



ENVIRONMENTAL SITE MANAGEMENT PLAN

FORMER VALLCO SHOPPING MALL
10123 NORTH WOLFE ROAD,
CUPERTINO, CALIFORNIA

APRIL 2019
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1 INTRODUCTION

On behalf of Vallco Property Owner, LLC (Vallco), WSP has prepared this Environmental Site Management Plan (ESMP) for the former Vallco Shopping Mall property located at 10123 North Wolfe Road in Cupertino, California (Site, Figure 1). This ESMP has been prepared to provide a framework to manage excavated soils during redevelopment activities at the Site.

1.1 SITE REDEVELOPMENT PLAN

The Site is anticipated to be used for commercial and residential buildings, subsurface and surface parking areas, and landscaping. In September 2018, the City of Cupertino approved a project for the Site that will include 2,402 residential units, up to 485,912 square feet of retail/entertainment uses, and 1,981,447 square feet of office uses. The project was approved pursuant to newly enacted legislation, SB 35. Approximately 10,500 parking spaces will be provided in both above-and below ground structures. The plan includes two publicly accessible town squares and a connected green roof.

Planned development includes extensive subsurface parking that will require excavation of soil to a depth of 20 to 30 ft-bgs across much of the Site (Figures 2 and 3). It is anticipated that between 1.4 and 1.8 million cubic yards of soil will be removed as part of the redevelopment. Based on information available in the California Geotracker database, the depth to groundwater beneath the Site is approximately 80 to 90 feet bgs; therefore, groundwater will not be encountered during the Site redevelopment activities.

Pre-redevelopment activities will include the demolition of the Mall building structures, including foundations and associated subsurface utilities, and all associated parking garages/structures. The Site demolition is expected occur in phases, as documented in Figure 4

1.2 OBJECTIVES OF ESMP

The purpose of this ESMP is to provide a process to properly evaluate, manage and dispose of excavated soil during demolition and redevelopment activities. The ESMP also includes procedures in the event that unknown contamination is encountered during excavation and grading activities.

This SMP is organized as follows:

- Section 2: Environmental Conditions
 - Section 3: Construction Measures
 - Section 4: Reporting Requirements
-

1.3 INTENDED USERS OF ESMP

This ESMP is primarily intended to be used by the general contractor and the construction workers who may come into contact with soil beneath the Site. The ESMP presents measures to be implemented during construction by construction workers to mitigate potential risks to human health and the environment if

impacted soil is encountered. The ESMP also includes procedures to be followed if previously unknown contamination is encountered during construction activities.

The property owner is Vallco Property Owner, LLC (Vallco). The General Contractor (Contractor) for the project is anticipated to be Devcon Construction, Inc. (Devcon) of Milpitas, California.

The specific responsibilities for Vallco and the Contractor in connection with the redevelopment are described below.

- **Property Owner/Vallco:** As the property owner, Vallco is primarily responsible for any environmental issues related to redevelopment of the Site. Vallco is responsible for communication between the entities identified in this ESMP and for all interaction with the applicable regulatory agencies. For soils excavated during redevelopment, Vallco will profile soils to determine their disposition and will, as appropriate, select the appropriate disposal facilities for all soils generated from the activities through the redevelopment phase.
- **Contractor:** Contractor will be responsible for implementation of all pre-redevelopment elements, as well as those during redevelopment if impacted or suspect soil is encountered.

1.4 PROJECT PERSONNEL

The following personnel have been identified for the project. Personnel should be updated as the project progresses, as necessary.

Property Owner/ Responsible Party (Site Management)	Vallco Property Owner, LLC 965 Page Mill Road Palo Alto, CA 94304	Nandy Kumar nkumar@shcmllc.com Paul Hansen phansen@shcmllc.com
General Contractor	Devcon Construction Inc 690 Gibraltar Dr. Milpitas, CA 95035	Daisy Pereira dpereira@Devcon-const.com
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2 ENVIRONMENTAL CONDITIONS

2.1 SITE SETTING

The Site is located at 10123 North Wolfe Road in Cupertino, California (Figure 1). The Site is owned by Vallco and is approximately 50 acres that is occupied by the mostly vacant Vallco Shopping Mall (the Mall). The Mall consists of one irregularly shaped two-story, steel- framed building (connected by bridge across Wolfe Road) and two small detached buildings. The two-story building is part of the enclosed former shopping Mall with approximately 1.5 million square feet of floor space that was constructed between 1974 and 1979 and renovated in 1988 and 2006. The Mall had approximately 110 tenant spaces and was anchored by Macy's, Sears, and J.C. Penney.

According to the U.S. Geological Survey Cupertino, California quadrangle (7.5-minute series) map, the ground elevation of the subject property is approximately 185 feet above mean sea level. The site is located on relatively flat land with the property sloping slightly to the northeast. The general area surrounding the Site is residential and commercial. The subject property is bound to the north by Highway 280 and to the east and south by Calabazas Creek.

The U. S. Department of Agriculture Soil Conservation Service indicates that the soils at the subject property are classified as Botella. The soils texture is identified as a clay loam. The bedrock underlying the property consists of rocks from the Quaternary Series.

2.2 GEOLOGY & HYDROGEOLOGY

The Site is located in the Santa Clara Valley, and is underlain by unconsolidated alluvial sediments, consisting of fine-grained (low permeability) deposits interbedded with coarse-grained (higher permeability) sediments. Soils encountered during an on-site soil investigation in October 2018 performed by WSP consisted predominately of clays followed by silty sands or poor and well graded sands. Fill material appeared as lean clays and extended between five to ten feet below ground surface (ft-bgs) and in some locations, as deep as 20 ft-bgs.

Based on information available in the California Geotracker database, a nearby site (TOSCO Global ID: TO608575840) measured groundwater ranging historically from 70.86 ft-bgs (May 2006) to 90.70 ft-bgs (December 2008) with a general groundwater flow direction of northeast. A Phase I Environmental Site Assessment (Phase I ESA) prepared by Cornerstone Earth Group (Cornerstone, 2018) identifies this groundwater zone as being perched and found only intermittently across the Site between depths of 80 and 95 ft-bgs. Groundwater elevations measured from previous on-site groundwater monitoring wells located at the former J.C. Penney automotive repair facility ranged from 120 to 140 ft-bgs between 1990 and 1993. Since excavation will only extend to 20 to 30 ft-bgs, groundwater is not expected to be encountered during re-development.

2.3 SUMMARY OF ENVIRONMENTAL CONDITIONS

2.3.1 HISTORICAL SITE USE

WSP performed a Phase I ESA of the Site, documented in a report dated January 7, 2014 and updated in a letter report dated January 11, 2016. The major findings of these reports are summarized below:

Based on a review of historical aerial photographs, prior to construction of the initial Mall buildings in 1974-1979, the area surrounding the Site was developed with orchards, agricultural land, and farmhouses.

A Sears Automotive Center was constructed at the property in 1970 on the southwest side of the Mall property. The Sears Automotive Center was referenced as a Leaking Underground Storage Tank (LUST) site on the state Geotracker website. Four gasoline and two motor oil underground storage tanks (USTs) were removed from the Sears Automotive Center site in 1985. Dispenser islands and product lines were removed from the site in 1994. Seven borings were installed and sampling was conducted in soil and groundwater in 1999 to assess hydrocarbon concentrations at the site. Groundwater was not encountered in any of the borings at a depth of 44 ft-bgs. Concentrations of ethylbenzene, total xylenes, and lead were reported below regulatory action levels and the site was granted case closure on December 6, 1999, with the Santa Clara Valley Water District (SCVWD) concluding that any residual contamination in the subsurface relating to the former USTs is minimal.

J.C. Penney, located adjacent and to the east of the Mall property, was also listed as a LUST site in the environmental database report. Two USTs, one 350-gallon diesel tank and one 350-gallon waste oil tank, were removed from the site on November 15, 1989. Three hundred and three tons of contaminated soil was removed from the UST excavations. A 750-gallon waste oil/water sump was closed in-place on January 21, 1994. Confirmation soil samples were collected beneath the oil/water sump prior to the closure; no contaminants of concern (COCs) were detected. Groundwater monitoring results collected from four monitoring wells installed on the J.C. Penney site indicated that there were no detectable levels of target chemical constituents. The site was granted case closure on September 1, 1994 by the SCVWD.

With the closure of the two former automotive centers, the Santa Clara County Fire Department (SCCFD) requires implementation of an approved closure plan. The Closure Plan for the Former Sears Automotive Center was submitted to the SCCFD on March 25, 2019 and approved by the SCCFD by letter dated April 11, 2019. A similar closure plan will be submitted to the SCCFD for the former J.C. Penney Automotive Center. The closure activities of the Sears and J.C. Penney premises will be monitored and coordinated with the SCCFD to ensure that no material residual hazardous materials or contaminants remain following closure. Any remaining subsurface sumps/separators will be properly abandoned or removed as part of the closure activities.

A closure plan for the Western portion of the mall was approved and implemented in November-December 2018. A similar closure plan for the Eastern portion of the mall will also be prepared and submitted to the SCCFD for review and approval. The closure activities addressed, among other things, removal of one of the three generators within the mall and decommissioning of all the elevators in the West side of the mall (including removal of the hydraulic fluids). During the inspection of the elevators, there was no evidence of any release of hydraulic fluids. All these activities were conducted under the oversight of the SCCFD. With respect to the hydraulic fluids within the former elevators, a letter dated

June 20, 2019 from the elevator manufacturer (KONE Inc.), confirmed that the hydraulic fluids within their elevators do not contain volatile organic compounds (VOCs) or polychlorinated biphenyls (PCBs). The SCCFD approved the West Side Closure Plan Letter report by their letter dated December 12, 2018.

Given the historical uses of portions of the Site, any future subsurface disturbance (excavation or fill) during redevelopment activities should be performed with care and an awareness of possible past releases of chemicals or petroleum products in these areas. To this end, this ESMP applies to all redevelopment activities to ensure that excavated soils are sampled and properly handled/disposed, unknown contamination, if encountered, is appropriately addressed, and that imported fill materials are screened/analyzed before their use on the property. These areas are each identified as potential areas of concern and will be handled in accordance with Section 3.2.

2.3.2 ENVIRONMENTAL INVESTIGATIONS

In addition to the investigations and Site data associated with the regulatory closure of the two former automotive facilities, three phases of soil investigations were conducted to (a) assess environmental site conditions in connection with the planned development and (b) address potential residual subsurface environmental concerns such as the historical agricultural use of the Site and the former Sears Automotive Center. A Site Characterization Report that summarizes analytical results and Site conditions was generated by WSP and is included as Appendix A. The Site Characterization Report includes data summary tables and respective laboratory analytical reports.

SOIL INVESTIGATIONS

In September 2016, Valco retained Geosphere to conduct a subsurface investigation to collect various discrete soil samples at the Site as part of an accompanying geotechnical investigation. A total of eight borings were advanced. A total of 32 soil samples were collected and analyzed for volatile organic compounds (VOCs) by EPA method 8260B; semi-volatile organic compounds (SVOCs) by EPA method 8270D; polycyclic aromatic hydrocarbons (PAHs) by EPA method 8270D selected ion monitoring (SIM); total petroleum hydrocarbons (TPH) as gasoline (TPH-g), as diesel (TPH-d), and as motor oil (TPH-mo) by EPA Method 8015C; pesticides by EPA Method 8081; polychlorinated biphenyls (PCBs) by EPA method 8082A; title 22 metals; 2,3,7,8-tetrachlorodibenzodioxin (TCDD) by method 1613B; and asbestos by method 435.

In October 2018, Valco retained WSP to conduct a further subsurface investigation at the Site to provide additional information concerning subsurface conditions across the entire Site. The investigation included the installation of 15 borings. Samples were collected for Title 22 metals by EPA Method 6010B; TPH-g, TPH-d, and TPH-mo by EPA Method 8015M; SVOCs and PAHs by EPA Method 8270; herbicides by EPA Method 8151; and pesticides by EPA Method 8081. All soil sample locations and depths were analyzed for Title 22 metals and TPH-g, -d, and -mo. Soil samples collected at depths of approximately 1 and 5 ft-bgs were additionally analyzed for SVOCs, PAHs, herbicides, and pesticides at all locations.

On January 10, 2019, WSP collected additional soil samples from seven boring locations on the south side of the Mall property, east of the former Sears Center, to address the potential for lead, pesticide, or arsenic impacts around former farmhouse buildings. Samples were collected by hand auger at the following depths, 0.5, 1, 2, and 3 ft-bgs. All samples were analyzed for pesticides (by EPA Method 8081A), and lead and arsenic (by EPA Method 6020). A summary of sample locations is included in Figure 5.

FORMER SEARS AUTOMOTIVE CENTER

As identified in Cornerstone's Phase I ESA, the Statewide Environmental Evaluation and Planning System (SWEEPS) UST database lists seven USTs as having been located at the Site and the records only confirm the removal of six USTs. Additionally, a building plan from 1969 for the former Sears Automotive center depicted a 1,000-gallon waste oil UST on the west side of the building. Accordingly, the Cornerstone Phase I ESA recommends further investigation, including a geophysical survey, to identify whether a seventh UST in the SWEEPS UST database remains at the former Sears Automotive Center.

To address the possibility that any USTs remain in the vicinity of the former Sears Automotive Center, WSP performed a geophysical ground penetrating radar (GPR) survey on January 25, 2019 and a series of test pits around a suspected abandoned access port on March 26, 2019. The GPR survey showed no evidence of any underground tanks on the west or east sides of the Sears automotive building. The test pits revealed that the suspected access port was an abandoned storm drain. A metal pipe was located beneath the abandoned storm drain that ran perpendicular to the building. The end of the pipe was found to be capped off and determined to be the pipe that lead to a former used oil tank (Figure 6). Additional description of field activities is included in the Site Characterization Report in Appendix A.

Although WSP's investigation discussed above clearly demonstrates that no UST remains beneath the former Sears Automotive Center, this area is still identified as a potential area of concern for purposes of this ESMP. Soil excavation work in this area will be handled as discussed in section 3.2 of this report.

As noted earlier, an East Side closure plan and a specific closure plan for the J.C. Penney Automotive Center will be submitted to the SCCFD for review and approval. All closure/demolition activities on the East Side of the mall will be carried out in a manner consistent with this ESMP.

If sampling results from implementation of the closure plans for the former Sears or J.C. Penney Automotive Centers indicate conditions are different from that anticipated in the ESMP, an addendum to the ESMP will be prepared.

2.3.3 ANALYTICAL RESULTS

All analytical results have been compared to Environmental Screening Levels (ESLs) for residential human health risks as established by the San Francisco Regional Water Quality Control Board (RWQCB), revised January 2019, associated with residential direct soil exposure. Additionally, analytical results have been compared to the Department of Toxic Substance Control (DTSC) Modified Screening Levels (April 2019).

No other metals (excluding cobalt and arsenic), TPH, SVOC, PAH, or herbicides were detected in any of the samples at concentrations that exceeded their respective residential screening levels. Arsenic was found to exceed residential and construction worker screening levels in many samples. However, regulatory agencies do not require remediation of compounds that are below naturally-occurring background levels. Concentrations of naturally occurring arsenic in California may often be far above the screening levels. None of the arsenic concentrations in soil samples collected during the investigation of the Site exceeded the regional background level of 11 mg/kg for arsenic (Duvergé, December 2011). Additionally, results from samples collected for asbestos and 2,3,7,8-TCDD by Geosphere were all below laboratory reporting limits. Geosphere also analyzed samples for VOCs, of which only 2- Butanone

(MEK) and methylene chloride were detected above laboratory reporting limits. Concentrations of methylene chloride did not exceed the ESL or RSL.

A total of 60 samples were analyzed for pesticides from 32 samples collected by Geosphere (8 borings) and 28 samples collected by WSP (21 borings) at various depths across the Site. Two of the 60 samples analyzed for pesticides contained dieldrin that exceeded the residential RSL. One of those samples also exceeded the residential ESL. There is no evidence to suggest the widespread presence of dieldrin at the Site above applicable screening levels. A 95% upper confidence level of the mean (95% UCL) dieldrin concentration was calculated using EPA's ProUCL Version 5.1. The 95% UCL for dieldrin of 2.1 µg/kg is well below both the ESL (38 µg/kg) and RSL (34 µg/kg).

Cobalt was detected in one out of the 102 samples analyzed for the compound at a concentration of 23 mg/kg, which is the same concentration as the residential ESL and RSL. The Kearney Foundation of Soil Science reported in 1996 (Kearny, 1996) that soil samples collected in northern California frequently contain higher concentrations of cobalt which they attributed to ultramafic and volcanic rocks found in the area. The detection of cobalt at the concentration of the screening levels is isolated to only one sample of the 102 collected indicating there is no evidence to suggest the widespread presence of cobalt at the Site above applicable screening levels.

Based on the above results for dieldrin and cobalt and the fact that no other analytes exceeded residential screening levels, WSP finds that historical agricultural operations at the Site did not impact soils with pesticide, arsenic, or lead. In addition, there was no evidence of any impacts/exceedances of ESLs for TPH (or any other constituents) in the samples from seven borings (Figure 7) in proximity to the former Sears Automotive Center.

A total of 32 samples collected by Geosphere (8 borings) were analyzed for PCBs. Two samples contained detections of PCBs (both Arochlor 1254): E5-1 (523 µg/kg) and E8-1 (25.6 µg/kg). The results of those samples were compared to RSLs for residential human health risks. Only the E5-1 sample collected at one foot bgs with 523 µg/kg exceeded the RSL. PCBs were not detected in the samples collected in the E-5 boring at five feet bgs (E5-2) and 10 feet bgs (E5-3). The PCB concentration in sample E5-1 is less than the most conservative High Occupancy Cleanup Level of 1,000 µg/kg established in the Toxic Substances Control Act (TSCA; 40 CFR 761.61). TSCA's High Occupancy Cleanup Level is consistent with residential and commercial land use.¹ Thus, PCB concentrations detected at the site are below the TSCA health-protective value of 1 mg/kg and further assessment of PCBs would not be required under TSCA. In addition, since PCBs were not detected in 30 of 32 samples collected, there is no evidence to suggest the widespread presence of PCBs at the Site.

Despite the fact that the detection of PCBs at boring E-5 is less than the TSCA cleanup level, because the detection was above RSL, the area from which the sample was taken will be further characterized prior to construction and excavated during redevelopment activities. Details of this characterization and removal of the PCBs are included within Section 3.4 of this Report.

¹ As defined in TSCA, the term "high occupancy area" means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for bulk PCB remediation waste. Examples could include a residence, school, day care center, sleeping quarters, a single or multiple occupancy 40 hours per week work station, a school class room, a cafeteria in an industrial facility, a control room, and a work station at an assembly line (40 CFR 761.3).

