Site occasionally for a specific limited task (such as plan review, meetings, land surveying, geographic surveying, asphalt paving, electrical work, etc.) and who are unlikely to be exposed over permissible and published exposure limits, shall be informed of the Site hazards in a tail gate safety meeting.

Tailgate Meetings

The Field Superintendent will conduct an initial Tailgate Safety Meeting prior to commencing work at the Site. In addition, the following information will be provided to all Site personnel involved with the project, as applicable:

- Name of personnel and alternate responsible for Site safety and health
- Safety, health, and other hazards present at the Site
- Hospital directions
- General safety procedures and practices to minimize risks from hazards at the Site
- Instructions for safe use of personnel protective equipment
- Recognition of symptoms and signs, which might indicate overexposure to hazards
- Site control measures
- Emergency/Contingency procedures

EMERGENCY RESPONSE

In the event of minor physical injury, appropriate first aid will be administered and worker transport to the emergency room, if necessary. In the event of significant physical injury beyond the level of first aid response, emergency response personnel will be contacted immediately by calling 911 from the nearest land-line or via cell phone.

Hospital/Clinic: Watsonville Community Hospital
75 Nielson Way
Watsonville, CA 95076

Emergency Phone Number: 911

Hospital Directions: See ATTACHED directions

Emergency/Contingency Plans and Procedures: Mobile Phone contact with emergency personnel.
(831)254-1747 – Jered Chaney, Site Safety Officer

DISCLAIMER AND SIGNATURES

Site Hazard Information Provided By: *Jered Chaney – Site Safety Officer*

Date: June 16, 2017

Jered Chaney, Site Safety Officer

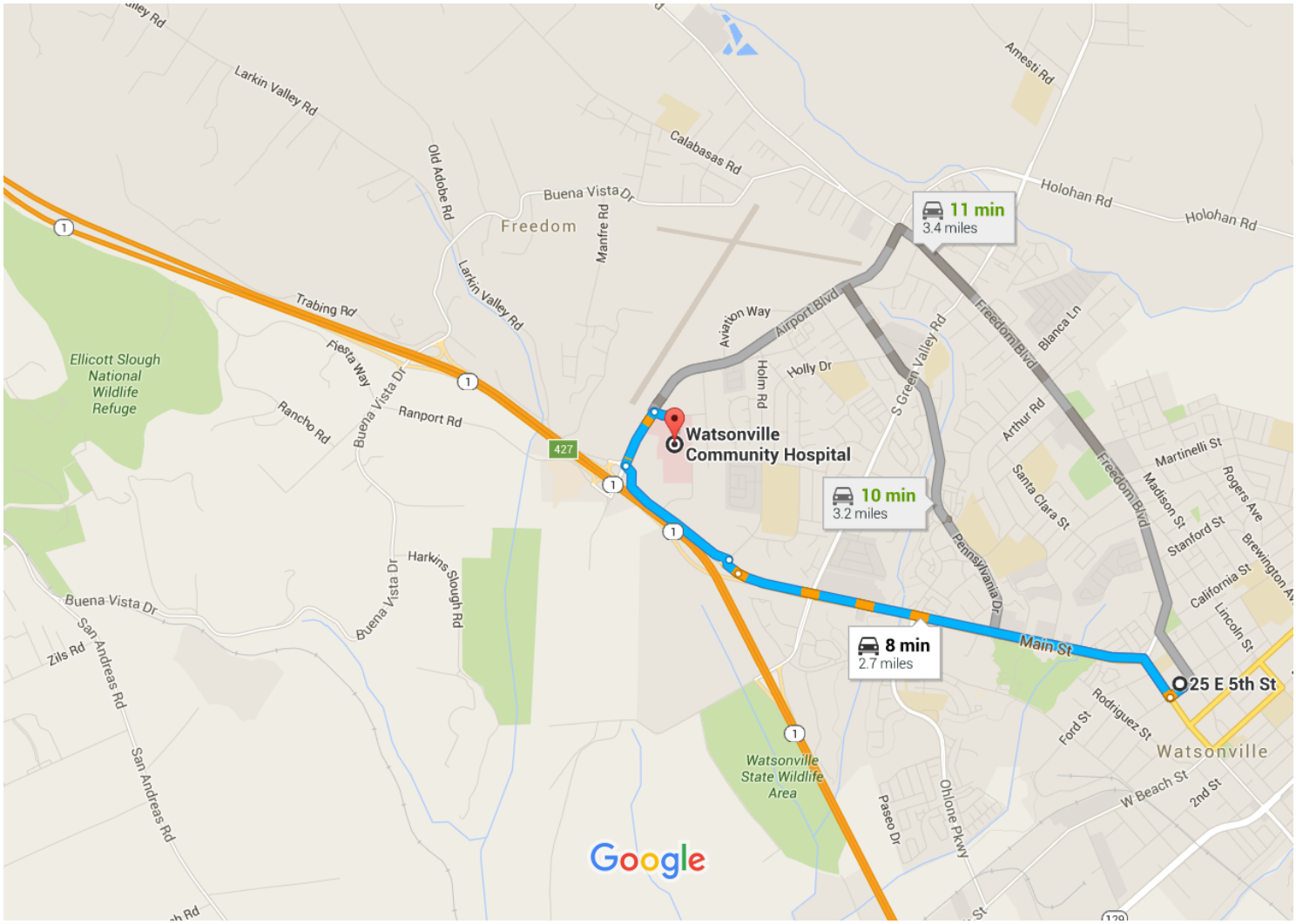
Note: All contractors and authorized visitors to the site are responsible for maintaining their safety using standard of care construction site safety procedures. This site safety plan is designed to provide worker right to know information on site contaminants of concern and a generic due diligence overview of safety issues. Neither the professional activities of Weber, Hayes and Associates, nor the presence of Weber, Hayes and Associates employees and subcontractors, shall be construed to imply Weber, Hayes and Associates has any responsibility for methods of work performance, superintendence, sequencing of construction, or safety in on or about the job site.