Other than the single PCB exceedance, the analytical results indicate that no demonstrable environmental impacts upon soils exists at the Site and as such, WSP does not anticipate encountering impacted soils that exceed the respective residential RSLs.

2.3.4 RESIDENTIAL SCREENING LEVELS

Based on the above assessment of environmental conditions at the Site, soils containing COCs at levels that exceed residential ESLs are generally not anticipated to be encountered. As such, Site conditions during soil excavation should not pose an unacceptable risk to Site construction workers.

For purposes of this ESMP, four areas have been designated areas of potential concern at the Site: the former Sears Automotive Center, the former J.C. Penney Automotive Center, the Cupertino Ice Center, and an area where a single soil sample from boring E5 contained a concentration of PCBs that exceed the residential screening level. The excavation of soils in the automotive center areas will be handled as described in Section 3.2. The Cupertino Ice Center will be handled in the future Closure Plan for both the J.C. Penney Automotive Center and the eastern portion of the Mall (see section 3.5). The PCBs in soil will be addressed as described in Section 3.3. Any soil with notable staining or odor will be considered as impacted soil. If impacted soils are encountered during excavation (considered unlikely), impacted soil will be handled as described in section 3.4. RSLs as well as gross contamination levels and residential odor nuisance levels will be the screening levels that are applied to any unknown contamination that may be encountered during construction.

3 CONSTRUCTION MEASURES

Following demolition of structures and utilities, soil inspection and sampling will be conducted as follows in order to arrange for proper disposition of the excavated soils as described in this section.

3.1 ENVIRONMENTAL HEALTH AND SAFETY

3.1.1 WORKER HEALTH AND SAFETY

The Contractor shall be responsible for its own Health and Safety Program (HASP), including exposure monitoring of its workers and subcontractors. Contractor and Vallco have the authority to stop work in cases where safety hazards are observed. The Contractor shall develop and maintain for the duration of the project a safety program that will effectively incorporate and implement all required safety provisions of OSHA, state-specific worker safety requirements, Uniform Fire Code, and standard industry practices.

The Contractor shall prepare a Site-specific HASP, compliant with U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) as described in 29 CFR 1910.120 and CalOSHA as described in 8 CCR 5192. The Contractor shall provide Vallco a copy of the HASP prior to commencement of any activities requiring or recommending implementation of a HASP. The Contractor shall be solely responsible for the implementation of the HASP throughout the duration of Site work.

If unknown soil contamination is discovered through observation, monitoring, or laboratory analysis, soils will be screened as documented in section 3.4 and compared to the RWQCB ESLs for construction workers (Appendix B). If soil exhibits exceedances of the ESLs for construction workers, then workers that have the potential for exposure to the impacted soil should be at a minimum 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) trained personnel, with foreman also having additional eight-hour supervisory training.

3.1.2 ENVIRONMENTAL CONTROL MEASURES

DUST CONTROL

The Contractor shall handle soil in a manner to minimize the potential for generation of airborne dust. The Contractor will monitor for airborne dust as required by its Health and Safety Plan. In accordance with Bay Area Air Quality Management District (BAAQMD) regulations, no visible dust may leave the site. The Contractor will be responsible for visually monitoring and implementing dust control measures such that no visible dust leaves the Site. Dust generating activities that will be mitigated include those associated with excavation activities, creation of soil stockpiles, truck traffic on unpaved areas of the Site, ambient wind traversing soil stockpiles, and loading of Site soil into transportation vehicles.

At a minimum, the Contractor shall conduct visual air monitoring to confirm the efficacy of dust control procedures. As appropriate, the Contractor shall modify demolition and construction procedures to control emissions of dust.

To address the potential for dust above applicable human health protection thresholds, the Contractor shall implement all applicable mitigation measures during construction. Dust control should be performed by applying water with a low-pressure spray system. Low volumes of potable, reclaimed and/or treated dewatering water should be routinely spread in areas where dust may be generated because of development activities. If observations of visible dust indicate that the dust control measures are not adequate, then the Contractor shall implement additional engineering control measures, i.e., if visual dust is observable. These additional measures should include, but are not limited to:

- change of work procedures;
- wetting of surfaces;
- covering of exposed soil with plastic sheeting;
- use of dust palliatives; and
- reducing vehicle speeds.

EQUIPMENT CLEANING

Equipment (e.g., trucks and excavation equipment) that is exposed to Site soil during development activities will be cleaned prior to movement out of active work zones and leaving the Site. To minimize the spread of soil and dust, it is recommended that the equipment be dry-brushed for removal of material from the truck body and tires prior to exiting work zones. It is recommended that equipment exiting the Site be inspected and logged for compliance by the Contractor with the Site cleaning requirements.

If impacted soil is encountered, construction equipment and vehicles that contact impacted soil on the Site will be decontaminated prior to leaving the area of impacted soil associated with the Site. As above, decontamination methods will consist of scraping, brushing, and/or vacuuming to remove dirt on vehicle exteriors and wheels. If dry methods are not adequate, methods such as steam cleaning, high pressure washing, and cleaning solutions will be used. If generated, wash water resulting from decontamination activities will be collected and managed in accordance with all applicable laws and regulations.

STORMWATER

During Site development activities, storm water best management practices (BMPs) should be followed in accordance with the Contractor's Stormwater Pollution Prevention Plan (SWPPP) to be prepared for the Site. The BMPs for the Site development activities should include: use of fiber rolls; inlet protection; stabilized construction entrance; covering soil stockpiles with plastic sheeting or tarps during significant rainfall events; landscape and paving; street cleaning and catch basin cleaning.

If impacted soil or groundwater is encountered, stormwater pollution controls specific to environmental cleanup operations are intended to isolate stormwater in areas of cleanup operations and prevent contaminants from leaving the Site, co-mingling with water in other parts of the development project, or entering the stormwater system. Such controls will be based on BMPs such as those described in the California Stormwater Quality Association handbook for construction activities (CASQA, 2015). As described above, on-site sediment and erosion protection controls will be the primary methods for minimizing discharges of sediments from the Site.

STOCKPILE MANAGEMENT

Based on the results of soil investigations detailed herein, impacted soils are not anticipated to be encountered during construction excavation; however, isolated soil impacts from historical Site operations may be present.

During excavation, Vallco will oversee and will direct the Contractor to perform the following soil handling activities:

- Based upon soil investigations and observations during excavation, it is anticipated that the vast majority of excavated soil will not require special handling or segregation as impacted and will be stockpiled, moisture controlled, and completely covered to prevent fugitive dust.
- In the potential areas of concern, as described in Section 3.2, soil will be field screened by the Vallco representative for evidence of contaminant impacts, such as discoloration or staining, odors, unusual foreign materials, or organic vapors (measured by a photoionization detector). Using these indicators, the Vallco representative may direct the segregation of the soil into stockpiles, storage bins, or directly loaded into haul-off trucks for profiling and ultimate disposal to appropriate locations. Using these soil handling procedures, impacted soil will be segregated from non-impacted soil.
- The Contractor will be responsible for performing visual screening in other areas of the Site where it is highly unlikely that potentially impacted soil will be encountered. If such soil is encountered, the Contractor will notify Vallco and the procedures in Section 3.2 will be followed.
- Fill material and native material may also be separated during excavation based on characterization data or observations of impacts.
- If suspect impacted soil is to be segregated and stockpiled, the soil must be placed on a minimum 10-mil-thick polyethylene sheeting (or approved-equivalent impermeable sheet), completely covered and secured by the same impermeable sheeting, moisture controlled, and bermed when the soil is not actively being handled. All soil stockpiles must be covered at the end of each work day and handled using BMPs under the site-specific SWPPP. The SWPPP shall be consistent and in accordance with all applicable local/state rules and regulations.

3.2 POST- DEMOLITION SOIL SCREENING FOR AREAS OF CONCERN

As identified in Section 2.3 and described below, there are two primary potential areas of concern at the Site: the former Sears Automotive Center, the former J.C. Penney Automotive Center. The Cupertino Ice Center is also an area that may require specific attention. The SCCFD requires implementation of the approved closure plan for the former Sears Automotive Center due to the presence of an oil-water separator, hydraulic lifts, petroleum fluid pipelines, battery storage area, and lead containing materials (WSP, 25 March 2019). Similarly, the J.C. Penney former automotive center will require a closure plan to address an abandoned in-place UST, the presence of hydraulic lifts, the existence of four inactive groundwater monitoring wells, and associated piping.

A closure plan for the Sears Automotive Center was submitted to the SCCFD (Appendix C) on March 25, 2019 and approved on April 11, 2019, and includes soil sampling under the oil-water separator, remnant piping and any other subsurface equipment for proper characterization and subsequent disposal.

A similar closure plan will be prepared for the J.C. Penney Automotive Center for submission to the SCCFD. The closure plan will also include soil sampling under buried piping as well as include attention to the removal of a 750-gallon UST abandoned in place. Additionally, the four inactive groundwater monitoring wells located on the J.C. Penney premises will be located and abandoned in accordance with the SCVWD well standards.

In addition, as noted in Cornerstone's Phase I ESA, refrigeration equipment located in the Cupertino Ice Center was observed to have oil staining and a spill (approximately 1 to 2 gallons) of oily water on the concrete floor slab. Cornerstone did not find it to be likely that the noted staining and spill would have significantly impacted underlying soil quality; however, to ensure underlying soil in this area is not impacted, the area will be surveyed as described below.

During excavation of the soil in these potential areas of concern (Figure 8), an Environmental Professional will be present to observe underlying soil for evidence of potential impacts and, if observed, collect soil samples in accordance with Section 3.4. The Environmental Professional will also walk the potential areas of concern on a 25-foot grid as follows:

Soil samples will be screened in the field for the presence of VOCs using the following screening method:

- at a minimum, a representative soil sample will be collected from points on a 25 foot grid of the area and placed into an unused re-sealable plastic bag with a minimum volume of one quart, until the container is approximately one-half full;
- the plastic bag will be sealed and the soil within it will be crumbled by hand, if possible, to expose fresh surfaces;
- after at least 2 minutes, the plastic bag will be opened just enough to allow the probe of the organic vapor meter ("OVM") to be inserted into the headspace of the plastic bag;

if the OM reading exceeds the 25 parts per million by volume ("ppmv") continuously for 10 seconds or more, the soil will be considered "potentially contaminated with volatile chemicals." Then the procedures identified in Section 3.4 will be followed.

3.3 PCB INVESTIGATION

As noted in Section 2.3.3, a single sample from Geosphere boring E-5 one foot below ground surface (sample E5-1) contained PCBs at 523 µg/kg, above the RSL, and is considered a potential area of concern. WSP located boring E-5 from surface evidence and markings and recorded its location using GPS. During redevelopment excavation activities, the soil in area surrounding the sample E5-1 will be addressed separately from the mass excavation; soil surrounding and area of sample E5-1 will be addressed as described below.

Additional step-out sampling for PCBs will be performed in the area of boring E-5 where PCBs were detected in soil at a concentration exceeding the RSL. This sampling will be performed prior to pavement removal or excavation in the area to ensure that appropriate health and safety

measures (e.g., appropriately trained workers) and appropriate soil management protocols (e.g., decontamination and air monitoring as necessary based on PCBs concentrations) are performed during soil disturbing activities in the area of boring E-5.

Thus, before any excavation occurs, the following sequence will occur:

- A workplan for additional pre-excavation step-out sampling for PCBs in the area of boring E-5 will be prepared for review and approval by the City prior to issuing any demolition permits issued for the C-1 Area (Figure 4). All soil samples will be analyzed for PCBs using EPA Method 8082A.
- The results of the PCBs sampling will be provided to the City for review, with assistance from a qualified third-party consultant, prior to issuance of a permit that allows soil disturbance in the area of boring E-5.
- If the additional sampling finds PCB levels that exceed residential screening levels, the City will be notified and a determination will be made as to whether regulatory agency oversight is required.
- If the PCBs levels in the additional samples are below residential screening levels, regulatory oversight would not be necessary, and removal of PCBs impacted soil in the vicinity of boring E-5 should be performed as described below.

An excavation workplan will be prepared following the sampling described above. The limits of excavation for removal of PCBs-impacted soil in the vicinity of boring E-5 as described above will be refined based on the findings from the additional PCBs sampling (e.g., the excavation boundary will extend to the locations of step-out samples where PCBs are below residential screening levels) and the step-out samples can serve as confirmation samples for the excavation of PCBs impacted soil.

All excavated soils will be segregated from other soil from the Site, stockpiled, and characterized for disposal at a properly licensed disposal facility.

3.4 MANAGING STAINED OR ODOROUS SOIL

If impacted soils are observed or encountered (visual staining, odor, etc.) during excavation (considered unlikely), the Contractor shall promptly notify Vallco and the Vallco representative. To protect worker health and safety and to ensure accurate results, the Vallco representative shall conduct observations and, as necessary, conduct monitoring/sampling of the suspect media. Initial identification of hazardous substances will be performed by the Vallco representative based on visual olfactory observations, or monitoring with a photoionization detector (PID).

A Vapor Encroachment Assessment was performed and is detailed in the Site Characterization Report (SCR). The Assessment identified two potential onsite sources of VOCs: the Sears Automotive Center and the J.C. Penney Automotive Center, the two areas of most concern on the Site that will be specifically addressed by Closure Plans submitted to the SCCFD. Although these locations are unlikely to pose potential vapor concerns, we have outlined measures to apply in the event that unexpected VOCs are identified.

If newly found soil impacts are discovered during demolition, Site development activities, or during the screening of the potential areas of concern, the following actions shall be taken:

- 1 Initial Discovery :** Prior to any activity by the Contractor in the immediate vicinity, the Vallco representative shall make an initial determination within the field using visual and olfactory observations and PID equipment. Upon the confirmation by the Vallco representative of the discovery of newly found soil impacts, operations within the immediate area shall cease and the Contractor should secure the area using suitable barriers (i.e., caution tape, construction fencing,, etc).
- 2 Evaluation :** If observations and field tests indicate impacted soil, the Vallco representative shall notify Vallco of the initial discovery of newly found soil impacts. Samples will be collected for laboratory analysis and any earthwork operations will remain suspended in the area of suspected impacted soil pending review of the laboratory analytical results. Soil samples will be analyzed for the following constituents :
 - TPH-g, TPH-d and TPH-mo using EPA Method 8015M;
 - VOCs using EPA Methods 5035 and 8260;
 - PCBs using EPA Method 8082A
 - Cadmium, chromium, lead, nickel, and zinc by EPA Method 6020; and
 - Moisture content to allow for conversion to dry weight for comparison to screening criteria.

The list of analytes should be modified accordingly if conditions or historical use in a given area indicate that other laboratory analyses would be appropriate.

- 3 Data Review :** Excavation is being performed to a depth of more than 20 feet bgs across the site. If chemical concentrations are identified above residential ESLs or RSLs within approximately three feet of any excavation bottom or sidewall as part of the waste profiling process or through investigation based on observation or odor, then, following completion of the excavation, Vallco will perform confirmation sampling to document removal of impacted soil to confirm that remaining soils meet unrestricted I and use criteria (RWQCB's ESLs for residential land use or DTSC RSLs). Confirmation soil samples will be collected in a 25 foot x 25 foot grid over the identified impacted area. Analyses will be limited to those compounds that exceeded residential ESLs or RSLs in the evaluation sample. If final confirmation sampling identifies chemical concentrations above residential ESLs or RSLs in either the excavation bottom or sidewalls, then Vallco will notify the City and an appropriate regulatory agency, such as the Santa Clara County Department of Environmental Health (SCCDEH), DTSC, EPA, or the RWQCB. In addition, documentation of the sampling, sampling results, and copies of the ESMP completion report will be submitted to the City and any such agency that becomes involved with the project. Excavated soil that is impacted will be stockpiled separately from unimpacted soil. Excavated impacted soil will be characterized and disposed of appropriately and separately from unimpacted soil.
- 4 Automotive Centers :** For activities within the Automotive Centers, Under consultation, approval, and oversight by the SCCFD, confirmation samples will be collected to document removal of impacted soil to confirm that remaining soils meet unrestricted land use criteria (RSLs and ESLs for residential land use). For excavations that are 625 square feet or smaller (e.g., 25 feet by 25 feet), then a total of five

confirmation samples will be collected : 1 per sidewall and 1 per bottom. For larger excavations, confirmation soil samples will be collected at lateral and vertical intervals approved by the SCCFD (including bottom and sidewalls of the excavation) and analyses will be limited to only those compounds that exceeded residential ESLs and RSLs in the evaluation sample.

Excavation activities can resume as normal once the impacted soil has been removed and segregated.

3.5 PROTOCOLS FOR MANAGING SUBSURFACE STRUCTURES

As noted in Section 3.2, subsurface piping and components remain in the ground at the former Sears and J.C. Penney Automotive Centers. A closure plan for the former Sears Automotive Center has been submitted to and approved by the SCCFD (WSP, 25 March 2019) and a similar closure plan will be submitted for the former J.C. Penney Automotive Center and will also include the entire eastern portion of the Mall (including the Cupertino Ice Center). The closure plans include (or will include) details concerning soil sampling and specific analyses in general and specifically beneath and along underground piping paths to determine if there were any significant releases. In addition, a Vallco representative will be present during excavation activities in these two areas to ensure remaining subsurface equipment is properly removed and to observe underlying soil for evidence of potential impacts. Additionally, the four groundwater monitoring wells located at the J.C. Penney Automotive Center will be abandoned in accordance with the SCVWD well standards. A permit will be obtained from the SCVWD prior to the abandonment. A 750-gallon UST was abandoned in place at the J.C. Penney Automotive Center. Proper removal of this UST will be documented in the associated closure plan and coordinated in conjunction with the SCCDEH.

Although evidence suggests it is highly unlikely, special consideration is necessary if any unknown USTs are encountered. The removal of USTs is regulated by the SCCFD. The investigation and remediation of UST releases is regulated by SCCDEH, with oversight from the RWQCB. The Contractor shall immediately notify Vallco upon discovering any UST at the property. Removal and sampling of the UST will be performed in accordance with permit requirements from the SCCFD.

If a non-UST below-grade structure that could have contained chemicals of concern is encountered during earthwork, the structure and associated piping or other appurtenances will be removed in accordance with applicable laws and regulations. Any stained and odorous soil will be sampled and managed in accordance the procedures described in Section 3.4.

3.6 MANAGING EXCAVATED SOIL

The excavated soil will be disposed of off-site. No soil will be reused onsite. Soil disposal arrangements will be managed by the General Contractor. Soil waste profile applications will be submitted to potential receiving facilities once the excavation contractor has determined which are to be considered for use. The waste profile applications will be prepared by Vallco and include submittal of all data produced at the site and clarification as to which areas are being evaluated for acceptance by the receiving facilities.