PRINT NAME & INITIAL FOLLOWING TAILGATE MEETING AND SAFETY INSPECTION:

Google Maps

25 E 5th St, Watsonville, CA to Watsonville Community Hospital

Drive 2.7 miles, 8 min



Map data ©2015 Google 2000 ft

25 E 5th St

Watsonville, CA 95076

1. Head southwest on E 5th St toward Main St — 312 ft
2. Turn right at the 1st cross street onto Main St — 1.7 mi
3. Turn right onto Holm Rd — 384 ft
4. Turn left onto Westgate Dr — 0.5 mi
5. Turn right onto Airport Blvd — 0.2 mi

6. Turn right onto Nielson St

Destination will be on the right

410 ft

Watsonville Community Hospital

75 Nielson Street, Watsonville, CA 95076

Particulates Not Otherwise Regulated (Respirable Fraction)

General Description

Synonyms: Dust (respirable nuisance); "Inert" dusts; Nuisance dusts; PNOR (Note: includes all inert or nuisance dusts, whether mineral, inorganic, not listed specifically in 1910.1000)
OSHA IMIS Code Number: 9130 (IMIS Name History: Dust [respirable nuisance] prior to 9/1/89)
NIOSH Pocket Guide to Chemical Hazards - Particulates Not Otherwise Regulated: Physical description, chemical properties, potentially hazardous incompatibilities, and more

Exposure Limits and Health Effects

Exposure Limit	Limit Values	HE Codes	Health Factors and Target Organs
OSHA Permissible Exposure Limit (PEL) - General Industry See 29 CFR 1910.1000 Table Z-1 (PNOR) and 29 CFR 1910.1000 Table Z-3 (Inert or Nuisance Dust)	5 mg/m^3 (15 mppcf*) TWA	HE10	Lung disease
OSHA PEL - Construction Industry See 29 CFR 1926.55 Appendix A	Not established		
OSHA PEL - Shipyard Employment See 29 CFR 1915.1000 Table Z-Shipyards	Not established		
National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL) See Appendix D	Not established		
American Conference of Governmental Industrial Hygienists (ACGIH) Guideline	3 mg/m^3 (respirable particles)		compromised airway clearance
CAL/OSHA PEL	5 mg/m^3 TWA		

Action Level (AL) For Remedial Grading Air Monitoring

AL = Selected airborne Action Level [mg/m3] = 1/2 the OSHA PEL (5 mg/m3)

= 2.5 mg/m3

Carbon black

Synonyms & Trade Names Acetylene black, Channel black, Furnace black, Lamp black, Thermal black

CAS No. 1333-86-4	**RTECS No.** FF5800000 (/niosh-rtecs/FF588040.html)	**DOT ID & Guide**
Formula C	**Conversion**	**IDLH** 1750 mg/m3 See: 1333864 (/niosh/idlh/1333864.html)

Exposure Limits **NIOSH REL** : TWA 3.5 mg/m3 Ca TWA 0.1 mg PAHs/m3 [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)] See Appendix A (nengapdxa.html) See Appendix C (nengapdxc.html)
OSHA PEL : TWA 3.5 mg/m3

Measurement Methods
NIOSH 5000 (/niosh/docs/2003-154/pdfs/5000.pdf) ;
OSHA ID196 (http://www.osha.gov/dts/sltc/methods/inorganic/id196/id196.html) (http://www.cdc.gov/Other/disclaimer.html)
See: NMAM (/niosh/docs/2003-154/) or OSHA Methods (http://www.osha.gov/dts/sltc/methods/index.html) (http://www.cdc.gov/Other/disclaimer.html)

Physical Description Black, odorless solid.

MW: 12.0	**BP:** Sublimes	MLT: Sublimes	**Sol:** Insoluble	**VP:** 0 mmHg (approx)	**IP:** NA
Sp.Gr: 1.8-2.1	**Fl.P:** NA	**UEL:** NA	**LEL:** NA		

Combustible Solid that may contain flammable hydrocarbons.

Incompatibilities & Reactivities Strong oxidizers such as chlorates, bromates & nitrates

Exposure Routes inhalation, skin and/or eye contact

Symptoms Cough; irritation eyes; in presence of polycyclic aromatic hydrocarbons: [potential occupational carcinogen]

Target Organs respiratory system, eyes

Cancer Site [lymphatic cancer (in presence of PAHs)]

Personal Protection/Sanitation (See protection codes (protect.html))
Skin: No recommendation

First Aid (See procedures (firstaid.html))
Eye: Irrigate promptly

Eyes: Prevent eye contact **Wash skin:** Daily **Remove:** No recommendation **Change:** No recommendation	**Breathing:** Fresh air

Respirator Recommendations

NIOSH/OSHA

Up to 17.5 mg/m3:
(APF = 5) Any quarter-mask respirator.
Click here (pgintrod.html#nrp) for information on selection of N, R, or P filters.

Up to 35 mg/m3:
(APF = 10) Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100.
Click here (pgintrod.html#nrp) for information on selection of N, R, or P filters.
(APF = 10) Any supplied-air respirator

Up to 87.5 mg/m3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter.

Up to 175 mg/m3:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
Click here (pgintrod.html#nrp) for information on selection of N, R, or P filters.
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Up to 1750 mg/m3:
(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
Click here (pgintrod.html#nrp) for information on selection of N, R, or P filters.
Any appropriate escape-type, self-contained breathing apparatus

In presence of polycyclic aromatic hydrocarbons:

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure

breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
Click here (pgintrod.html#nrp) for information on selection of N, R, or P filters.
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection (pgintrod.html#mustread)

See also: INTRODUCTION (/niosh/npg/pgintrod.html) See ICSC CARD: 0471 (/niosh/ipcsneng/neng0471.html) See MEDICAL TESTS: 0038 (/niosh/docs/2005-110/nmed0038.html)

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Centers for Disease Control and Prevention 1600 Clifton Road Atlanta, GA 30329-4027, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - Contact CDC–INFO

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

Petroleum distillates (naphtha)

CAS 8002-05-9

RTECS SE7449000

Synonyms & Trade Names
Aliphatic petroleum naphtha, Petroleum naphtha, Rubber solvent

DOT ID & Guide

Exposure Limits	
	NIOSH REL: TWA 350 mg/m^3 C 1800 mg/m^3 [15-minute]
	OSHA PEL†: TWA 500 ppm (2000 mg/m^3)

IDLH 1100 ppm [10%LEL] See: 8002059

Conversion 1 ppm = 4.05 mg/m^3

Physical Description
Colorless liquid with a gasoline- or kerosene-like odor. [Note: A mixture of paraffins (C5 to C13) that may contain a small amount of aromatic hydrocarbons.]

MW: 99 (approx)	BP: 86-460°F	FRZ: -99°F	Sol: Insoluble
VP: 40 mmHg (approx)	IP: ?		Sp.Gr: 0.63-0.66
Fl.P: -40 to -86°F	UEL: 5.9%	LEL: 1.1%	

Flammable Liquid

Incompatibilities & Reactivities
Strong oxidizers

Measurement Methods
NIOSH 1550
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
Up to 850 ppm:
(APF = 10) Any supplied-air respirator
Up to 1100 ppm:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode*
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes inhalation, ingestion, skin and/or eye contact

Symptoms Irritation eyes, nose, throat; dizziness, drowsiness, headache, nausea; dry cracked skin; chemical pneumonitis (aspiration liquid)

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

Lead

CAS 7439-92-1

Pb

RTECS OF7525000

Synonyms & Trade Names
Lead metal, Plumbum

DOT ID & Guide

Exposure Limits

NIOSH REL*: TWA (8-hour) 0.050 mg/m^3 See Appendix C [*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.]