3.6.1 DISPOSAL CHARACTERIZATION SAMPLING

Based on existing soil analytical results, discussed in detail in the Site Characterization Report (Appendix A), excavated soil is expected to meet compliance with the RSLs and ESLs. Additional profiling for off-site disposal of excavated soil will be handled in accordance with the receiving facility.

3.6.2 SOIL DISPOSAL

Any characterized “pre-existing” hazardous/impacted soil will be hauled offsite to the appropriate receiving facility and manifested with Vallco identified as the generator. The receiving facilities will be reviewed and approved by Vallco.

3.7 IMPORT SOIL

The only import soil anticipated at the site is topsoil and base rock. The contractor will be responsible to conform with DTSC’s Information Advisory, Clean Imported Fill Material, October 2001 for screening of imported topsoil, base rock, and other material.

4 REPORTING REQUIREMENTS

A closure implementation report will be generated with the closure of the former Sears and J.C. Penney Automotive centers and submitted to the SCCFD, with a courtesy copy provided to the City. The soil screening performed at the former Sears and J.C. Penney Automotive centers will also be documented in an ESMP completion report and submitted to the SCCFD, with a copy to the City. If impacted soils are uncovered during excavation activities, the analysis and subsequent disposal of the impacted soil will be documented in the ESMP completion report.

ACRONYMS

µg/l	micrograms per liter
EPA	Environmental Protection Agency
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
ESMP	Environmental Site Management Plan
ft-bgs	Feet below ground surface
GPR	Ground Penetrating Radar
LUST	leaking underground storage tank
MDL	method detection limit
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated Biphenyl
PID	Photoionization detector
QA/QC	quality assurance/quality control
REC	Recognized Environmental Condition
RL	reporting limit
RSL	Regional Screening Level
RWQCB	San Francisco Bay Regional Water Quality Control Board
SCCDEH	Santa Clara County Department of Environmental Health
SCCFD	Santa Clara County Fire Department
SCVWD	Santa Clara Valley Water District
SVOCs	semi-volatile organic compounds
TCDD	Tetrachlorodibenzodioxin
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-mo	total petroleum hydrocarbons as motor oil
USCS	Unified Soil Classification System
UST	underground storage tank
WSP	WSP USA, Inc.

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- Cornerstone Earth Group. 2018. Phase I Environmental Site Assessment, Vallco Special Area Specific Plan Parcels, Cupertino, California. February 26.
- Duverge. 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. December.
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- Santa Clara Valley Water District. 1994. Underground Storage Tank (UST) Case Closure – J.C. Penney Store No., 10150 North Wolfe Road, Cupertino, CA 95014; Case No. 27H. September 1.
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- WSP. 2014. Phase I Environmental Site Assessment, Vallco Fashion Mall, 10123 North Wolfe Road, Cupertino, California. January 7.
- WSP. 2016. Updated Information to the January 7, 2014 Phase I Environmental Site Assessment, Vallco Fashion Mall in Cupertino, California. January 11.

FIGURES

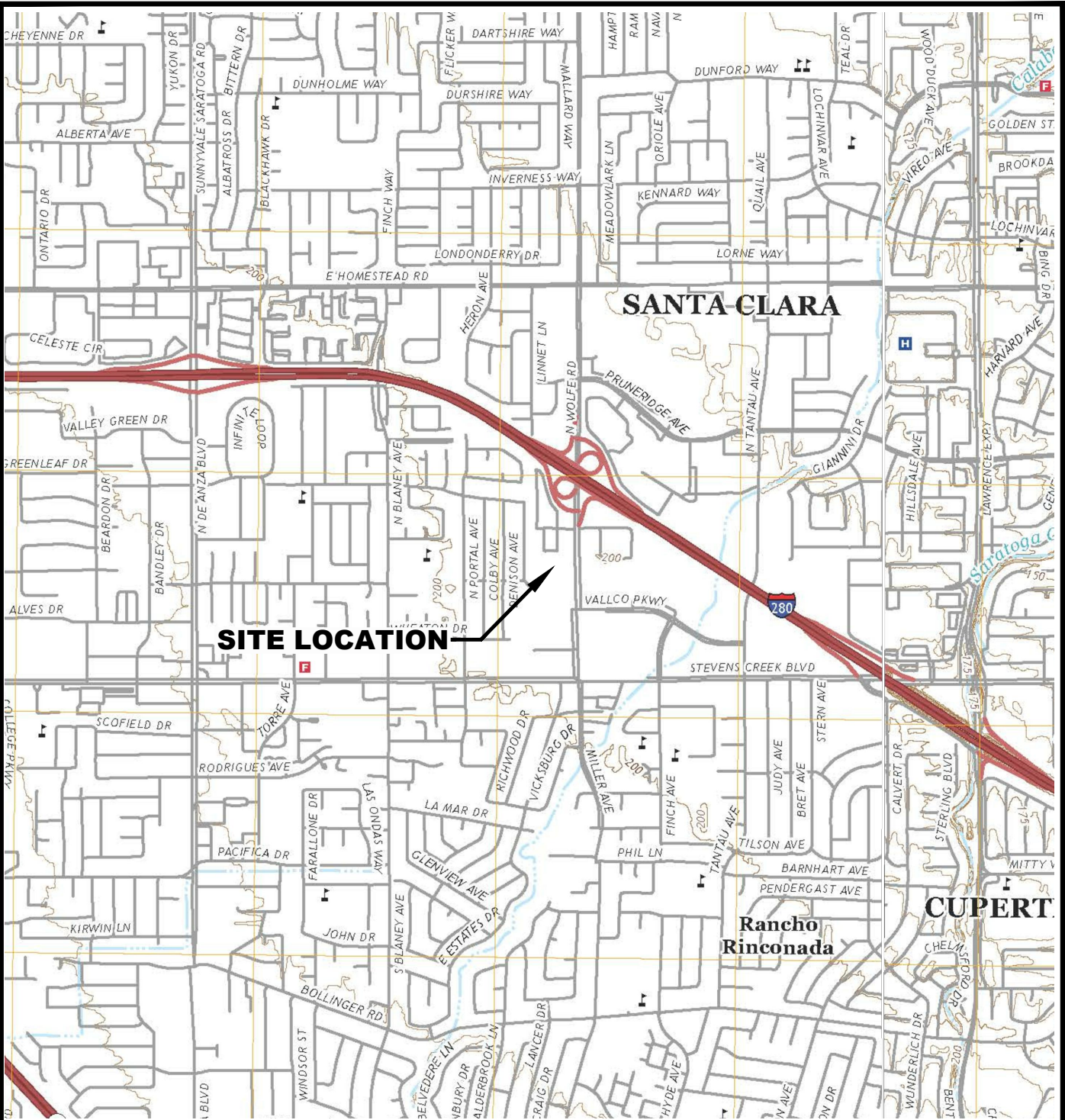
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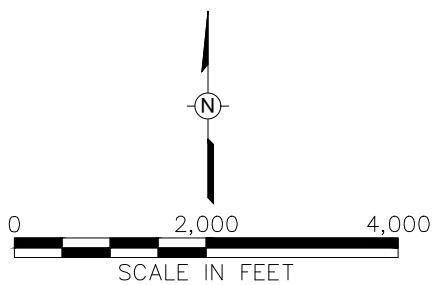
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REFERENCE
 7.5 MINUTE SERIES TOPOGRAPHIC QUADRANGLE
 CUPERTINO, CALIFORNIA
 2018
 SAN JOSE WEST, CALIFORNIA
 2018



QUADRANGLE LOCATION



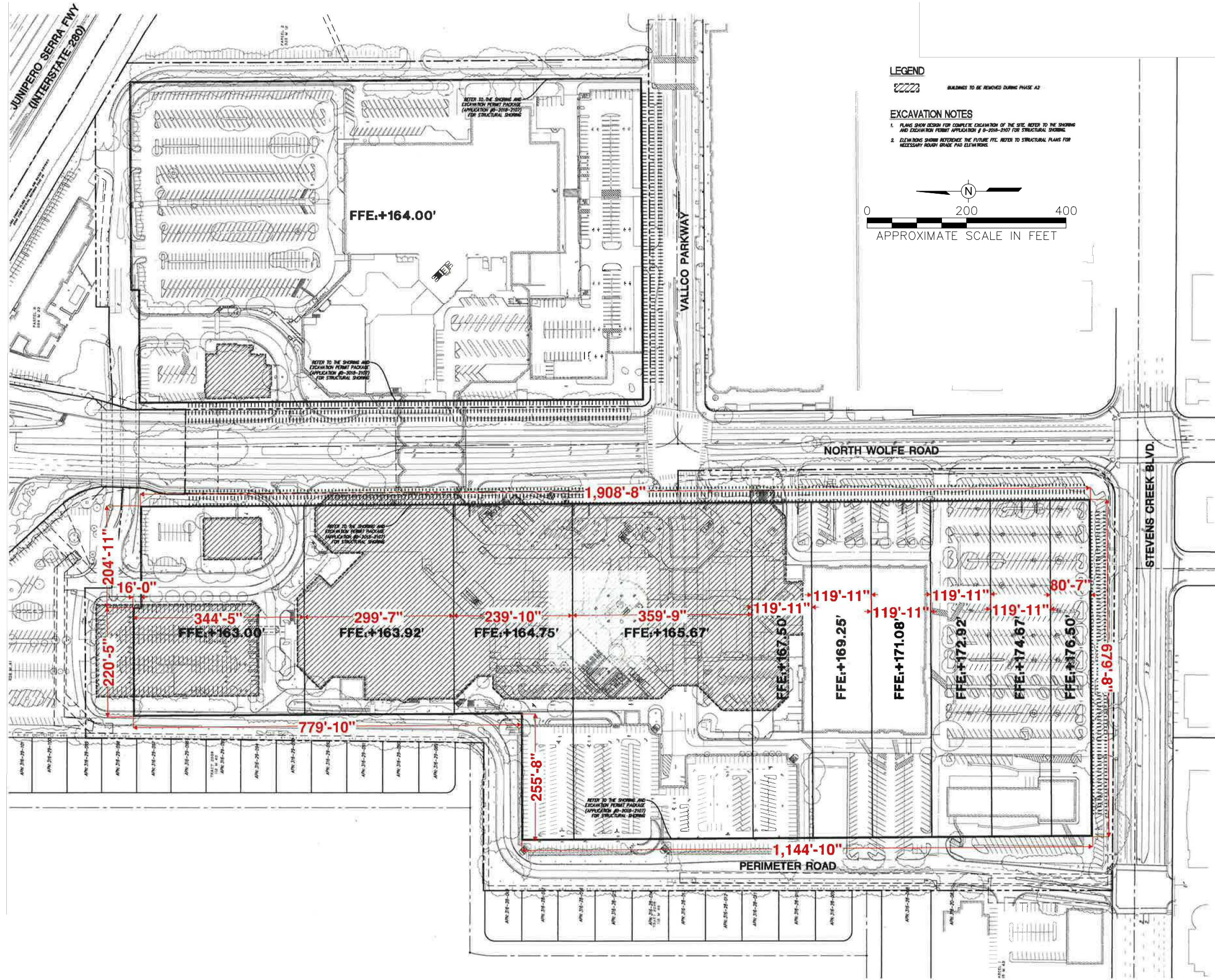
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Figure 1
 SITE LOCATION MAP

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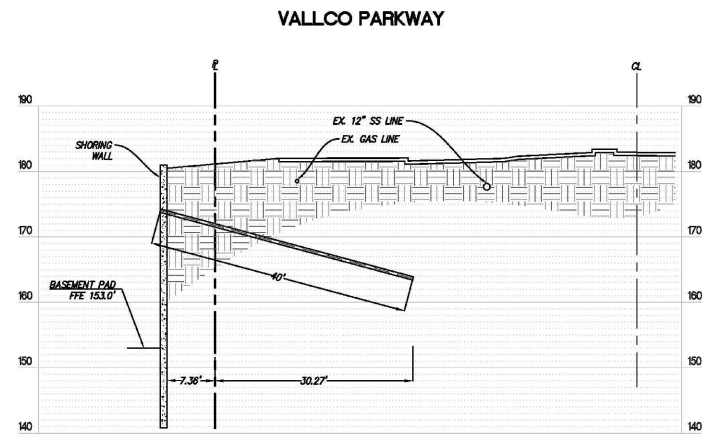
Figure 2
 REDEVELOPMENT ECAVATION AREAS

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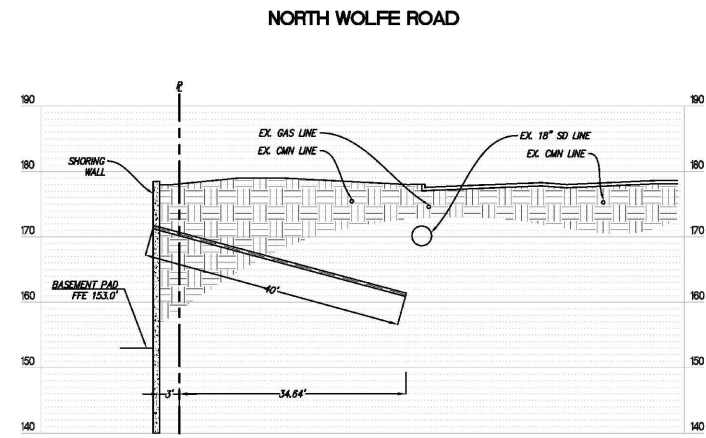
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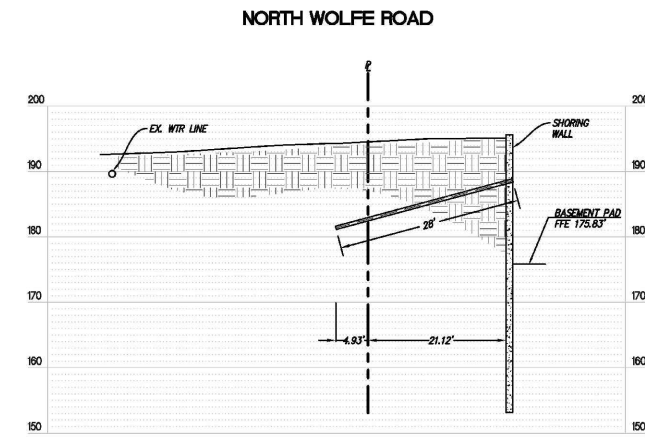
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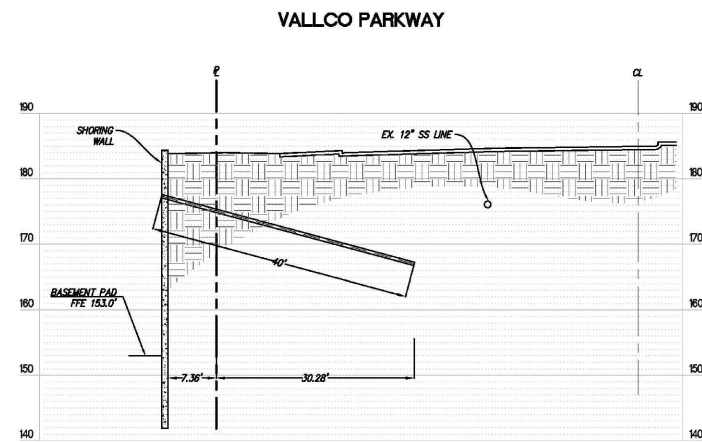
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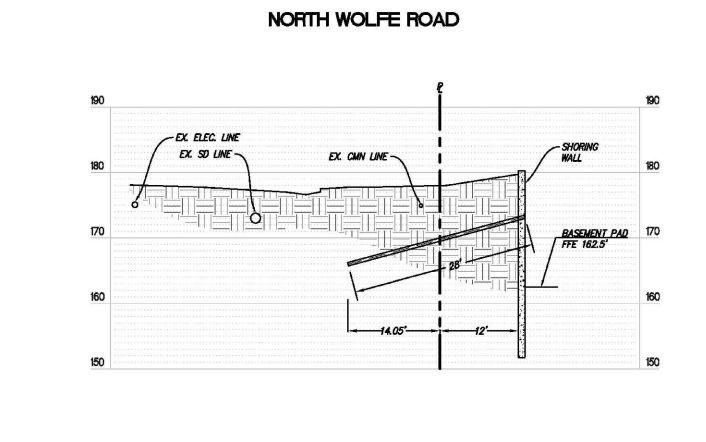
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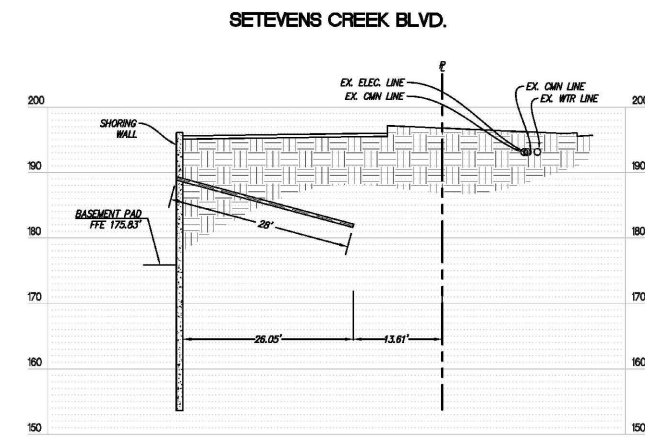
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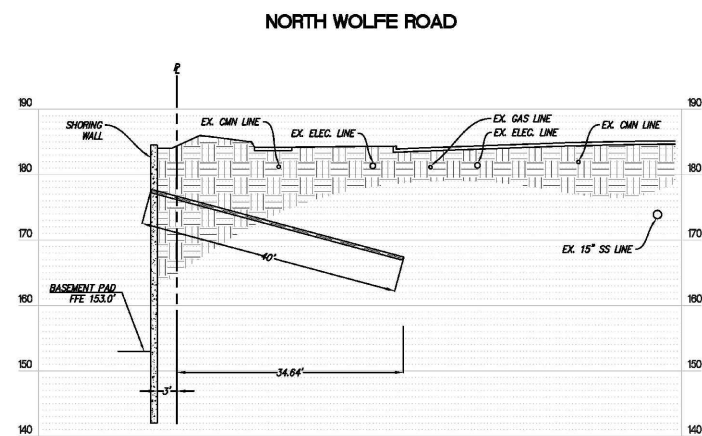
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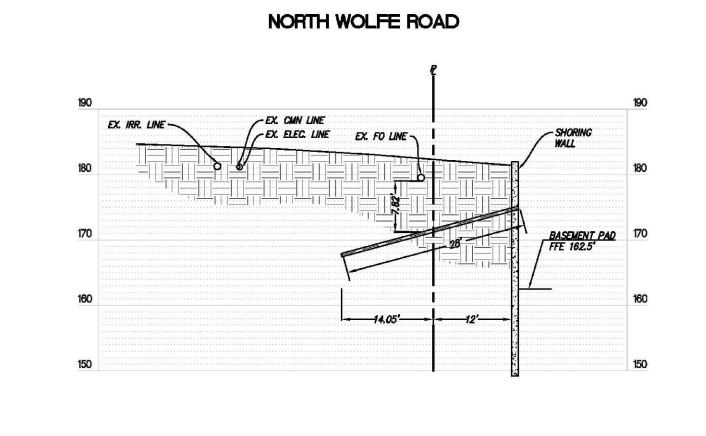
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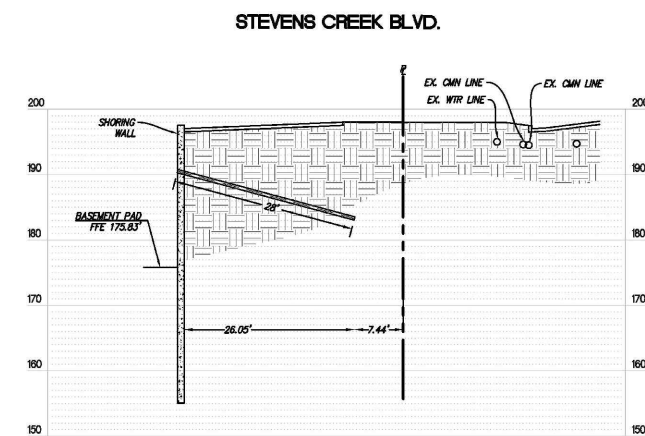
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SECTION 3