OSHA PEL*: [1910.1025] TWA 0.050 mg/m^3 See Appendix C [*Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.]

IDLH 100 mg/m^3 (as Pb) See: 7439921

Conversion

Physical Description
A heavy, ductile, soft, gray solid.

MW: 207.2	BP: 3164°F	MLT: 621°F	Sol: Insoluble
VP: 0 mmHg (approx)	IP: NA		Sp.Gr: 11.34
Fl.P: NA	UEL: NA	LEL: NA	

Noncombustible Solid in bulk form.

Incompatibilities & Reactivities
Strong oxidizers, hydrogen peroxide, acids

Measurement Methods
NIOSH 7082, 7105, 7300, 7301, 7303, 7700, 7701, 7702, 9100, 9102, 9105; OSHA ID121, ID125G, ID206
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: Daily
Remove: When wet or contaminated
Change: Daily

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap flush promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations (See Appendix E) NIOSH/OSHA

Up to 0.5 mg/m^3:
(APF = 10) Any air-purifying respirator with an N100, R100, or P100 filter (including N100, R100, and P100 filtering facepieces) except quarter-mask respirators. Click here for information on selection of N, R, or P filters.
(APF = 10) Any supplied-air respirator

Up to 1.25 mg/m^3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter

Up to 2.5 mg/m^3:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters.
(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Up to 50 mg/m^3:
(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Up to 100 mg/m^3:
(APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters./Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes inhalation, ingestion, skin and/or eye contact

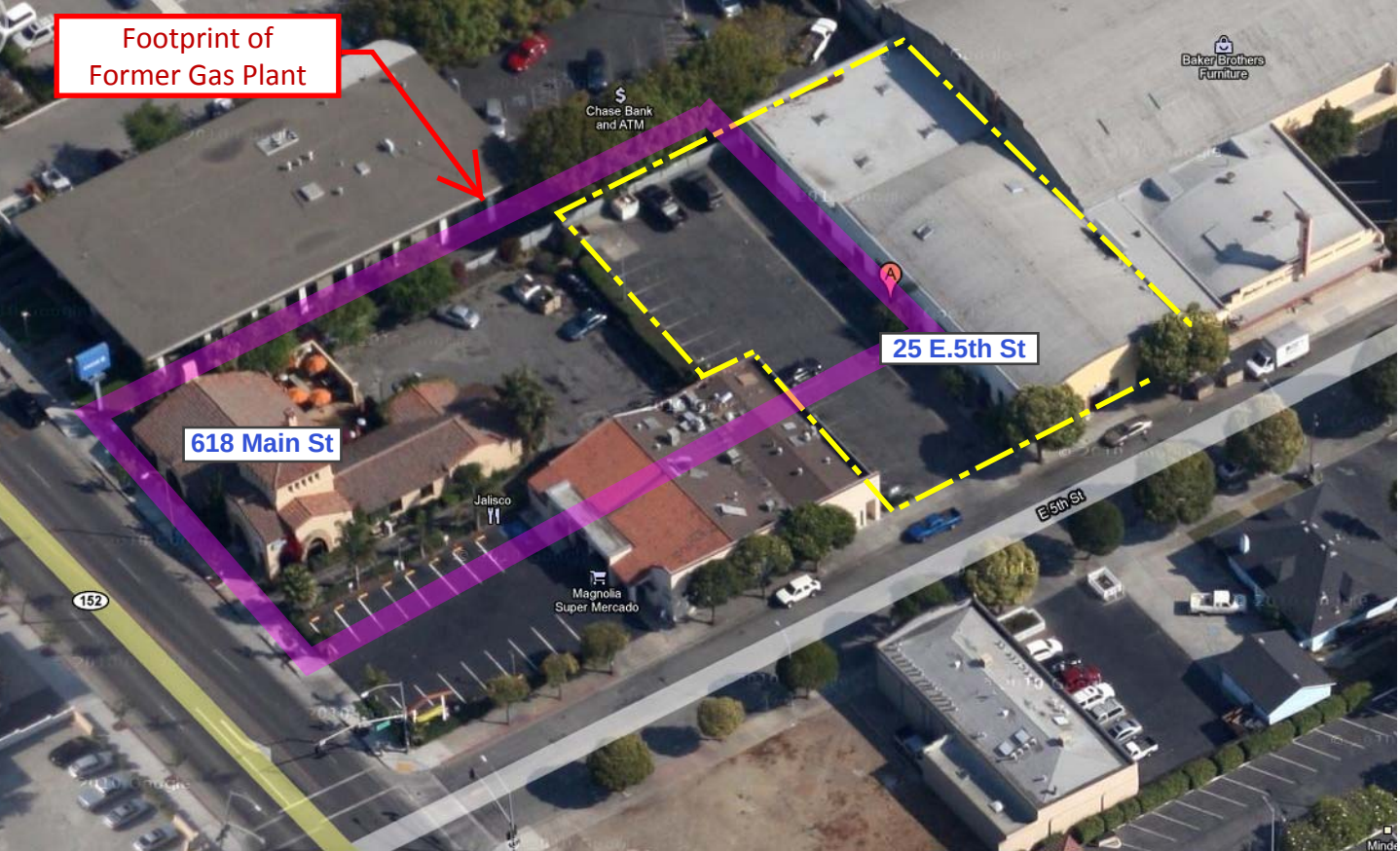
Symptoms Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension

Target Organs Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue

See also: INTRODUCTION See ICSC CARD: 0052 See MEDICAL TESTS: 0127

APPENDIX F

HISTORICAL CORRESPONDENCE & MAPS


Footprint of
Former Gas Plant
Chase Bank
and ATM
Baker Brothers
Furniture
25 E.5th St
618 Main St
Jalisco
Magnolia
Super Mercado
E 5th St
152

PACIFIC GAS AND ELECTRIC COMPANY

PG&E 618 MAIN STREET • WATSONVILLE, CALIFORNIA 95076 • (408) 724-4717

June 20, 1986

Ms. Gene Marie Hammonds Coe
P. O. Box 396
Pebble Beach, CA 93953

Dear Ms. Coe:

The purpose of this letter is to summarize PGandE's gas plant identification and evaluation program, and to notify you that the property you own off Fifth Street in Watsonville was once the site of a gas manufacturing facility.