SECTION 6



SECTION 9

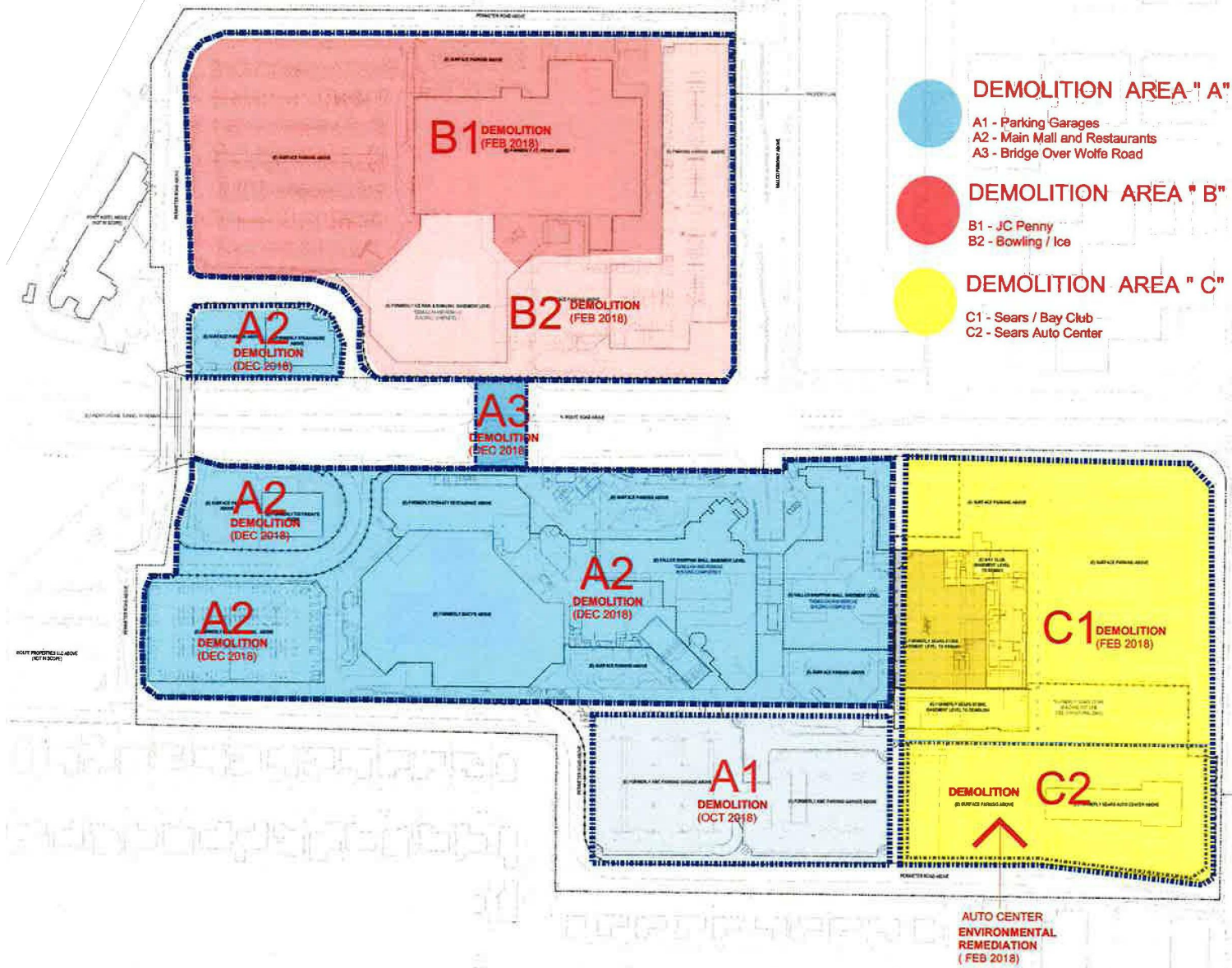
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Figure 3
 EXCAVATION CROSS SECTIONS
 FOR MALL REDEVELOPMENT

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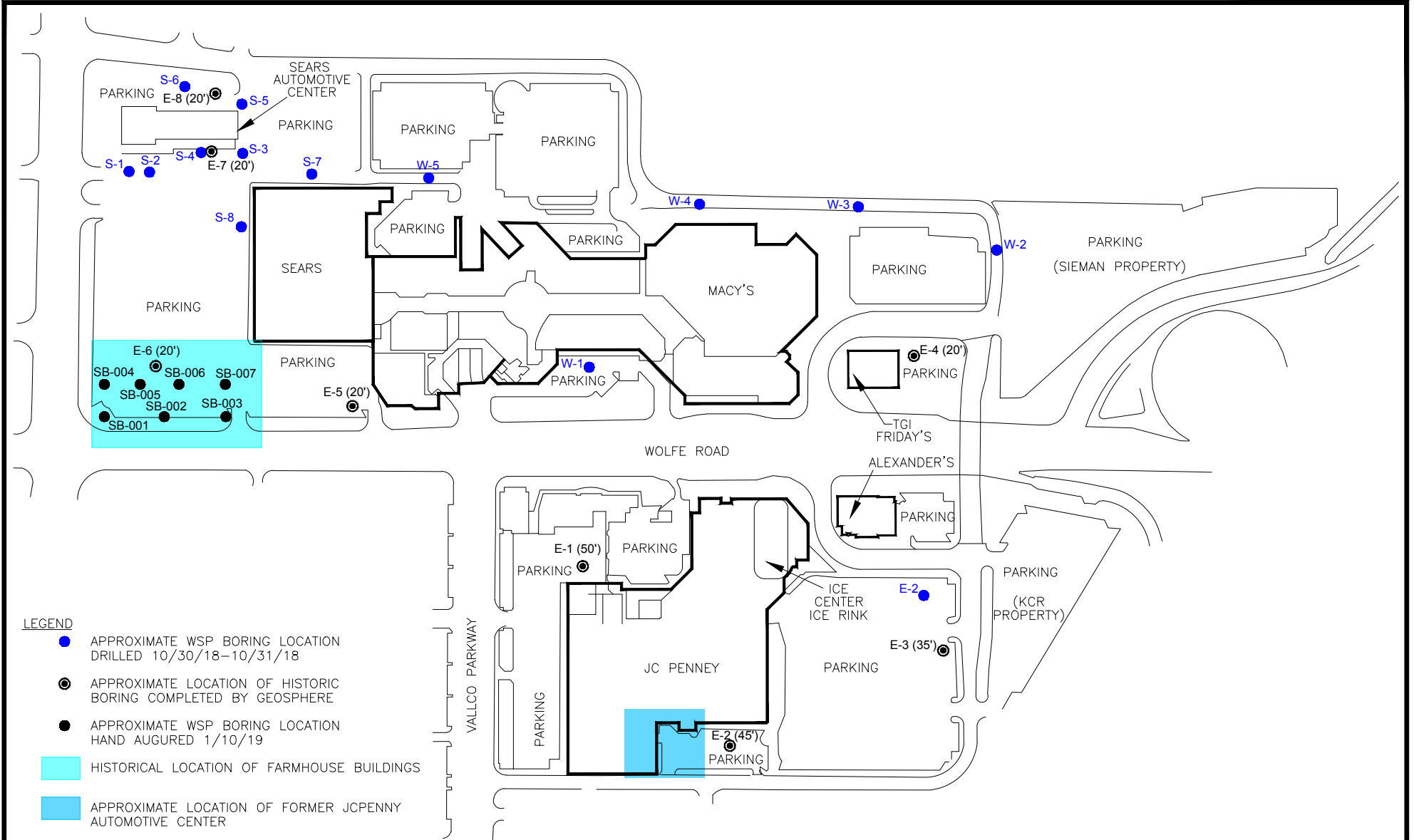
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Figure 4

DEMOLITION PHASING

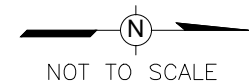
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- LEGEND**
- APPROXIMATE WSP BORING LOCATION DRILLED 10/30/18-10/31/18
 - ⊙ APPROXIMATE LOCATION OF HISTORIC BORING COMPLETED BY GEOSPHERE
 - APPROXIMATE WSP BORING LOCATION HAND AUGURED 1/10/19
 - HISTORICAL LOCATION OF FARMHOUSE BUILDINGS
 - APPROXIMATE LOCATION OF FORMER JCPENNY AUTOMOTIVE CENTER

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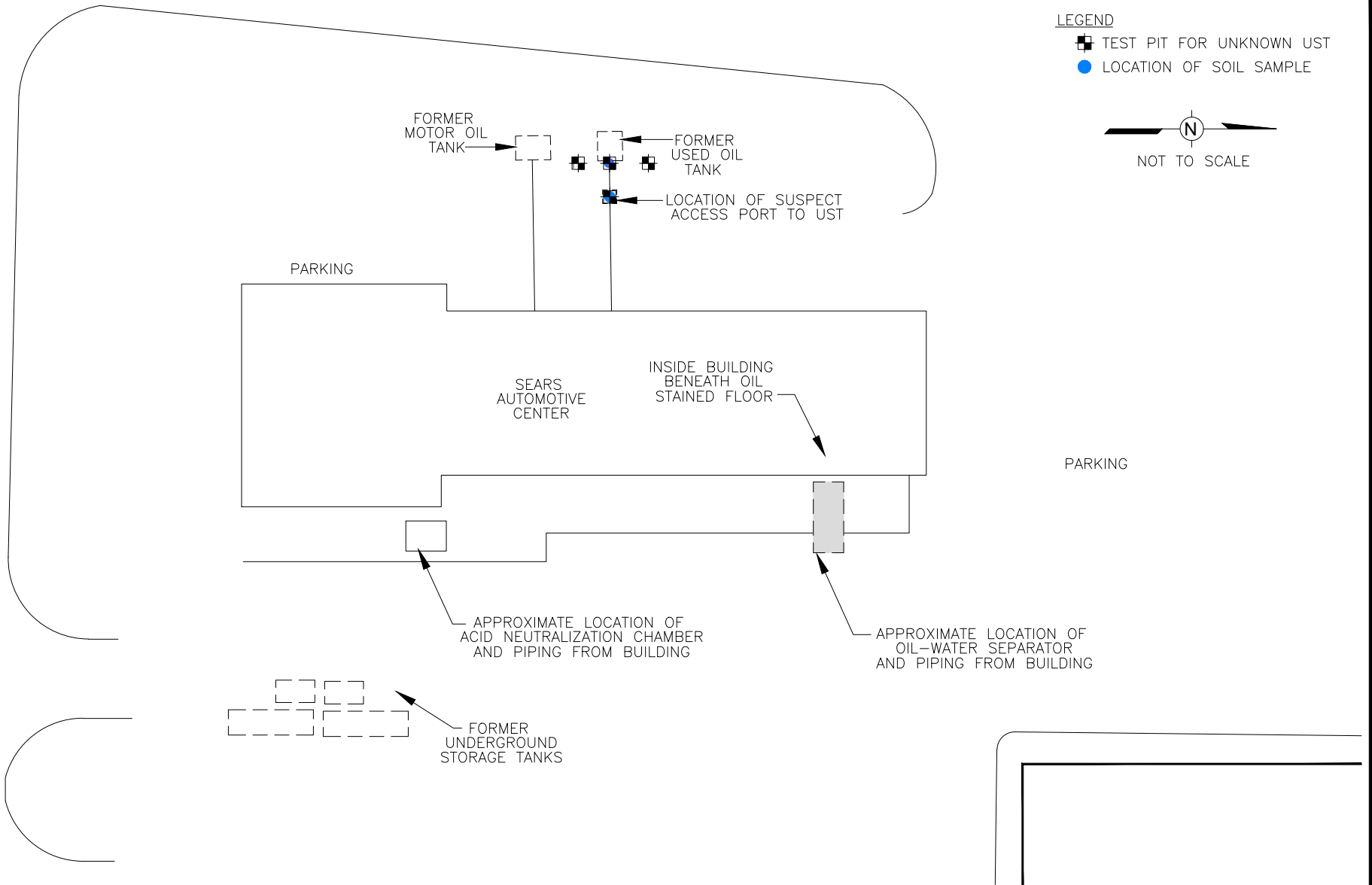


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Figure 5
SITE LAYOUT AND
APPROXIMATE SOIL BORING LOCATIONS

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Figure 6

APPROXIMATE TEST PIT LOCATIONS—
SEARS AUTOMOTIVE CENTER

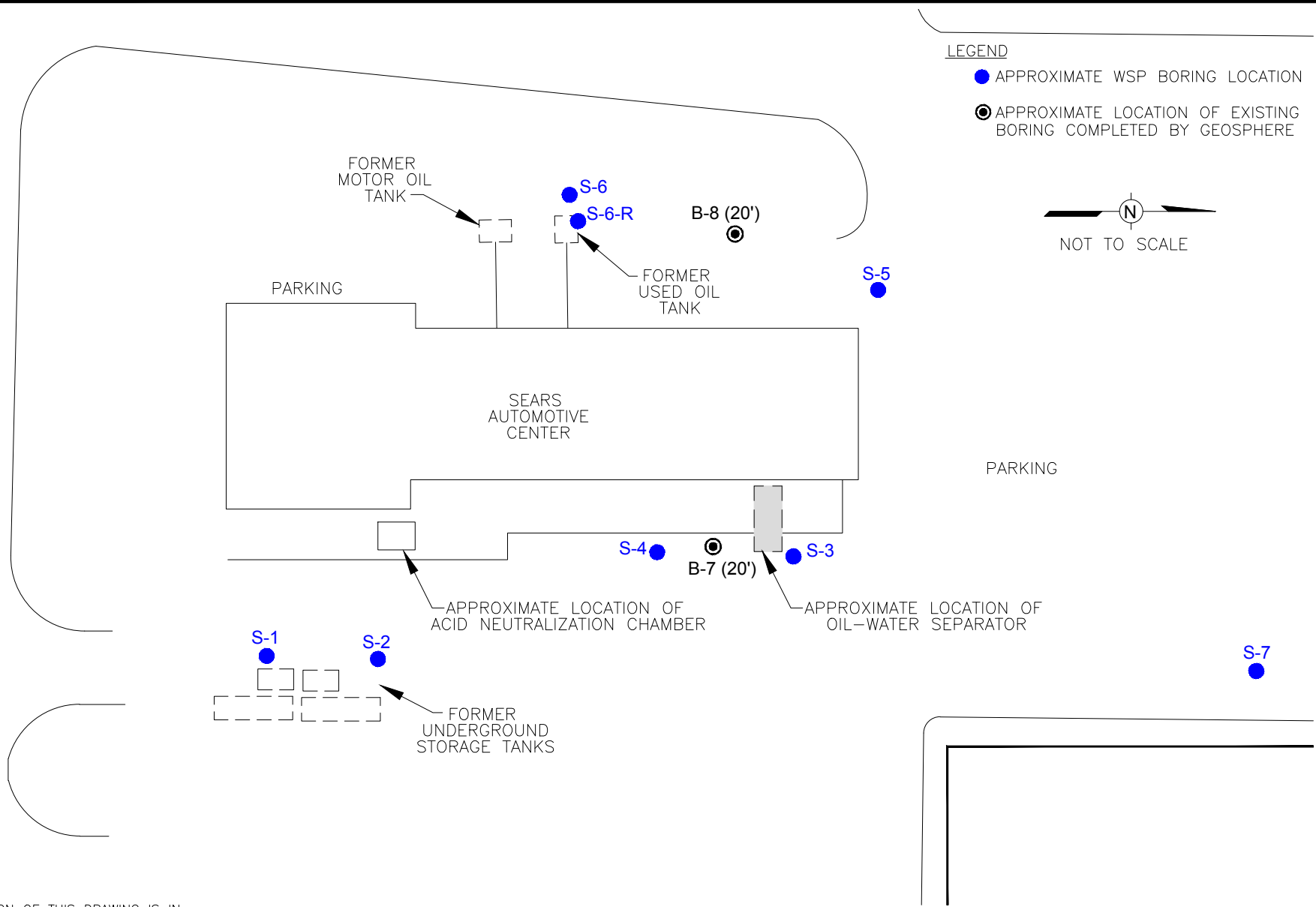
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Figure 7

APPROXIMATE BORING LOCATION – SEARS AUTOMOTIVE CENTER

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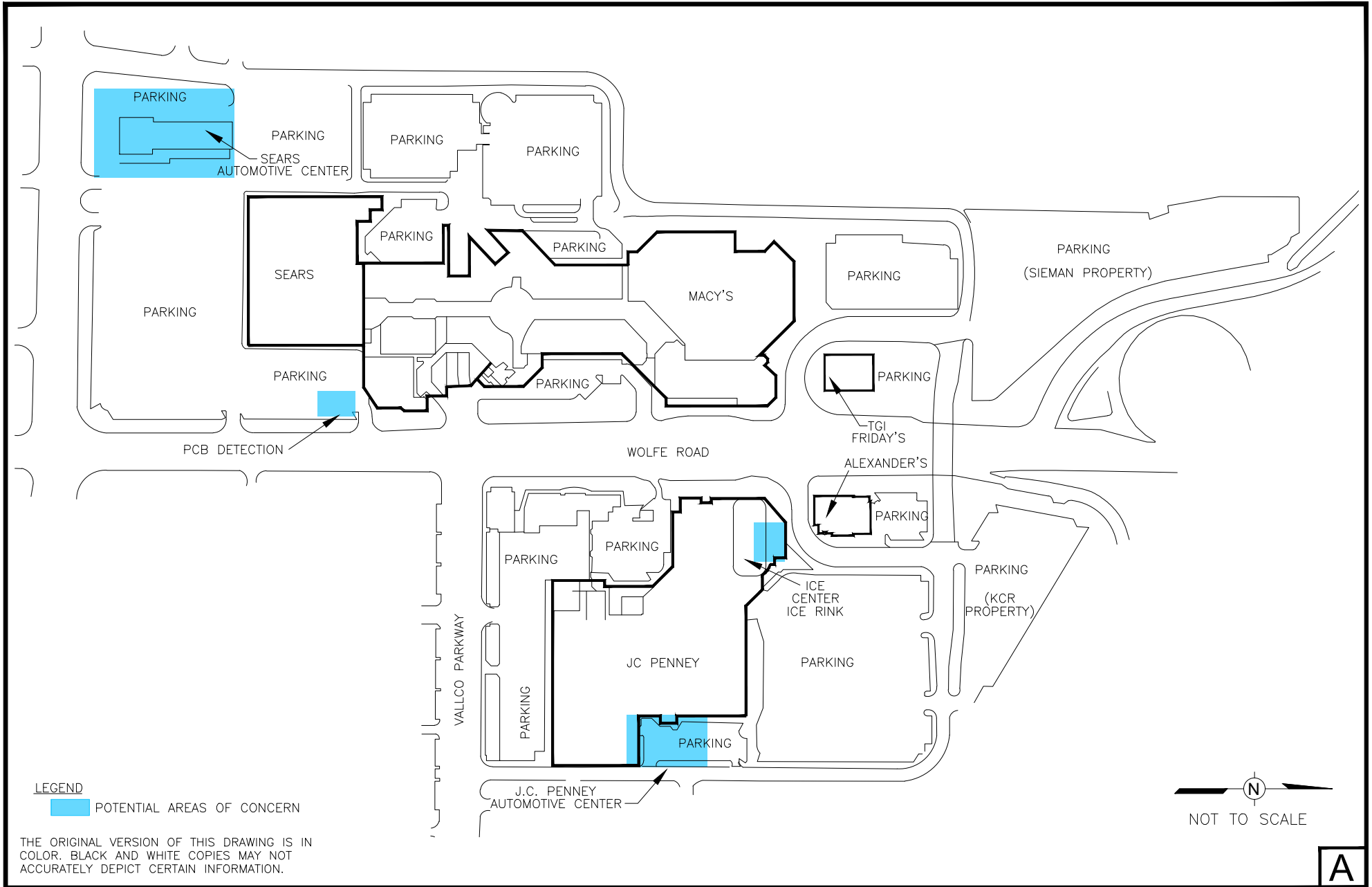


Figure 8

POTENTIAL AREAS OF CONCERN



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APPENDIX

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SITE
CHARACTERIZATION
REPORT



SITE CHARACTERIZATION REPORT

**FORMER VALLCO
SHOPPING MALL
10123 NORTH WOLFE ROAD,
CUPERTINO, CALIFORNIA**

VALLCO PROPERTY OWNER LLC
965 PAGE MILL ROAD
PALO ALTO, CALIFORNIA 94304

APRIL 2019
REVISED JULY 2019

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WSP.com

WSP CERTIFICATION

WSP certifies that this document was prepared in general accordance with ASTM E1903-11: Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (the “Practice”) in that the User of this Report, Vallco Property Owner LLC (Vallco), and WSP defined the scope and objectives of the investigations documented herein in light of relevant factors, including “without limitation the substances released or possibly released at the property, the nature of the concerns presented by their presence or likely presence, the portion of the property to be investigated, the information already available, the degree of confidence needed or desired in the results, the degree of investigatory sampling and chemical testing needed to achieve such confidence, and any applicable time and resource constraints.” Further, the objectives of the User were essentially those defined in Sections 1.2.1 through 1.2.4. in the Practice (Objectives 1 through Objective 4). Generally, the Significance and Use of the Practice involved a Scope of Work directed at evaluating environmental conditions at the Site to determine if conditions are consistent with the planned mixed commercial/residential use of the Site (Sections 4 and 5 of the Practice). In planning and carrying out the investigations, interpreting the results, and preparing this Site Characterization Report, WSP generally followed Sections 6, 7, 8, and 9 of the Practice and the Example Table of Contents for Phase II ESA Report—Option B Format.



Richard E. Freudenberger
Executive Vice President



Allen J. Waldman, P.G.
Technical Manager

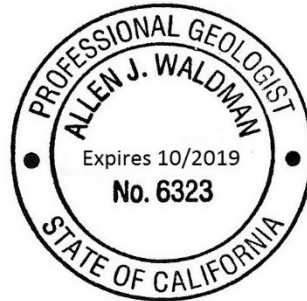




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EXECUTIVE SUMMARY

On behalf of Vallco Property Owner LLC (Vallco), WSP has prepared this Site Characterization Report (Report) for the former Vallco Shopping Mall property located at 10123 North Wolfe Road in Cupertino, California (Site). This Report evaluates environmental conditions at the Site to determine if conditions are consistent with the planned mixed commercial/residential use of the Site.

In summary, based on the existing data for the Site, and subject to Vallco's compliance with County-approved closure plans during site demolition (discussed below), environmental conditions at the Site are fully consistent with the planned commercial/residential reuse of the Site and no areas of concern were identified that would warrant further investigation or remedial action.

Previously Identified Environmental Conditions:

The primary areas on the Site that were previously identified in the Phase I Environmental Site Assessment (ESA) reports to contain Recognized Environmental Conditions (RECs) or potential environmental concerns are the following:

- **Former Sears Automotive Center:**

REC 1 - The potential that a 1,000-gallon waste oil underground storage tank (UST) may be present on the west side of the Sears Center building.

REC 2 - The presence of an oil-water separator and acid neutralization chamber on the east side of the Sears Center building.

REC 3 - Vehicle lift components remain in the ground within the northern portions of the Sears Center.

REC 4 - In 1986, Sears arranged for the removal of a 500-gallon UST, but no details regarding this UST were identified.

- **Historical Agricultural Use:**

REC 5 - There is a potential that residual pesticides from agricultural practices could remain in Site soil. If present, this soil may require appropriate management.

REC 6 - Soil adjacent to historical farmhouse buildings may have been impacted with lead-containing paint or pesticides. There is a potential that residual lead and pesticide concentrations could remain in On-Site soil near these structures.

- **Former J.C. Penney Automotive Facility:** The four historical groundwater monitoring wells are no longer in use and will need to be properly destroyed.

- **East and West Mall Buildings:** The Mall contained elevators, emergency generators, mechanical equipment, trash compactors, maintenance storage areas, and chemical storage areas consistent with typical Mall operations.

Resolution of RECs 1, 4, 5 and 6:

To address RECs 1,4,5 and 6 noted above, three phases of soil investigation (2016, 2018, and 2019), a ground penetrating radar (GPR) survey, and a test pit investigation were performed (2019). A total of 87 soil samples were analyzed from 29 borings taken at various depths across the Site. No metals (except

cobalt and arsenic), total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), or herbicides and pesticides (except dieldrin) were detected in any of the samples at concentrations that exceeded the Department of Toxic Substances Control (DTSC) Modified Screening Levels and EPA Residential Screening Levels (for those constituents which lack DTSC Modified Screening Levels) residential screening levels (RSLs), both dated April 2019. For dieldrin, the 95% upper confidence level of the mean dieldrin concentration was below the RSLs. The detection of cobalt at the concentration of the RSL is isolated to only one sample of the 102 collected, indicating there is no evidence to suggest the widespread presence of cobalt at the Site above applicable screening levels. Arsenic was found to exceed residential and construction worker screening levels in many samples. However, none of the arsenic concentrations in soil samples collected during the investigation of the Site exceeded the regional background level of 11 mg/kg for arsenic as determined by the RWQCB (Duvergé, December 2011)

A total of 32 samples collected from eight borings were analyzed for polychlorinated biphenyls (PCBs). Of the 32 samples, only two samples contained PCBs, and only one (E5-1), at 0.523 mg/kg, above the DTSC RSLs for PCBs of 0.24 mg/kg. The PCB concentration in sample E5-1, however, is less than the most conservative High Occupancy Cleanup Level of 1,000 µg/kg established in the Toxic Substances Control Act (TSCA; 40 CFR 761.61). Since 30 of 32 samples collected did not contain detectable levels of PCBs and only one sample exceeded the residential RSL, there is no evidence to suggest the widespread presence of PCBs at the Site. The noted lone detection of PCBs above the RSL has been identified and that area, along with the surrounding area, will be segregated, further characterized, and removed during redevelopment excavation activities. Details of the approach for the elevated PCB area are included in the environmental site management plan (ESMP) and described within Section 4.1 of this Report.

Overall, other than the single PCB detection described above, the data do not indicate any significant impacts to soil at the Site. More specifically, Site soils are not impacted by pesticides, arsenic, or lead from past agricultural operations at the Site, thereby addressing RECs 5 and 6.

To address the possibility that any USTs remain onsite, as noted in RECs 1 and 4, WSP performed a geophysical GPR survey on January 25, 2019 at and around the Sears Center. The survey showed no evidence of any underground tanks on the west or east sides of the Sears automotive building. Additionally, test pits were advanced on March 25, 2019 around a concrete box that was suspected to be an access port to a former UST without closure documentation. No UST was found. Together, the geophysical survey and test pits confirm that no USTs remain in the Sears Center and resolve RECs 1 and 4.

Resolution of RECs 2 and 3, and Remaining Potential Environmental Concerns:

The remaining potential environmental concerns, including RECs 2 and 3, are most efficiently addressed as part of the demolition of existing structures and redevelopment activities and will be addressed at that time. Each is discussed below and will be specifically addressed during the referenced demolition and development activities.

- **SCCFD Closure Plans**

The Santa Clara County Fire Department (SCCFD) requires implementation of an approved closure plan for the Sears Automotive Center and J.C. Penney Automotive Facility. A closure plan for the Sears Automotive Center was submitted to the SCCFD on March 25, 2019 and approved on April

11, 2019. The approved closure plan specifically address RECs 2 and 3, relating to the remaining presence of an oil-water separator, acid neutralization chamber, hydraulic lifts, and associated piping. The approved closure plan likewise addresses any risks associated with residual building materials, including the battery storage area.

A closure plan for the Western portion of the mall was approved and implemented in November-December, 2018. The closure activities addressed, among other things, removal of one of the three generators within the mall and decommissioning of all the elevators in the West side of the mall. With respect to the hydraulic fluids within the former elevators. KONE Inc., the elevator manufacturer issued a letter dated June 20, 2019 that states that KONE has not used hydraulic fluids within their elevators that contain volatile organic compounds (VOCs) or polychlorinated biphenyls (PCBs). The SCCFD approved a Closure Letter report by their letter dated December 12, 2018.

In addition to the closure plans for the two previous automotive centers, the two remaining emergency generators and the remaining elevators located in the Eastern portion of the Mall will be closed under a closure plan prepared for and approved by the SCCFD, resolving these potential environmental concerns.

Lastly, the planned development will require excavation of soil to depths of 20 to 30 feet below ground surface (ft-bgs) across most of the Site. If any residual stained soil or potential contamination is identified during demolition and redevelopment, such soil will be excavated and disposed of at a permitted, off-site disposal facility.

- Abandonment of Groundwater Monitoring Wells

The four groundwater monitoring wells located on the J.C. Penney premises will be located and abandoned under a permit from the Santa Clara Valley Water District (SCVWD).

- Building Demolition

Before conducting any renovation or demolition activities that might disturb potential asbestos, light fixtures, or painted surfaces, Vallco will ensure that it complies with all requirements for management and abatement of asbestos-containing materials, proper handling and disposal of fluorescent and mercury vapor light fixtures, building materials containing PCBs, and with all applicable requirements regarding lead-based paint.

1 INTRODUCTION

On behalf of Vallco, WSP has prepared this Site Characterization Report for the former Vallco Shopping Mall property located at 10123 North Wolfe Road in Cupertino, California (Site). This Report evaluates environmental conditions at the Site to determine if conditions are consistent with the planned mixed commercial/residential use of the Site.

1.1 PURPOSE

This Report evaluates environmental conditions at the Site to determine if conditions are consistent with the planned mixed commercial/residential use of the Site. The Report considers and specifically addresses each of the RECs identified in prior Phase I Environmental Site Assessments (Phase I ESAs) prepared for the Site, including the Phase I ESA prepared by WSP in 2014 and updated in 2016 (WSP 2014 and 2016, respectively), and the Phase I ESA prepared by Cornerstone Earth Group in 2018 (Cornerstone, 2018), and presents data obtained by WSP during soil and related investigations performed in 2018 and 2019.

The Report includes the following:

- A description of the site use history and planned development,
- Presentation and evaluation of results from soil investigations conducted by Geosphere Consultants, Inc. (Geosphere) (2016) and WSP (2018 and 2019), and
- Analyses of existing data, including recent testing performed by WSP, to address the RECs and potential open issues identified in the existing Phase I ESAs.

2 BACKGROUND

2.1 SITE DESCRIPTION AND PREVIOUS USE

The Site is located at 10123 North Wolfe Road in Cupertino, California (Figure 1). The Site is owned by Vallco and is approximately 50 acres that is occupied by the mostly vacant Vallco Shopping Mall (the Mall). The Mall consists of one irregularly shaped two-story, steel- framed building (connected by bridge across Wolfe Road) and two small detached buildings. The two-story building is part of the enclosed former shopping Mall with 1,115,000 square feet of floor space that was constructed between 1974 and 1979 and renovated in 1988 and 2006. The Mall had approximately 110 tenant spaces and was anchored by Macy's, Sears, and J.C. Penney. The two detached buildings included in the Mall were located north and northeast of the shopping mall at 10343 North Wolfe Road, Cupertino, California (formerly TGI Fridays) and 10330 North Wolfe Road, Cupertino, California (formerly Alexander's Steakhouse). There were former underground storage tanks at the Sears Automotive Center and J.C. Penney's (Figure 2 and Figure 3, respectively), which were removed under regulatory oversight in 1994 and 1999, respectively.

A public ice rink and cooling tower are in the northeastern portion of the Mall. Two three-level covered parking garages were located on the north and west sides of the Mall, respectively. A separate parking garage is located north of the former Macy's store. Outdoor asphalt-paved parking areas were located on the west, south, and east, adjacent to Sears, on the north and on the south side of J.C. Penney, on the north side of TGI Fridays, and on the north side of Alexander's Steakhouse (Figure 1). Today the Mall is mostly vacant, although existing tenants remain, including the ice rink, a bowling alley, a restaurant and a fitness facility.

The area surrounding the Site is residential and commercial. Prior to construction of the Mall, the Site contained orchards since at least 1939. Based on review of historical aerial photographs, the southeastern portion of the Site included buildings that appear to have been associated with the former agricultural activities (Figure 1). The Site was used as a retail shopping mall since at least 1979.

2.2 GEOLOGY AND HYDROLOGY

The Site is located in the Santa Clara Valley, and is underlain by unconsolidated alluvial sediments, consisting of fine-grained (low permeability) deposits interbedded with coarse-grained (higher permeability) sediments. Soils encountered during WSP's soil investigation in October 2018 consist predominately of clays followed by silty sands or poor and well graded sands. Fill material appeared as lean clays and extended between five to ten ft-bgs and in some locations, as deep as 20 ft-bgs.

Based on information available in the California Geotracker database, a nearby site (TOSCO Global ID: TO608575840) measured groundwater ranging historically from 70.86 ft-bgs (May 2006) to 90.70 ft-bgs (December 2008) with a general groundwater flow direction of northeast. Cornerstone's Phase I ESA Report (Cornerstone, 2018) identifies this groundwater zone as being perched and found only intermittently across the Site between depths of 80 and 95 ft-bgs. Groundwater elevations measured from previous on-site groundwater monitoring wells located at the former J.C. Penney automotive repair facility ranged from 120 to 140 ft-bgs between 1990 and 1993.

2.3 SITE USE HISTORY

WSP performed a Phase I ESA of the Site, documented in a Report dated January 7, 2014 and updated in a letter report dated January 11, 2016, that summarizes the historical uses of the property. Historical uses that may have impacted soil or groundwater beneath the Site are summarized in sections 3.3.1 through 3.3.4 below. Additionally, sections 3.3.1 through 3.3.3 include the RECs identified in Cornerstone's Phase I ESA Report (Cornerstone, 2018). In addition to the identified RECs, Cornerstone and WSP identified several potential environmental concerns that WSP also addresses in this Report.

2.3.1 FORMER SEARS AUTOMOTIVE CENTER

A Sears Automotive Center was constructed at the property in 1970 on the southwest side of the Mall property and was referenced as a Leaking Underground Storage Tank (LUST) site on the state Geotracker website. Existing documentation contained in the Geotracker website shows the removal of two 12,000-gallon and two 5,000-gallon gasoline USTs, one 550-gallon UST, and one 550 UST and product dispensers from the Sears Automotive Center site in 1985. Dispenser islands and product lines were removed from the site in 1994. Seven borings were installed and sampling was conducted in soil and groundwater in 1999 to assess hydrocarbon concentrations at the site. Groundwater was not encountered in any of the borings to a depth of 44 ft-bgs. Concentrations of ethylbenzene, total xylenes, and lead were reported below regulatory action levels and the Santa Clara Valley Water District (SCVWD) granted case closure for the site on December 6, 1999. The SCVWD concluded that residual contamination in the subsurface from the former USTs is minimal. SCVWD's closure report is included in Appendix A.

Cornerstone's Phase I ESA identified four RECs in association with the former Sears Automotive Center, including two relating to the former USTs.

- REC 1 - Documents reviewed during Cornerstone's study, as well as their observations at the Site, indicate that a 1,000-gallon waste oil UST may be present on the west side of the Sears Automotive Center building. No documents pertaining to the removal of the UST or the evaluation of soil quality at the UST location were identified. There is a potential that this UST, if present, may have impacted soil, soil vapor and/or ground water at the Site.
- REC 2 - An oil-water separator (connected to floor drains within the building) and an acid neutralization chamber (connected to drains within a former battery storage room and located outside the southeast corner of the building) were identified during their study on the east side of the Sears Automotive Center building (Figure 2). There is a potential that these features may have impacted soil, soil vapor and/or ground water at the Site.
- REC 3 - Vehicle lift components (e.g., outer lift cylinder casings and possibly associated hydraulic fluid piping and reservoirs) remain within the northern portions of the Sears Automotive Center that is not underlain by the basement. There is a potential that these features may have impacted soil and/or ground water at the Site.
- REC 4 - In 1986, Sears, Roebuck and Company established a contract with K.E. Curtis Construction Company for the removal of a 500-gallon UST. No details regarding the contents or location of the UST were described in the contract, and no other records pertaining to a UST

removal at Sears in 1986, or later, were identified. There is a potential that this unidentified UST may have impacted soil, soil vapor, and/or ground water at the Site.