Historically, beginning in the 1850's, gas was made from coal or oil by PGandE and other companies in northern and central California. This gas was sold in the community for gas lighting, cooking, heating and other uses. This practice diminished in PGandE's service area during the 1930's with the introduction of natural gas made possible by the construction of transmission pipelines. The last known gas manufacturing plant in our service area ceased operation in the 1950's. Records indicate that the gas manufacturing plant formerly located on your property ceased operation between 1904 and 1906.

A recent study by the federal Environmental Protection Agency identified over 1,500 former gas manufacturing plant sites around the country. This study found that in some cases, residues from these facilities, primarily coal, tar and lampblack, may still remain on-site. Under current regulations, these materials may now be classified as a "hazardous waste".

Following the EPA study, PGandE initiated its own study to identify the location of former gas manufacturing plant sites in its service area, regardless of whether they were ever owned by PGandE. The property you own off Fifth Street in Watsonville has been identified as a site of a former manufactured gas plant.

We have voluntarily informed the EPA and the state environmental agencies of the existence of sites in our service area. Because we were not sure whether or not you were aware of this former use of your property, we felt it important to inform you. We have not been directed by any agency to make this notification.

In cooperation with the Regional Water Quality Control Board, we have begun a program to test drinking water supplies in the vicinity of all sites to confirm that gas plant residues are not present in levels that will pose a hazard. Of those sites tested so far, no traces have been found.

In addition, PGandE will, at your request, and without regard to whether we ever owned or operated a gas manufacturing plant on your property, take exposed surface soil samples for laboratory analysis at our expense to determine if gas plant residues are present on the surface. Both the water and soil testing results will be shared with you and the appropriate agencies.

PGandE does not believe that your property, even if former gas manufacturing plant residues are present, poses any immediate threat to the public, or the environment. If the test results indicate that additional studies or other actions are warranted, we will discuss responsibility for these actions with you at that time.

Additional information about your site or PGandE's program to evaluate and manage the sites that it owns, as well as research and other background information on gas plant residues that has been developed, is available to you if you should desire it. If you would like any of this information, or if we can answer any questions you might have, please call Loren Ingols, 408-426-6300.

Sincerely,

Gayle D. Hamilton

Gayle D. Hamilton
Manager

Note:

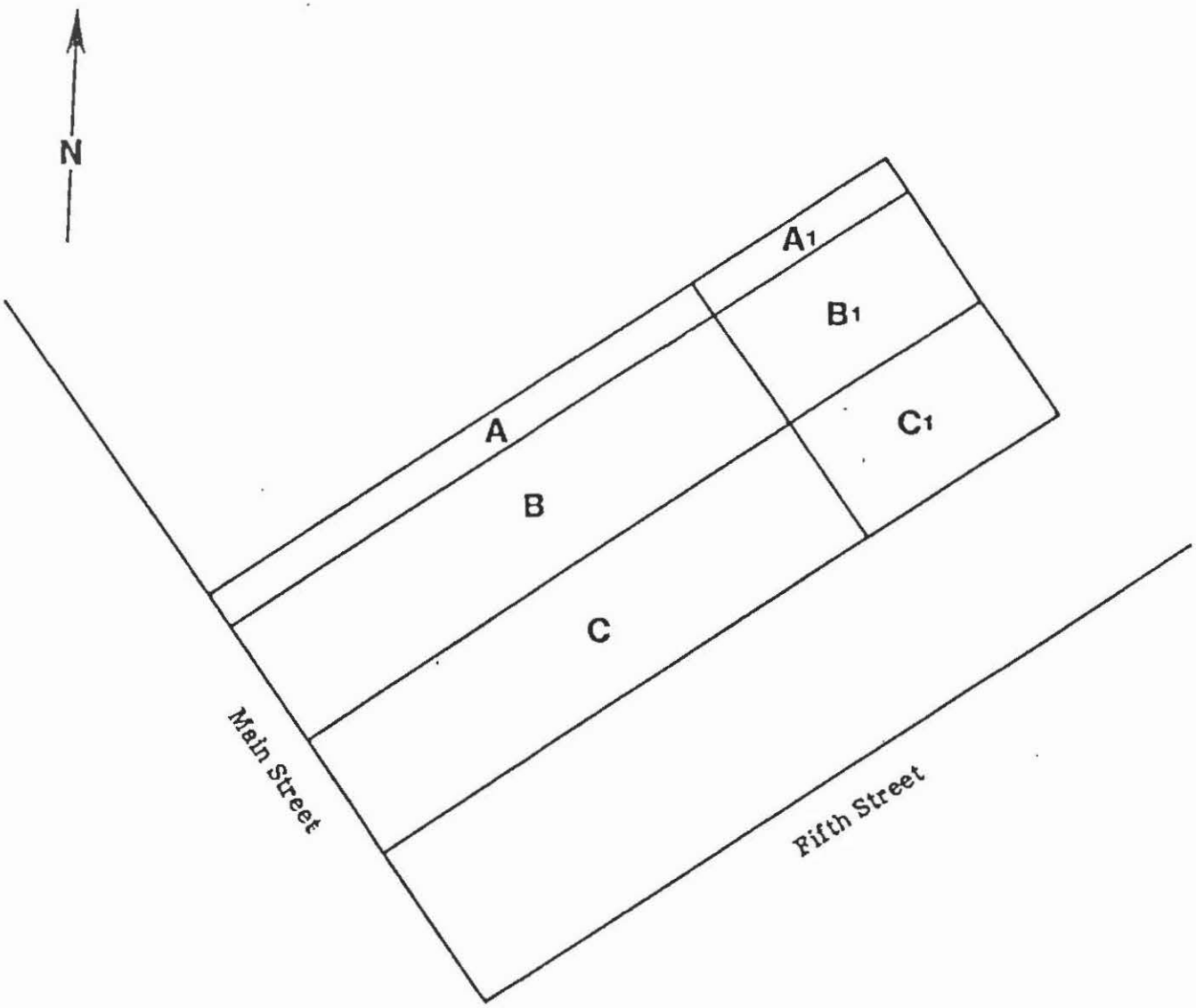
The owner of the 25 E.5th Ave property in 1986 was Ms. Gene Coe.

-

Prior to selling the property in 1986, Ms. Coe provided this letter to potential buyers of the subject property (Mr. and Mrs. Oneto, the current owners). And prior to purchasing this property, the Oneto's contacted the PG&E representative referenced in this letter (Loren Ingols), who reportedly tested the on-site soils and informed the Oneto's there were no environmental risks based on the testing.

-

(Personal communication: Mrs. Martha Oneto)



Watsonville Gas Plant (408-8) – Parcel Map

(See also chain of title)

PACIFIC GAS AND ELECTRIC COMPANY

77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910-372-6587

January 19, 1987

Ms. Genemarie Gawthorp
c/o T. R. Hall
47375 West Dakota Avenue
Firebaugh, CA 93622

Dear Ms. Gawthorp:

With your permission, Pacific Gas and Electric Company's Department of Engineering Research recently sampled exposed surface soil at 618 Main Street, Watsonville, CA, for the presence of residues commonly associated with manufactured gas plant operations. The results of an analysis of these samples by an independent laboratory certified by the State of California are attached for your information (Table 1). As previously indicated, we are also providing these results to appropriate government officials.

Attached also is information which is furnished as general background. While this information is believed to be reliable, PGandE assumes no responsibility for its use or accuracy.

For specific questions or interpretations of the test results, we recommend that you contact the California Department of Health Services, Ms. Susan Solarz, (415) 540-3401, and/or the Regional Water Quality Control Board, Ms. Nora Kataoka, (805) 549-3147.

Please feel free to return the enclosed postage-paid card if you have any other questions concerning PGandE's Manufactured Gas Plant Program.

Sincerely,

Ron R. Rhodes
Coast Division Manager

RRR:ll

Atta

cc:

Note:

Six months later (Jan 1987) the owner of the adjoining 618 Main St. property (Ms. Genemarie Gawthorp) was provided this letter showing elevated levels of gas plant type wastes in surface soils (PNAs = 11 mg/kg).

-

EnviroStor database notes:

PEA completed (5/5/87). The results of previous investigations indicate that subsurface soil contains residues characteristic of MGP by-products including polynuclear aromatic hydrocarbons (PNAs), total petroleum hydrocarbons (TPH), and volatile organic compounds (VOCs).

-

http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=44490007

TABLE 1

RESULTS OF SURFACE SOIL TESTING

	Concentration in Parts Per Million				
Sample I. D.	Total PNAs	Lead	Arsenic	Mercury	Cyanide
861039-07	11	260	< 0.50	< 0.10	1.1

Key: < : "Less than"; indicates that constituent was not detected at the detection limit given

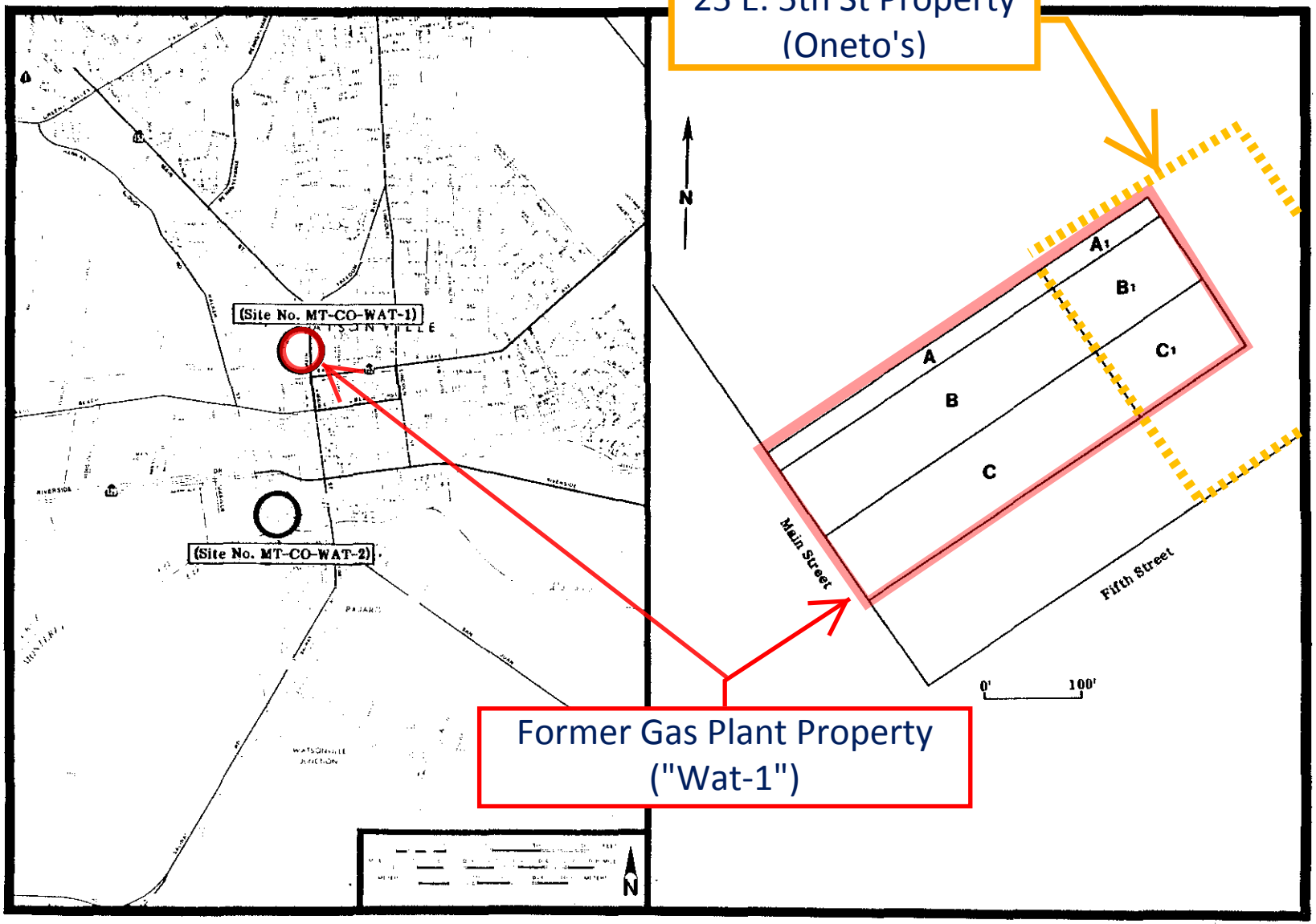
OWNER: Gawthrop

HISTORICAL SUMMARY
OF
FORMER MANUFACTURED GAS PLANTS
IN THE
CITY OF WATSONVILLE

PG and E

October, 1986

TABLE OF CONTENTS



Location Map **Parcel Drawing**

DATA SUMMARY

Watsonsville Gas Plant (MT-CO-WAT-1)

DATA SUMMARY FOR SITE MT-CO-WAT-1

Parcel	Assessor's Parcel Number	Current Owners	Current Land Use	Future Land Use
A, B, C	18-151-26	Pacific Gas and Electric Company 77 Beale Street San Francisco, California	PGandE Watsonville Office	No development proposed
A1, B1, C1	18-151-23	Genemarie H. Coe P.O. Box 396 Pebble Beach, California	Parking lot and warehouse	Construction in progress. Warehouse being converted to an office building

Approximate acreage of all parcels - .6

Note: See also Summary of Chain of Title

Watsonville Gas Plants (MT-CO-WAT-1 and 2) - Chronology

1871 The Watsonville Maxim Gas Company is incorporated in October of 1871. The gas plant (MT-CO-WAT-1, hereafter WAT-1) is constructed near the intersection of Fifth and Main Streets. At this time, gas is produced from gasoline. (Note: Property for this plant is not acquired until 1879.)