- Details concerning measures to address these RECs are contained in Sections 4.2, 4.3, 5.1, and 5.2 of this report.

2.3.2 HISTORICAL AGRICULTURAL USE

Based on a review of historical aerial photographs, the area surrounding the Site was developed with orchards, agricultural land, and farmhouses before construction of the initial Mall buildings in 1974-1979.

Cornerstone identified two RECs associated with the past agricultural use of the Site.

- REC 5 - There is a potential that residual pesticides from agricultural practices could remain in Site soil. If present, this soil may require appropriate management.
- REC 6 - Soil adjacent to structures that may have been painted with lead-containing paint (i.e. historic farmhouse buildings) can become impacted with lead as a result of the weathering and/or peeling of painted surfaces. Soil near wood framed structures also can be impacted by pesticides historically used to control termites. There is a potential that residual lead and pesticide concentrations could remain in On-Site soil resulting from the prior residence and outbuildings previously located on the southeast portion of the Site.

Details concerning measures to address RECs 5 and 6 are contained within Section 5.1 of this report.

2.3.3 FORMER J.C. PENNEY AUTOMOTIVE CENTER

J.C. Penney operated an automotive maintenance facility from the Mall's construction circa 1974 until 1985. J.C. Penney, located on the east side of the Mall property, was referenced as a LUST site in the Cornerstone Phase I report. Two USTs, one 350-gallon diesel tank and one 350-gallon waste oil tank, were removed from the site on November 15, 1989. Three hundred and three tons of contaminated soil were removed from the UST excavations. A 750-gallon waste oil/water sump was closed in-place on January 21, 1994. Soil samples were collected beneath the oil/water sump prior to the closure; no contaminants of concern (COCs) were detected. Groundwater monitoring results collected from four monitoring wells installed on the J.C. Penney site indicated that there were no detectable levels of target chemical constituents in groundwater. The site was granted case closure on September 1, 1994 by the SCVWD; a copy of the closure report is included as Appendix B.

Cornerstone identified REC 3 (vehicle lift components remaining in ground) as also applying to the J.C. Penney Automotive facility. Cornerstone identified one additional environmental concern associated with the J.C. Penney facility:

- Four historic groundwater monitoring wells will need to be properly destroyed as they are no longer in use. The Cornerstone Report anticipated that this will likely occur as part of the

demolition/redevelopment activities. The location of the groundwater monitoring wells is detailed in Figure 3.

Details concerning measures to address each of these concerns are contained in Section 5.2 of this report.

2.3.4 VALLCO MALL – EAST AND WEST BUILDINGS

The Vallco Mall is two stories and contains 110 retail spaces that were used for a variety of purposes from retail and recreation (ice-skating) to restaurants. As such, the Mall contained elevators, emergency generators, mechanical equipment, trash compactors, maintenance storage areas, and chemical storage area in association with typical Mall operations.

Cornerstone and WSP each identified the following environmental concerns in association with the planned demolition of the existing Mall structures.

- Prior to the demolition of the twenty elevators located across the Site, a closure plan will need to be submitted and approved by the Santa Clara County Fire Department (SCCFD).
- Three emergency generators were identified at the Site. The generators will need to be removed in accordance with the approved closure plan before demolition activities occur.
- Due to the age of the Mall buildings, there is a potential that building materials may contain asbestos, lead based paint, PCBs, and fluorescent or mercury vapor light fixtures. Before conducting any renovation or demolition activities that might disturb potential asbestos, light fixtures, or painted surfaces, management and abatement of asbestos-containing materials, proper handling and disposal of fluorescent and mercury vapor light fixtures, PCB-containing building materials, and compliance with all applicable requirements regarding lead-based paint.

These concerns are addressed in Section 5.2 of this report.

2.4 SITE FUTURE USE

The Site is anticipated to be used for commercial and residential buildings, subsurface and surface parking areas, and landscaping. In September 2018, the City of Cupertino approved a project for the Site that proposes 2,402 residential units, up to 485,912 square feet of retail/entertainment uses, and 1,981,447 square feet of office uses. Approximately 10,500 parking spaces will be provided in both above-and below ground structures. The plan includes two publicly accessible town squares and a connected green roof.

Relevant to this investigation, planned development includes extensive subsurface parking that will require excavation of soil to a depth of 20 to 30 ft-bgs across much of the Site (Figures 4 and 5). As discussed in Section 3.2 above, the depth to groundwater is approximately 80 to 90 ft-bgs; therefore, groundwater will not be encountered during the Site redevelopment activities.

2.5 PLANNED DEMOLITION

Pre-redevelopment activities will include the demolition of the Mall building structures, including foundations and associated subsurface utilities, and all associated parking garages/structures. The Site demolition will occur in phases, as documented in Figure 6.

3 SITE ENVIRONMENTAL INVESTIGATIONS

3.1 SITE SOIL INVESTIGATIONS

In addition to the investigations and Site data associated with the regulatory closure of the two former automotive facilities (Appendices A and B), three phases of soil investigations were conducted to assess environmental site conditions in connection with the planned development. Table 1 provides a summary of the sampling locations, rationale, and analyses performed.

3.1.1 2016 GEOSPHERE INVESTIGATION

In September 2016, Vallco retained Geosphere to conduct a subsurface investigation to collect various discrete soil samples at the Site as part of an accompanying geotechnical investigation. Geosphere drilled a total of eight borings using a mobile direct push GeoProbe® DT-22. Specifically, boring E-1 went to a maximum depth of 50 feet, E-2 to a depth of 45 feet, E-3 to a depth of 35 feet, and E-4 through E-8 to a depth of 20 feet each. The soil was continuously sampled in five foot intervals, with discrete samples being collected at depths of 1', 5', 10', 15', 20', 30', 40', and 50', where applicable (Table 1). Sample nomenclature was marked as boring identification (E1 through E8) followed a depth designation (1 through 8), the depth designation of 1 corresponded to 1 ft-bgs, the depth designation of 2 corresponded to 5 ft-bgs, etc. Samples were collected for volatile organic compounds (VOCs) by EPA method 8260B; semi-volatile organic compounds (SVOCs) by EPA method 8270D; polycyclic aromatic hydrocarbons (PAHs) by EPA method 8270D selected ion monitoring (SIM); total petroleum hydrocarbons (TPH) as gasoline (TPH-g), as diesel (TPH-d), and as motor oil (TPH-mo) by EPA Method 8015C; pesticides by EPA Method 8081; polychlorinated biphenyls (PCBs) by EPA method 8082A; title 22 metals; 2,3,7,8-tetrachlorodibenzodioxin (TCDD) by method 1613B; and asbestos by method 435. Following the completion of drilling, the boreholes were backfilled using grout and excess auger cuttings. The locations of the Geosphere borings are included on Figure 1 and results are presented in the attached Data Tables. The Geosphere report is included as Appendix C.

3.1.2 2018 WSP INVESTIGATION

In October 2018, Vallco retained WSP to conduct a further subsurface investigation at the Site to provide additional information concerning subsurface conditions across the entire Site. The investigation included the installation of 15 borings, each to a depth of 20 ft-bgs as, depicted on Figure 1. Seven borings were concentrated in the area of the Sears Automotive Center to determine if there were any residual effects from the former underground fuel and motor oil tanks and other previous operations at the Sears Center.

DRILLING PROCEDURES

A GeoProbe® 7822DT direct push drill rig run by an external generator or a GeoProbe® 7800 truck mounted direct push drill rig was used to advance each boring down to the targeted depth of 20 ft-bgs. Each drill rig was equipped with a 5-foot Macro Core® continuous core sampler with acetate sleeves, which created a 2.5-inch diameter hole. All drilling was conducted by Trinity Drilling, Inc. of Santa Cruz, California, a C-57 licensed driller.

The recovered soil core from each boring was visually logged by a WSP geologist using the Unified Soil Classification System (USCS). Soil cores were then initially screened for VOCs by a photoionization detector (PID) to determine if sample depths should be adjusted to intercept potential areas of contamination. Soil samples were then collected into laboratory-supplied containers and submitted to the lab for analysis. At the completion of each boring location, borings were backfilled with Portland type I/II cement.

DECONTAMINATION PROCEDURES

All subsurface drilling equipment was decontaminated before use at the Site. The drillers utilized wet techniques to decontaminate equipment. Disposable equipment intended for one-time use was not decontaminated, but was packaged for appropriate disposal.

The sampling rod went through a wet decontamination between each boring location and between each boring run advancement. The shoe of the sampling rod went through a wet decontamination after each run and between boring locations. A wet decontamination was completed by scrubbing the equipment in a non-phosphate detergent followed by two separate tap-water rinses.

INVESTIGATION DERIVED WASTE

All soil cuttings and decontamination and rinse water were contained in separate Department of Transportation authorized drums. The drums were temporarily placed in a secure area on-site. The waste was disposed of in accordance with applicable local, state, and federal regulations.

SOIL SAMPLE COLLECTION AND ANALYSIS

During soil boring advancement, soil samples were collected from five depths of approximately 1, 5, 10, 15, and, 20 ft-bgs as shown in Table 1. The final soil sample collection depths varied slightly based on PID detections during initial screening.

Soil samples were analyzed by Enthalpy Analytical (Enthalpy) of Berkley, California excluding herbicides, whose analysis was subcontracted to Eurofins of Garden Grove, California. Enthalpy and Eurofins are California ELAP certified laboratories. Samples were collected for Title 22 metals by EPA Method 6010B; TPH-g, TPH-d, and TPH-mo by EPA Method 8015M; SVOCs and PAHs by EPA Method 8270; herbicides by EPA Method 8151; and pesticides by EPA Method 8081. All soil sample locations and depths were analyzed for Title 22 metals and TPH-g, -d, and -mo.

Soil samples collected at depths of approximately 1 and 5 ft-bgs were additionally analyzed for SVOCs, PAHs, herbicides, and pesticides at all locations. Additional soil samples collected for SVOCs, PAHs, herbicides, and pesticides at approximate depths of 10, 15, and 20 ft-bgs, were submitted to the laboratory and placed on hold for analysis pending results of the shallower soil samples. All soil samples were collected into laboratory supplied, unpreserved 16 ounces (oz.) or 4 oz. clear jars.

All soil samples collected during the investigation were classified in the field according to the USCS. To aid in the estimation of the percentages of sand and fine-grained material (i.e. silt size and clay-sizes particles) in the soil, the geologists sieved the samples through a #200 mesh field sieve which retains the sand-size material and allows the fine-grained particles to pass.

QUALITY CONTROL METHODOLOGY

An equipment blank was collected once during the soil sampling event for quality control (QC) purposes (EB-1). The equipment blank was prepared by pouring store-bought distilled water on and through the shoe of the sampling rod and into sample containers for SVOC and TPH-g, -d, and -mo analysis. No compounds were detected at concentrations greater than laboratory reporting limits in the equipment blank.

A QC report was additionally provided by the laboratory that includes method blank summaries, blank spike and surrogate recovery summaries, laboratory control sample/laboratory control sample duplicate summaries, and matrix spike/matrix spike duplicate (MS/MSD) summaries. The analytical reports for soil samples are provided in Appendix D.

3.1.3 2019 WSP SUPPLEMENTAL INVESTIGATION

On January 10, 2019, WSP collected additional soil samples from seven boring locations on the south side of the Mall property, east of the former Sears Center (Figure 1), to address the potential for lead, pesticide, or arsenic contamination around former farmhouse buildings. Samples were collected by hand auger at the following depths, 0.5, 1, 2, and 3 ft-bgs (Table 1). All samples were analyzed for pesticides (by EPA Method 8081A), and lead and arsenic (by EPA Method 6020). All re-usable sampling equipment (i.e. hand auger) was decontaminated prior to use at the Site and between boring locations. Soil samples were collected directly into laboratory-supplied clear jar containers and submitted under chain of custody procedures to McCampbell Analytical Inc. of Pittsburg, California, a commercial analytical laboratory certified by the State of California Department of Health Services. A QC report was provided by the laboratory that includes method blank summaries, blank spike and surrogate recovery summaries, laboratory control sample/laboratory control sample duplicate summaries, and matrix spike/matrix spike duplicate (MS/MSD) summaries. The analytical report for this supplementary soil sampling is provided in Appendix E.

3.2 EVALUATION OF SOIL INVESTIGATION RESULTS

The results for Metals, TPH, SVOCs, PCBs, Herbicides, and Pesticides from both the Geosphere investigation (samples are prefixed by E1 to E8 followed by designation (1 to 8) as to depth of sample collection) and the WSP investigations (prefixed by S-1 to S-8, W1-to W-6 and E-2 followed by a designation noting the sample depth) are included the Data Tables.

All analytical results have been compared to Environmental Screening Levels (ESLs) for residential human health risks as established by the San Francisco Regional Water Quality Control Board (RWQCB), revised January 2019, associated with residential direct soil exposure. Additionally, as noted previously, analytical results have been compared to DTSC RSLs for human health risks, revised April 2019.

No metal (excluding cobalt and arsenic), TPH, SVOC, PAH, or herbicides were detected in any of the samples at concentrations that exceeded their respective RSLs. Arsenic was found to exceed residential and construction worker screening levels in many samples. However, regulatory agencies do not require remediation of compounds that are below naturally-occurring background levels. Concentrations of naturally occurring arsenic in California may often be far above the RSLs. None of the arsenic concentrations in soil samples collected during the investigation of the Site exceeded the regional background level of 11 mg/kg for arsenic as determined by the RWQCB (Duvergé, December 2011). In addition, no TPH, SVOC, PAH, herbicides, or pesticides were detected in any sample at concentrations that exceeded the RWQCB gross contamination levels or residential odor nuisance levels. Additionally, results from samples collected for asbestos, and 2,3,7,8-TCDD by Geosphere were all below laboratory reporting limits. Geosphere also analyzed samples for VOCs, of which only 2- Butanone (MEK) and methylene chloride were detected above laboratory reporting limits. Concentrations of methylene chloride did not exceed the ESL or RSL.

A total of 32 samples collected by Geosphere (8 borings) were analyzed for PCBs. Two samples contained detections of PCBs (both Arochlor 1254): E5-1 (0.523 mg/kg) and E8-1 (0.0256 mg/kg). The results of those samples were then compared to the RSLs for residential human health risks. Only the E5-1 sample collected at one foot bgs at 0.523 mg/kg exceeded the residential ESL of 0.23 mg/kg and the RSL of 0.24 mg/kg. PCBs were not detected in the samples collected in the E-5 boring at five feet bgs (E5-2) and 10 feet bgs (E5-3). The PCB concentration in sample E5-1 is less than the most conservative High Occupancy Cleanup Level of 1,000 µg/kg established in the Toxic Substances Control Act (TSCA; 40 CFR 761.61). The High Occupancy Cleanup Level is consistent with residential and commercial land use.¹ Thus, under TSCA, PCB concentrations detected at the site are below the TSCA health-protective value of 1,000 µg/kg and further assessment of PCBs would not be required. In addition, since PCBs were not detected in 30 of 32 samples collected, there is no evidence to suggest the widespread presence of PCBs at the Site.

Even though the detection of PCBs at boring E-5 is less than the TSCA cleanup level, the detection location and surrounding area will be segregated, further characterized, and properly disposed of during redevelopment excavation activities and confirmation sampling will be performed to ensure complete removal of the PCB detection area. Details of this approach to the PCBs are included in the ESMP and described within Section 4.1 of this Report.

A total of 60 samples were analyzed for pesticides from 32 samples collected by Geosphere (8 borings) and 28 samples collected by WSP (21 borings) at various depths across the Site. The results of those samples were then compared to current ESLs for residential human health risks and RSLs for human health risks. Two of the 60 samples analyzed for pesticides contained dieldrin that exceeded the residential RSL. One of those samples also exceeded the residential ESL. There is no evidence to suggest the widespread presence of dieldrin at the Site above applicable RSLs. A 95% upper confidence

¹ High occupancy area means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for bulk PCB remediation waste. Examples could include a residence, school, day care center, sleeping quarters, a single or multiple occupancy 40 hours per week work station, a school class room, a cafeteria in an industrial facility, a control room, and a work station at an assembly line (40 CFR 761.3).

level of the mean (95% UCL) dieldrin concentration was calculated using EPA's ProUCL Version 5.1. The 95% UCL for dieldrin of 2.1 µg/kg is well below both the ESL (38 µg/kg) and RSL (34 µg/kg).

Cobalt was detected in one out of the 102 samples analyzed for the compound at a concentration of 23 mg/kg, which is the same concentration as the residential ESL and RSL. The Kearney Foundation of Soil Science reported in 1996 (Kearny, 1996) that soil samples collected in northern California frequently contain higher concentrations of cobalt which they attributed to ultramafic and volcanic rocks found in the area. The detection of cobalt at the concentration of the RSL is isolated to only one sample of the 102 collected indicating there is no evidence to suggest the widespread presence of cobalt at the Site above applicable RSLs.

Based on the above results for dieldrin and cobalt and the fact that no other analytes exceeded RSL levels, WSP finds that historical agricultural operations at the Site did not impact soils with pesticide, arsenic, or lead contamination as identified in RECs 5 and 6.

3.3 SEARS AUTOMOTIVE CENTER INVESTIGATION

To address the possibility that any USTs remain onsite, as noted in RECs 1 and 4, WSP performed a geophysical GPR survey on January 25, 2019 around the former Sears Center. The survey consisted of a metal sweep performed with a Fisher TW-6 MiScope to determine the presence of any metal pipes leading to or from the suspected area of the former tanks and a GPR scan performed with a MALA easy locator to determine if there were any indications of an underground storage tank present beneath the ground surface. The survey showed no evidence of any underground tanks on the west or east sides of the Sears automotive building. The survey report is included as Appendix F.

In addition to the GPR survey, during WSP's 2018 soil investigation, one boring (S-6-R) was positioned directly adjacent to a concrete box suspected to be an access port to the suspect 1,000-gallon (or 500 gallon) UST(s). The drill rig was only able to advance to approximately 11 ft-bgs, where refusal occurred. The boring consisted mostly of pea gravel, a common backfill material. The drillers suspected that refusal was due to presence of concrete. It is noted in Blaine Tech Services (BTS) sampling report during tank removal of the other USTs at the Sears Automotive Center (BTS, 1985) that the tanks were mounted on concrete anchoring slabs. There is no documentation that the concrete anchoring slabs were removed during UST removal and therefore were likely left in-place when the pits were backfilled, explaining the presence of concrete at 11 ft-bgs where refusal was met.