1879 In the spring of 1879, the Maxim plant is shut down and replaced by a coal-gas works built at the same location. The works are completed in early May. Parcel B (WAT-1) is acquired by the Watsonville Maxim Gas Company (see Parcel Drawings for location).

1882 Parcel A (WAT-1) is acquired by the Watsonville Maxim Gas Company.

1883 Parcel C (WAT-1) is acquired by the Watsonville Maxim Gas Company.

1892 The Watsonville Gas Company acquires the plant (WAT-1) from the Watsonville Maxim Gas Company. (This transfer is not immediately apparent in the chain of title. Rather, titles to parcels A, B and C were transferred to P.L. Benjamin in 1901 and then to the Watsonville Gas Company in 1902.)

1902 The Watsonville Gas Company installs an oil-gas plant at the same location (WAT-1).

1904 The Watsonville Power and Light Company is incorporated. The new company acquires parcels A, B and C (WAT-1) after they pass through the hands of H.A.V. Torchiana et al. and J. Martin.

1905 The Watsonville Light and Power Company acquires parcel A at site (MT-CO-WAT-2, hereafter WAT-2), location of the new gas plant.

The Main Street plant (WAT-1) is shut down and ownership of the site is transferred to J. Martin and L. Lowe. A new oil-gas plant is opened at the Walker and Front Street site (WAT-2).

1906 Coast Counties Light and Power Company acquires both the new gas plant (parcel A, WAT-2) from the Watsonville Light and Power Company and the original plant (parcels A, B and C, WAT-1) from Martin and Lowe. By this time, the original plant (WAT-1) gas house is being rented to the Watsonville School District as a classroom.

1910-1920 The new gas plant (WAT-2) gradually expands its production.

1912 Coast Counties Light and Power Company merges into Coast Counties Gas and Electric Company. Titles to all properties are transferred.

1920-
1930 Rapid expansion of gas production occurs at the plant.

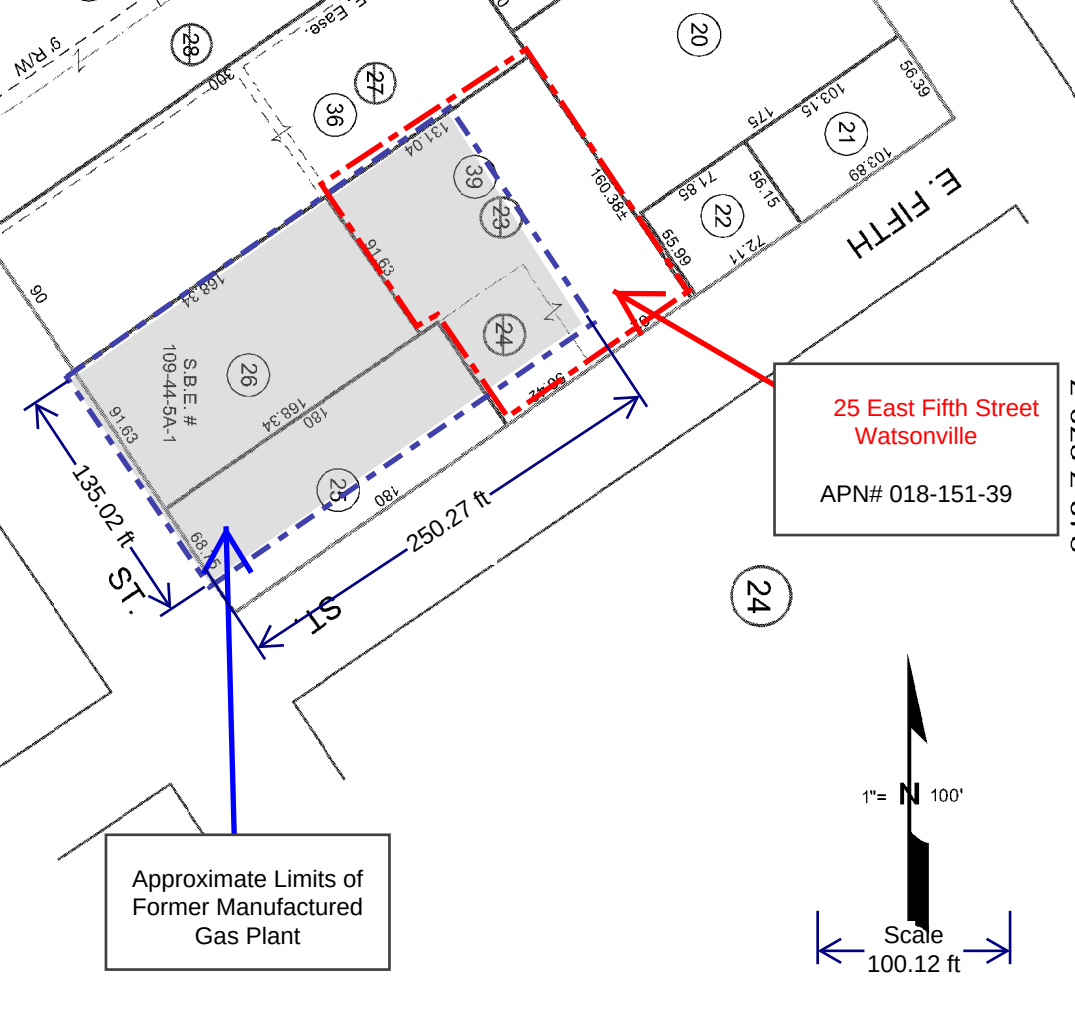
1920 Coast Counties Gas and Electric Company acquires parcels B and C at the new site (WAT-2).