Although the GPR survey did not detect any tank features, at the request of Vallco, WSP excavated four test pits around a square concrete box that was suspected to be a potential access port for a UST. The concrete box was removed and the area and box were inspected. The concrete box was determined to be an abandoned storm drain inlet. The basis for this was primarily because a plastic pipe led from the box to an existing storm drain inlet approximately 1 foot northwest. The piping had concrete within it leading to the conclusion that the storm drain was abandoned by backfilling with concrete. No odor or staining was noted and there were no signs of access ports to a UST.

Another test pit continued beneath the area of the concrete box. At approximately 3 feet below ground surface (ft-bgs) a metal pipe was encountered that aligned in an east- west direction. In order to determine the extent of the metal pipe, another test pit was dug approximately five feet west of the pit that first found the pipe, and this second pit encountered the end of the pipe. The end of the pipe was approximately 33 feet west of the Sears Automotive Building. The pipe end was clearly capped off.

Based upon the Sears Automotive Center Case Closure report, prepared by the SCVWD (SVWD,1999), this pipe was determined to be the pipe that led to the former used motor oil tank on the west side of the Sears Automotive building.

To ensure no UST was buried in place near the end of the capped pipe, additional test pits were placed approximately 5 feet north and 5 feet south of the pipe end. No UST or additional piping was observed. During the soil disturbance activities, no odor or staining was noted. All of the above data confirms that the suspect UST is no longer present at the Site, thereby addressing RECs 1 and 4.

Two soil samples were collected under the observed pipe, one beneath a section of the exposed pipe closest to the building and one beneath the pipe end cap. Samples were submitted to Enthalpy and were analyzed for TPH-mo by EPA method 8015B. TPH-mo was detected at 74 mg/kg in the sample collected beneath the pipe cap. TPH-mo was not detected in the other sample collected beneath the pipe. The detection of TPH-mo beneath the pipe cap is far below the residential ESL of 12,000 mg/kg and the gross contamination level of 5,100 mg/kg and is considered residual TPH-mo that may have resulted when the pipe was cut and capped. Sample results are contained in Appendix G.

3.4 VAPOR ENCROACHMENT SCREEN

The purpose of a Vapor Encroachment Screening Evaluation is to assess whether VOCs are present or are likely present in the vadose zone either on or near the site; if such vapors are present or likely to be present, further evaluation could be warranted to assess the potential for vapor intrusion. Using the Environmental Data Resources, Inc. (EDR) Vapor Encroachment Worksheet, WSP prepared a Vapor Encroachment Screen (VES) consistent with ASTM Standard E2600-15, Standard Guide for Vapor Encroachment Screening. A copy of the VES is included as Appendix J.

WSP identified sites from the EDR database search within the Vallco property and within a one-mile radius of the Vallco property address (10123 North Wolfe Road) southwest or upgradient of the Vallco property (groundwater flows to the northeast) that either 1) exhibited a release of petroleum products or VOCs, and/or contained USTs, or 2) engaged in a business that could potentially have released VOCs to the subsurface soils within or upgradient of the Vallco property. The VES identified the following sites under Standard Environmental Records that met these criteria:

- Former Sears Automotive Center within the Vallco property at 10101 Wolfe Road: As noted in this report, the site contained fuel and oil USTs as well as hydraulic lifts. (Note: The Bay Club Silicon Valley listing is a duplicate of the Sears Automotive Center; both are listed at the same address)
- Former J.C. Penney Automotive Center within the Vallco property at 10150 Wolfe Road: Also noted in this report, the former J.C. Penney operations included a diesel fuel UST and a waste oil UST.
- One Hour Martinizing by Lee (aka One Hour Cleaners by Lee) at 10045 E. Estates Drive (approximately 0.1 to 0.3 miles southwest (upgradient) of the Vallco property). This was a retail dry cleaners that used the VOC tetrachloroethene (PCE) for dry cleaning. There is no evidence in the EDR database to suggest a release of PCE occurred; the site is not listed on Geotracker. Based on the depth to groundwater (up to 40 feet below ground surface) and no evidence of a release from this location, it is considered highly unlikely that this site could be a potential source of soil vapors beneath the Vallco property.

- Wardrobe Custom Cleaners at 19705 Stevens Creek Boulevard (approximately 0.1 to 0.3 miles southwest (upgradient) of the Vallco property), This was a retail dry cleaners that used the VOC tetrachloroethene (PCE) for dry cleaning. There is no evidence in the EDR database to suggest a release of PCE occurred; the site is not listed on Geotracker Based on the depth to groundwater (up to 40 feet below ground surface) and no evidence of a release from this location, it is considered highly unlikely that this site could be a potential source of soil vapors beneath the Vallco property.

Considering the VES findings, further evaluation of the potential for vapor intrusion was performed, including a review of available data and the inclusion of measures to address any risk of vapor intrusion from the former operations noted above:

- As noted above, the former Sears Automotive Center underwent closure under oversight by the SCVWD. Benzene and toluene were not detected and ethylbenzene, and total xylenes were reported below current regulatory action levels (RWQCB Tier 1 soil ESLs; January 2019 (rev.1)) in soil samples collected from seven soil borings. The SCVWD concluded that residual contamination in the subsurface from the former USTs was minimal; SCVWD granted case closure for the site on December 6, 1999. Thus, no residual VOCs above current ESLs existed at the time of closure and the potential for vapor intrusion is highly unlikely.
- As noted above, the former J.C. Penney Automotive Center also underwent closure under oversight by the SCVWD. Soil samples were collected beneath the oil/water sump prior to the closure; benzene, ethylbenzene, and xylenes concentrations were not detected and toluene was below current regulatory action levels (RWQCB Tier 1 soil ESLs; January 2019 (rev.1)). Groundwater samples collected from four monitoring wells installed on the J.C. Penney site indicated that there were no detectable levels of target VOCs in groundwater at the time of closure. The site was granted case closure on September 1, 1994 by the SCVWD. Thus, no residual VOCs were present in soil or groundwater above current ESLs at the time of closure and the potential for vapor intrusion is highly unlikely.
- As an additional measure of protection, the ESMP includes a process to screen subsurface soils on a 25 ft by 25 ft grid for VOCs, and to further sample and characterize excavated soil, if warranted, during demolition and slab removal at the former Sears and J.C. Penney Automotive Centers. In addition, the closure plan for the former Sears Automotive Center includes targeted soil sampling for VOCs at the location of the oil-water separator, acid neutralization system, and associated piping. Similar sampling will be included, as appropriate, in the closure plan for the former J.C. Penney Automotive Center.
- To address any potential vapor intrusion from the two dry cleaners located offsite southwest across Stevens Creek Boulevard from the Vallco property and to the west of the Vallco property, the planned development includes subsurface parking that will result in the excavation of soil within the Vallco property along Stevens Creek to a depth of approximately 20 feet below ground surface. Thus, if any residual VOCs are present near the Vallco property, the development will be underlain by subgrade parking that will be on a separate ventilation system from the overlying occupied buildings, thereby mitigating the potential for vapor intrusion.

4 ANALYSIS AND CONCLUSIONS

4.1 SOIL ANALYTICAL RESULTS

In summary, laboratory results for all analytes except PCBs show no evidence of contaminants of concern at the Site at concentrations above RSLs.

As noted in Section 3.2, a single sample from Geosphere boring E-5 one foot below ground surface (sample E5-1) contained PCBs at 0.523 mg/kg, above the RSL of 0.24 mg/kg, and is considered a potential area of concern. WSP located boring E-5 from surface evidence and markings and recorded its location using GPS. During redevelopment excavation activities, the soil in area surrounding the sample E5-1 will be addressed separately from the mass excavation; soil surrounding and in the area of sample E5-1 will be addressed as described below.

Additional step-out sampling for PCBs will be performed in the area of boring E-5 where PCBs were detected in soil at a concentration exceeding the RSL. This sampling will be performed prior to pavement removal or excavation in the area to ensure that appropriate health and safety measures (e.g., appropriately trained workers) and appropriate soil management protocols (e.g., decontamination and air monitoring as necessary based on PCBs concentrations) are performed during soil disturbing activities in the area of boring E-5.

An excavation workplan will be prepared following the sampling described above. The limits of excavation for removal of PCBs-impacted soil in the vicinity of boring E-5 as described above will be refined based on the findings from the additional PCBs sampling (e.g., the excavation boundary will extend to the locations of step-out samples where PCBs are below RSLs) and the step-out samples can serve as confirmation samples for the excavation of PCBs impacted soil.

All excavated soils will be segregated from other soil from the Site, stockpiled, and characterized for disposal at a properly licensed disposal facility.

No other areas of concern were identified that would warrant remedial actions to be taken or further investigation.

Of note, there was no evidence of any impacts/exceedances of ESLs for TPH (or any other constituents) in the samples from seven borings in proximity to the former Sears Automotive Center. There is also no evidence of any impacts/exceedances of ESLs or RSLs for pesticides, lead or arsenic in shallow soil samples collected throughout the Site in the footprint of historical orchards or from the seven hand-augured borings in proximity to historical farm house buildings. There were two samples out of 60 samples collected with results that exceeded the RSL (34 µg/kg) for dieldrin; however, the 95% UCL for dieldrin results from all the samples collected was 2.1 µg/kg, far below the residential ESL and RSL.

The sampling performed and resulting data summarized in this report specifically address and resolve RECs 1,4, 5 and 6 identified in Cornerstone's Phase I ESA, as well as the RECs previously identified by WSP. Soil sampling for pesticides, lead, and arsenic showed that there is no residual soil contamination from historical agricultural land use or residual contamination from former lead-based paint suspected to have been used on farmhouse buildings, which resolves RECs 5 and 6 in the Cornerstone Phase I ESA report.

Additionally, there were no detections of TPH over ESLs or RSLs in samples collected around the former Sears Automotive Center (Borings S-1 through S-7) or in samples collected around the former J.C. Penney Automotive Center (Boring E-2). Based on the historical operations in these two former UST areas and, as recommended in WSP's Phase I ESA and update letter, subsurface disturbance will be performed with care and an awareness of the past USTs in these areas. The GPR survey and the test pits support the conclusion that there are no existing or suspect former USTs remaining in the former Sears Automotive Center area, thus addressing RECS 1 and 4 in the Cornerstone Phase I report.

Finally, the closure activities relating to the Sears and J.C. Penney premises will be monitored and coordinated with the SCCFD to ensure that no aboveground residual hazardous materials or contaminants remain following closure. Any remaining oil-water separator, acid neutralization chamber, hydraulic lifts, petroleum fluid pipelines, battery storage area, and asbestos containing material will be properly abandoned or removed as part of the closure activities. During excavation of the soil for re-development activities in these potential areas of concern as well as the single elevated PCB detection described in Section 3.2, an Environmental Professional will be present to observe underlying soil for evidence of potential impacts and, if observed, collect soil samples in accordance with the ESMP. As discussed previously, the planned development will require excavation of soil to depths of 20 to 30 feet bgs across most of the Site. If any residual stained soil or potential contamination is identified during demolition and redevelopment, such soil will be excavated and disposed of at a permitted, off-site disposal facility.

4.2 REMAINING ENVIRONMENTAL ITEMS

Investigative efforts have resolved RECs 1, 4, 5, and 6. The remaining RECs 2 and 3 and the environmental issues related to re-development and demolition activities will be addressed, under SCCFD oversight, at that time. These issues consist of the following:

SCCFD CLOSURE PLANS

A closure plan for the Western portion of the mall was approved and implemented in November-December, 2018. The closure activities addressed, among other things, removal of one of the three generators within the mall and decommissioning of all the elevators in the West side of the mall. With respect to the hydraulic fluids within the former elevators. KONE Inc., the elevator manufacturer provided a letter dated June 20, 2019 confirming that KONE has not used hydraulic fluids within their elevators that contain volatile organic compounds (VOCs) or polychlorinated biphenyls (PCBs).

Other closure activities in the Western portion of the mall included:

1. Removal of seven empty drums from a storage area of west garage
2. Removal and proper disposal of batteries from the AMC movie theater's inverter system
3. The cleaning and removal of all grease interceptors
4. Removal and proper disposal of miscellaneous paint and other waste.

Additionally, an Asbestos and Lead (Pb) Survey and Evaluation Report dated October 26, 2018 and a Limited Lead (Pb) Testing Report dated October 31, 2018 were prepared and these reports provide the

demolition contractor with the necessary information to ensure that these materials are properly identified and will be safely removed and properly disposed of during demolition activities.

The approved closure activities for the Western portion of the mall are described in a Closure Letter report prepared by WSP dated December 11, 2018. The SCCFD approved this Closure Letter report by their letter dated December 12, 2018. The KONE Inc. letter and the referenced Closure Letter and SCCFD approval letter are included in Appendix I of this report.

The SCCFD requires implementation of an approved closure plan for the former Sears Automotive Center due to the presence of an oil-water separator, acid neutralization chamber, hydraulic lifts, petroleum fluid pipelines, battery storage area, and lead containing materials, as well as for the J.C. Penney former automotive center due to the presence of hydraulic lifts and associated piping. A closure plan for the former Sears Automotive Center was submitted to the SCCFD on March 25, 2019 and approved on April 11, 2019 (Appendix H). During the demolition of the structures and removal of the paved surfaces, the equipment, piping, and materials will be removed and the soils beneath them will be sampled to ensure that there have been no releases of any hazardous materials. These closure activities relating to the Sears and J.C. Penney premises will be monitored and coordinated with the SCCFD to ensure that no aboveground or belowground residual hazardous materials or contaminants remain following closure. These activities will address RECs 2 and 3.

In addition to the closure plans for the two former automotive centers, a closure plan for the Eastern portion of the Mall will be submitted to SCCFD for approval and will resolve the remaining identified environmental concerns in this portion of the mall, including the two remaining generators and the remaining elevators.

ABANDONMENT OF GROUNDWATER MONITORING WELLS

The four groundwater monitoring wells located on the J.C. Penney premises will be located and abandoned in accordance with the SCVWD Well Standards. A permit will be obtained from the SCVWD prior to the abandonment. The preferred method of abandonment will be to drill out the wells to the total depth of the well and backfill with grout, as appropriate and necessary. This action will resolve this environmental concern.

DEMOLITION OF BUILDINGS

Before conducting any renovation or demolition activities that might disturb potential asbestos, light fixtures, or painted surfaces, Vallco will ensure that it complies with all requirements for management and abatement of asbestos-containing materials, proper handling and disposal of fluorescent and mercury vapor light fixtures, PCB-containing building materials, and with all applicable requirements regarding lead-based paint. Testing for asbestos, lead, and PCB containing material has been implemented in the west side of the Mall as part of the SCCFD closure plan. Compliance with these required and standard procedures will address these identified environmental concerns.

PCB SOIL DETECTION

As noted in Section 4.1, a single sample from Geosphere boring E-5 one foot below ground surface (sample E5-1) contained PCBs at 0.523 mg/kg, above the RSL of 0.24 mg/kg, and is considered a potential area of concern. Additional step-out sampling for PCBs will be performed in the area of boring E-5 where PCBs were detected in soil at a concentration exceeding the RSL. This sampling will be

performed prior to pavement removal or excavation in the area. An excavation workplan will be prepared following the sampling described above. The limits of excavation for removal of PCBs-impacted soil near boring E-5 will be refined based on the findings from the additional PCBs sampling (e.g., the excavation boundary will extend to the locations of step-out samples where PCBs are below RSLs) and the step-out samples can serve as confirmation samples for the excavation of PCBs impacted soil.

ACRONYMS

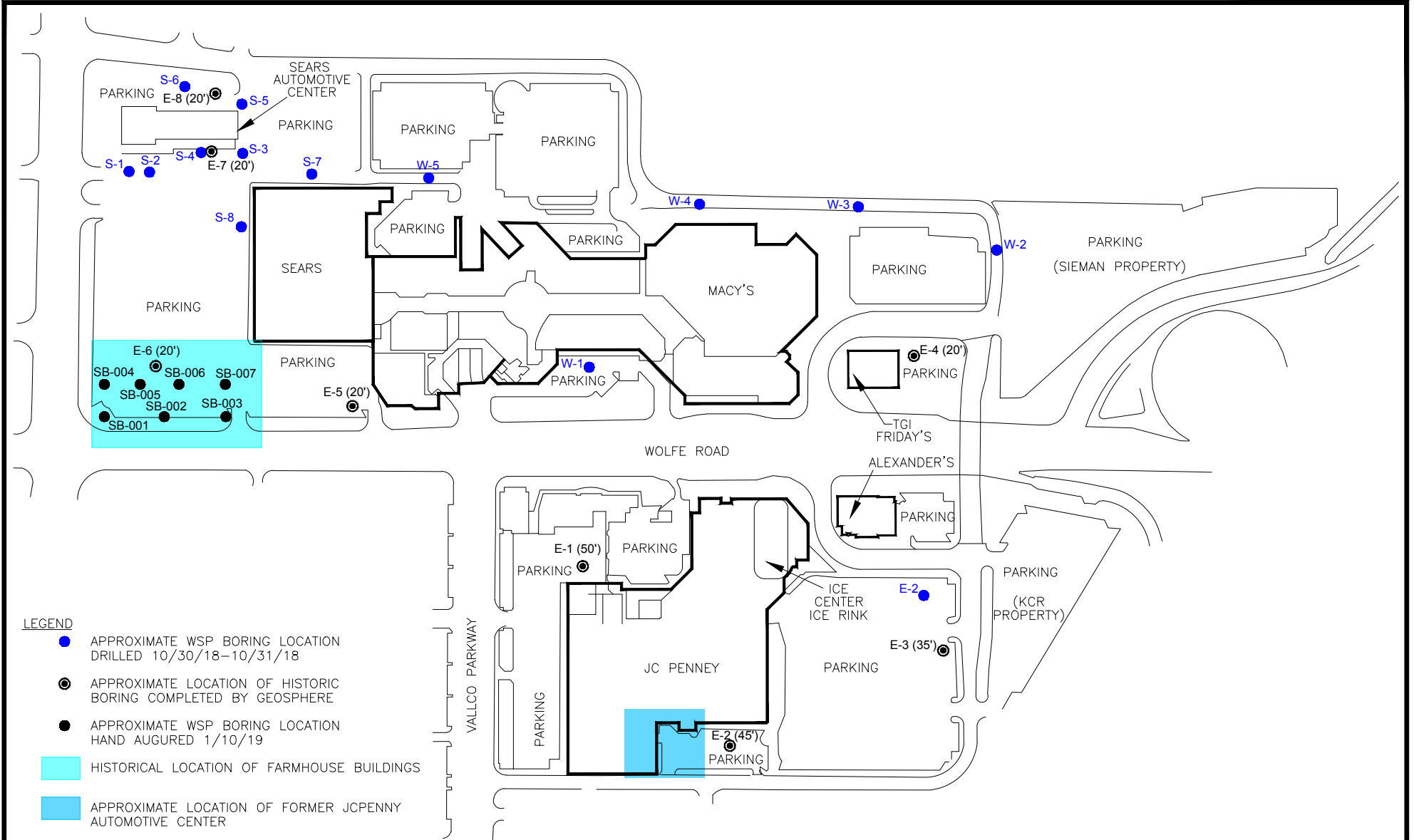
µg/l	micrograms per liter
COC	Contaminants of Concern
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
ESMP	Environmental Site Management Plan
ft-bgs	feet below ground surface
GPR	Ground Penetrating Radar
LUST	leaking underground storage tank
MDL	method detection limit
mg/kg	milligram per kilogram
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated Biphenyl
PID	Photoionization detector
QA/QC	quality assurance/quality control
REC	Recognized Environmental Condition
Regional Board	San Francisco Bay Regional Water Quality Control Board
RL	reporting limit
RSL	Regional Screening Level
SCCFD	Santa Clara County Fire Department
SCVWD	Santa Clara Valley Water District
SVOCs	semi-volatile organic compounds
TCDD	Tetrachlorodibenzodioxin
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-mo	total petroleum hydrocarbons as motor oil
USCS	Unified Soil Classification System
UST	underground storage tank
WSP	WSP USA, Inc.