1922 Coast Counties Gas and Electric Company disposes of parcel C (WAT-2) at the new site.

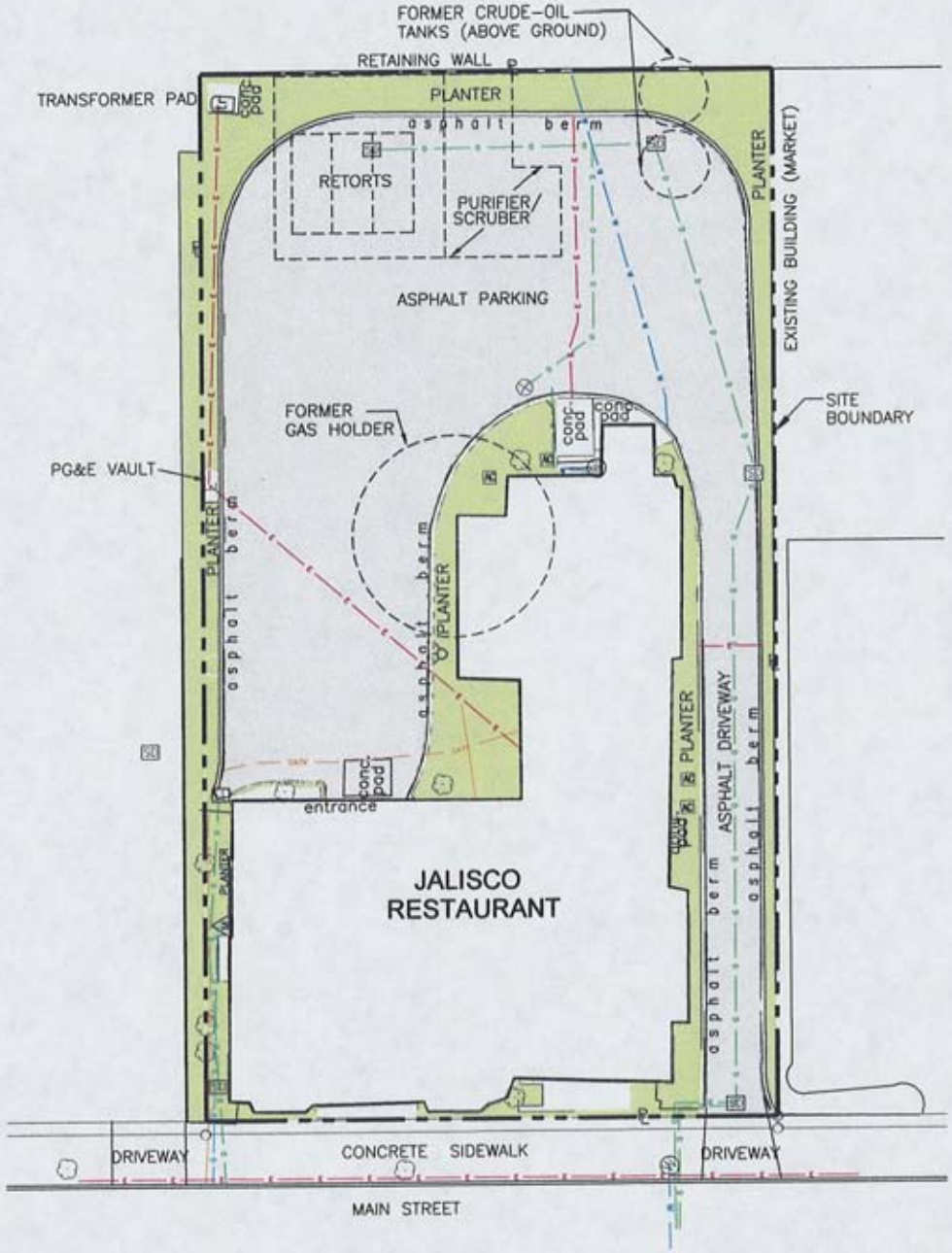
1931 Natural gas arrives in Watsonville and the plant is shut down.

1935 Portions of parcels A, B and C (A1, B1 and C1) at site WAT-1 are sold by Coast Counties Gas and Electric Company.

1954 Pacific Gas and Electric Company acquires all properties of Coast Counties Gas and Electric Company. This includes the remainder of parcels A, B and C at site WAT-1 and parcels A and B at site WAT-2. PGandE currently retains ownership of these parcels.


25 East Fifth Street
Watsonville
APN# 018-151-39
Approximate Limits of
Former Manufactured
Gas Plant
135.02 ft
250.27 ft
ST.
1ST
E. FIFTH
S.B.E. #
109-44-5A-1
1"= N 100'
Scale
100.12 ft

P:\Drafting\PGE-1012\PGE-1012-RAW-10-2005\002-PGE-1012-RAW-10-2005-SitePlan-Fig1-2.dwg 4/30/2007 12:34:56 PM PST



EXPLANATION

- TRANSFORMER
- STORM DRAIN
- AIR CONDITIONING UNIT
- LIGHT POST
- ELECTRIC VAULT
- GAS METER
- MANHOLE
- WATER METER
- STORMDRAIN
- CABLE LINE
- GAS LINE
- ELECTRICAL LINE
- WATER PIPE

0 30 60 FEET

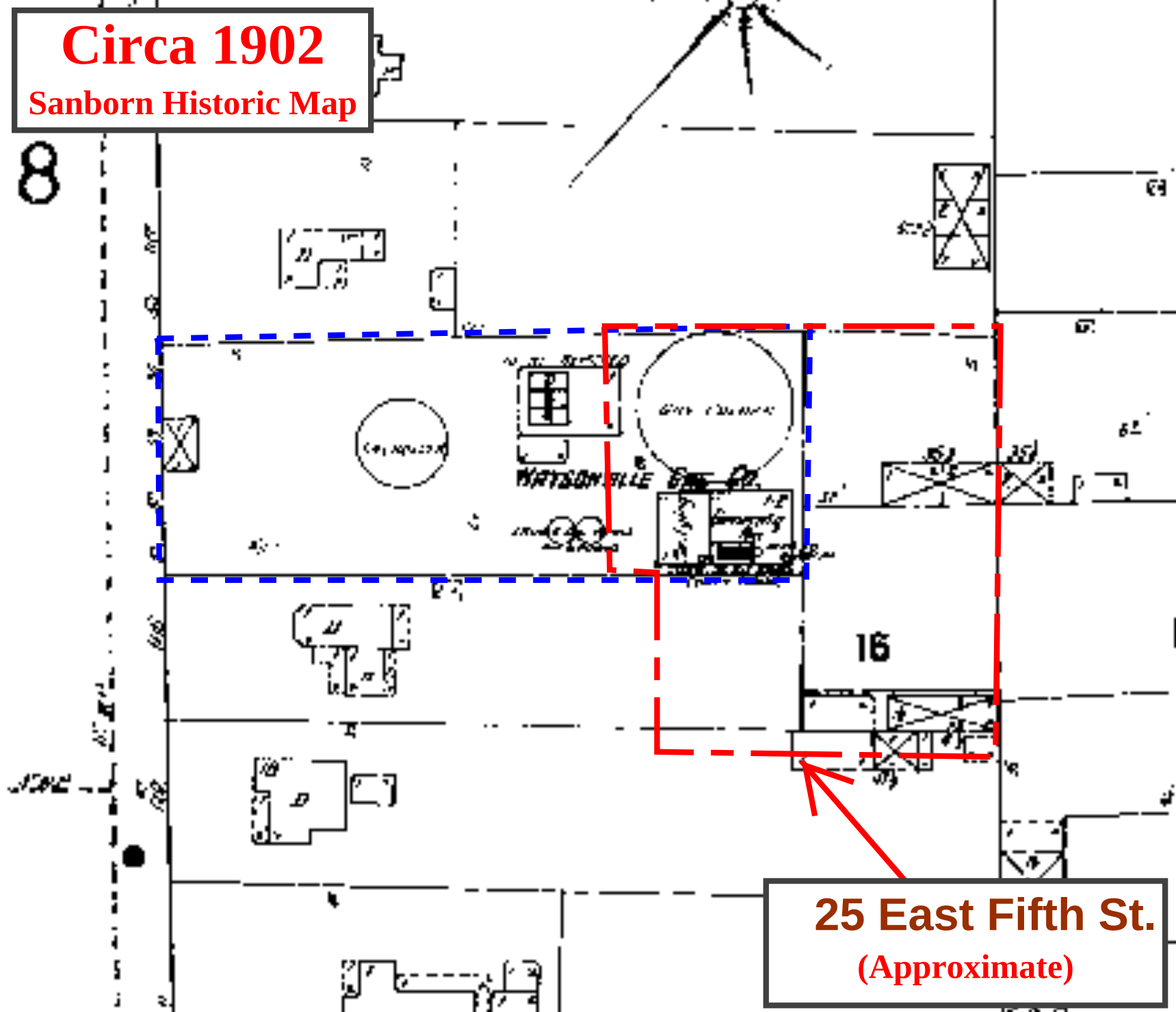
APPROXIMATE SCALE

FIGURE 1-2

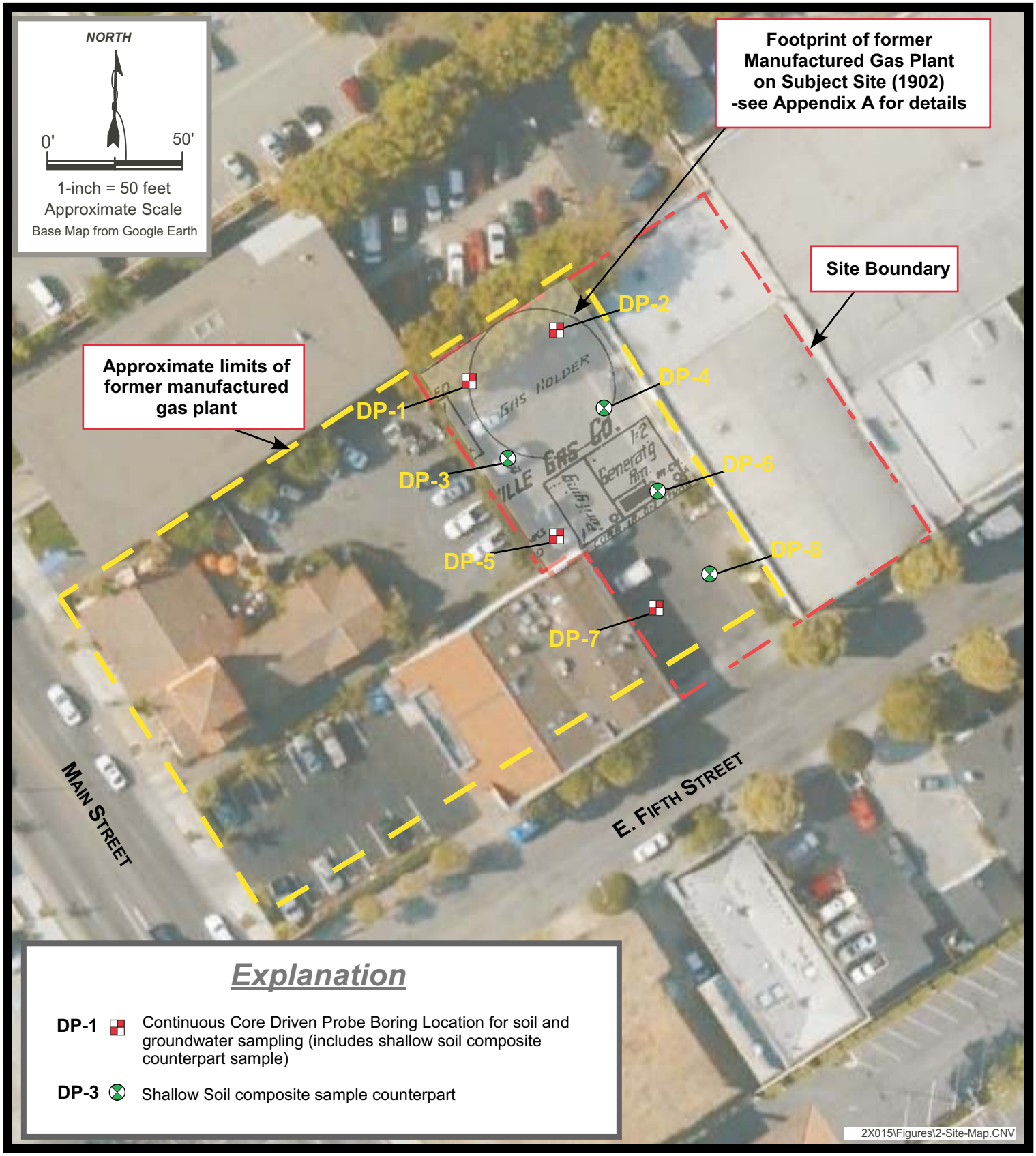
SITE PLAN

FORMER WATSONVILLE-1 MGP SITE
618 MAIN STREET
WATSONVILLE, CALIFORNIA

TERRA PACIFIC GROUP
Environmental Engineering, Consulting, and Construction


Circa 1902
Sanborn Historic Map
8
16
25 East Fifth St.
(Approximate)


Approximate Limits of Former Manufactured Gas Plant
MAIN ST
E 5TH ST
25 East Fifth Street
Watsonville
APN# 018-151-39
0
92ft



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 722 - 1159
www.weber-hayes.com

Site Map showing Drilling Locations
Oneto Propety
25 East Fifth Street, Watsonville, California

Figure 2
Job # 2X015