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- WSP. 2016. Updated Information to the January 7, 2014 Phase I Environmental Site Assessment, Vallco Fashion Mall in Cupertino, California. January 11.

FIGURES




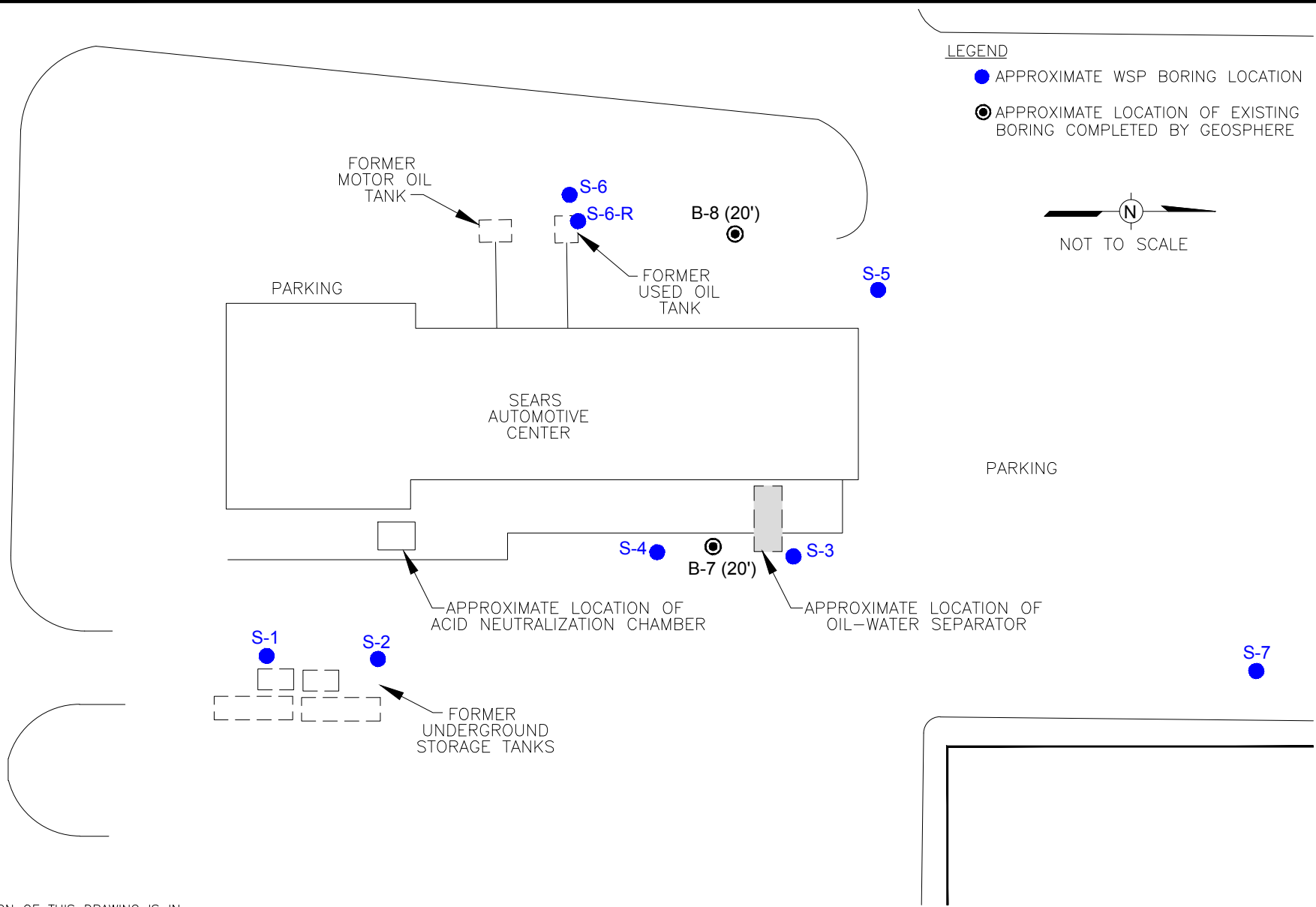


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 <p>WSP USA Inc. 2025 GATEWAY PLACE SUITE 348 SAN JOSE, CA 95110 TEL: +1 408.453.6100</p>	<p>Figure 1</p>	<p>VALLCO FASHION MALL 10123 NORTH WOLFE ROAD CUPERTINO, CALIFORNIA PREPARED FOR VALLCO PROPERTY OWNER, LLC PALO ALTO, CALIFORNIA</p>	<p>Drawn By: LS 4/9/2019</p>
	<p>SITE LAYOUT AND APPROXIMATE SOIL BORING LOCATIONS</p>		<p>Checked:</p> <p>Approved:</p> <p>DWG Name: 314MN1588.001-010</p>



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Figure 2

APPROXIMATE BORING LOCATION – SEARS AUTOMOTIVE CENTER

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 VALLCO PROPERTY OWNER, LLC
 PALO ALTO, CALIFORNIA

Drawn By: LS 4/9/2019

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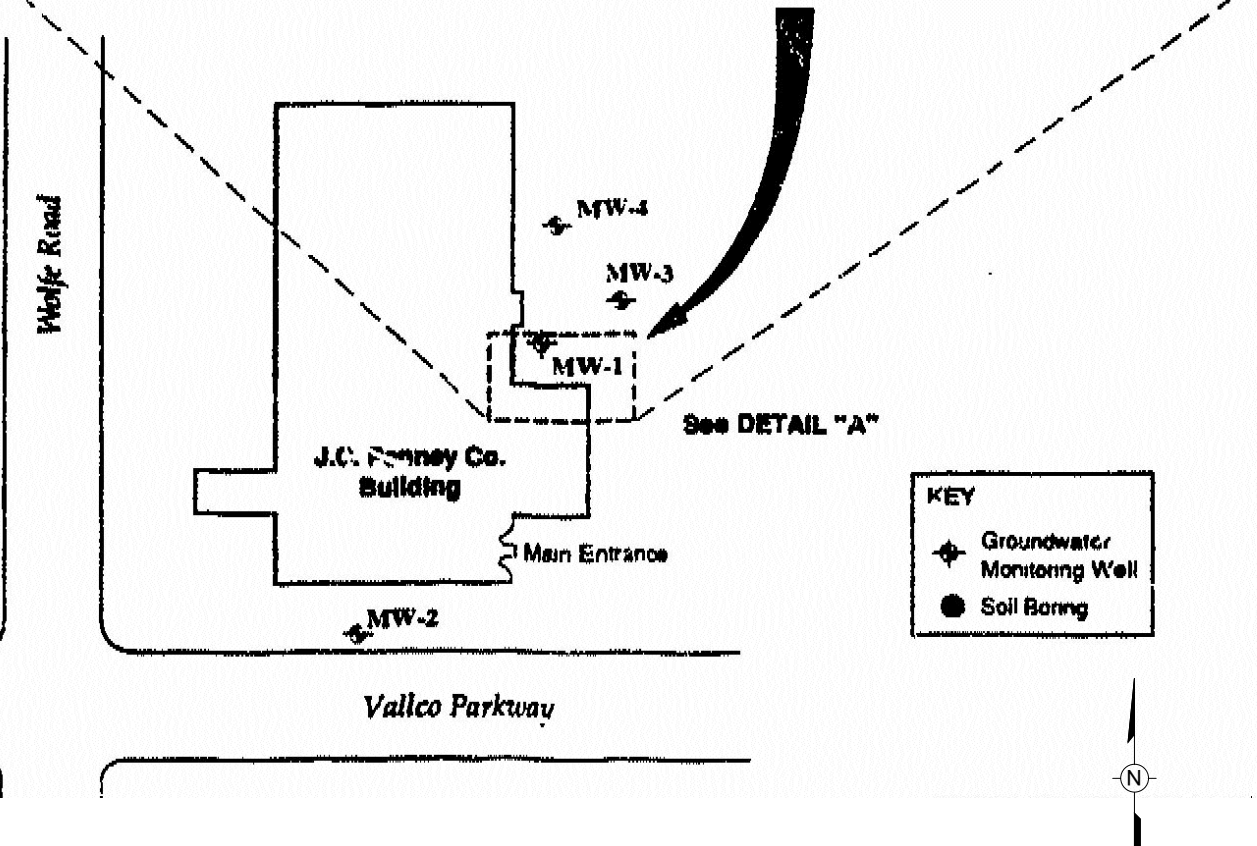
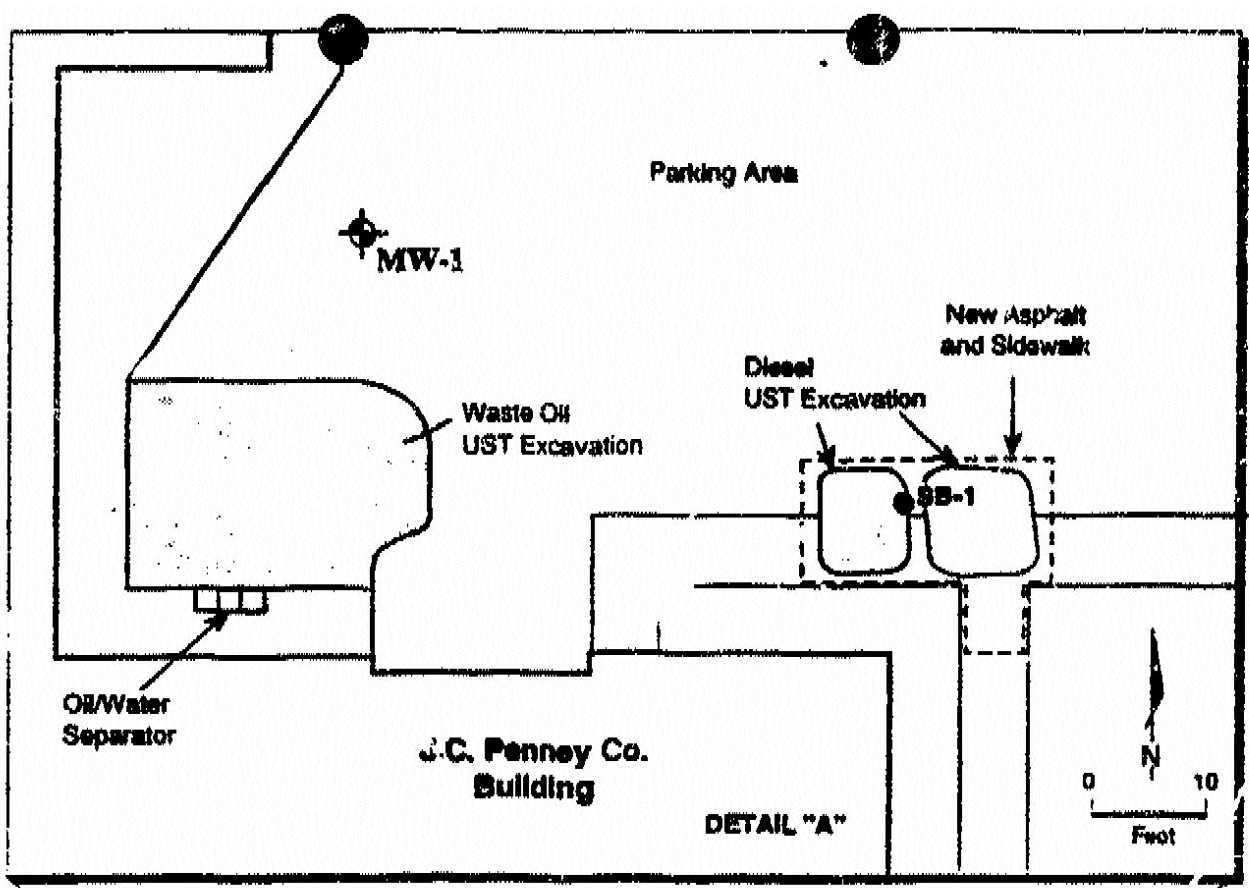
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Figure 3
 JCPENNY AUTOMOTIVE
 MAINTENANCE AREA

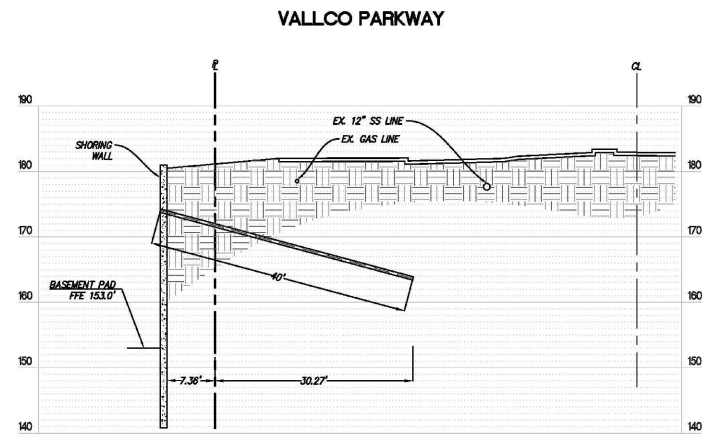
VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 VALLCO PROPERTY OWNER, LLC
 PALO ALTO, CALIFORNIA

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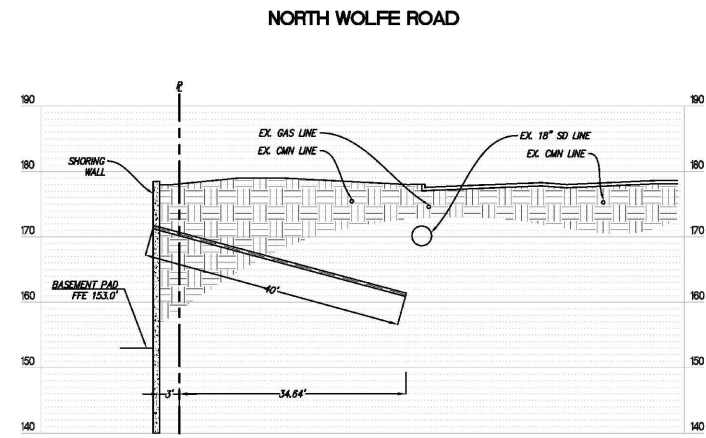
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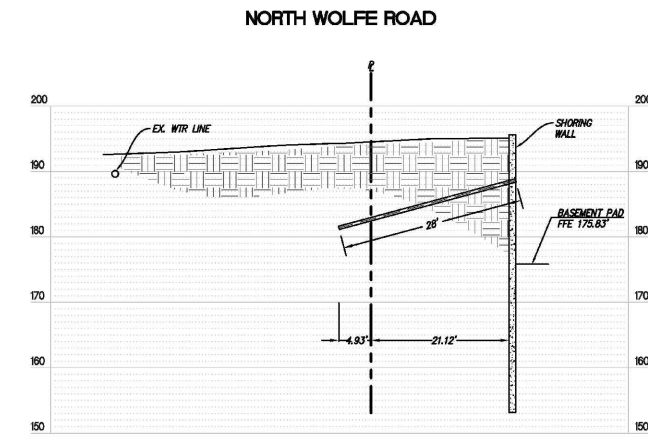
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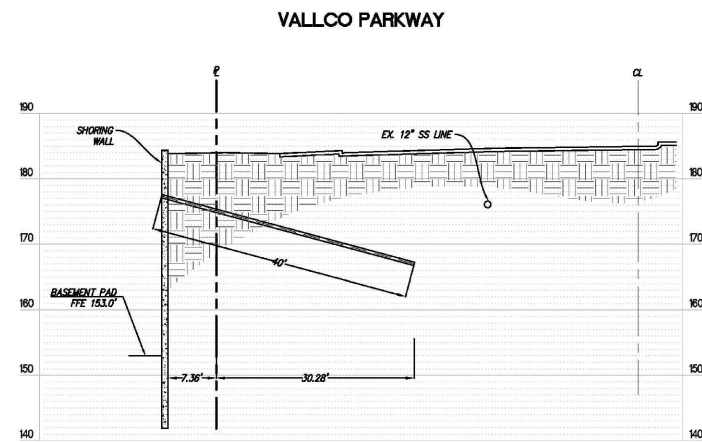
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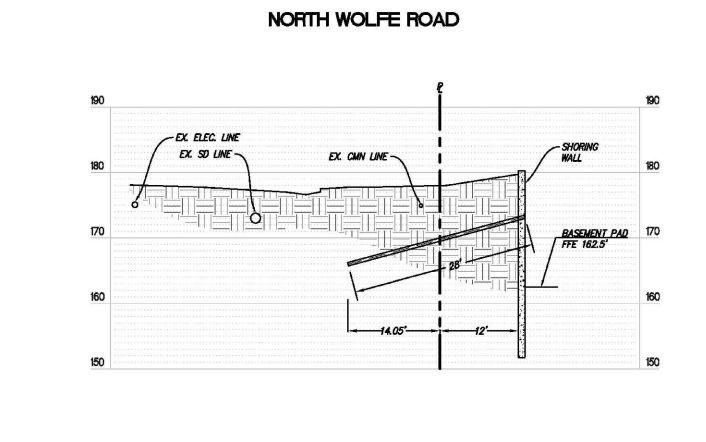
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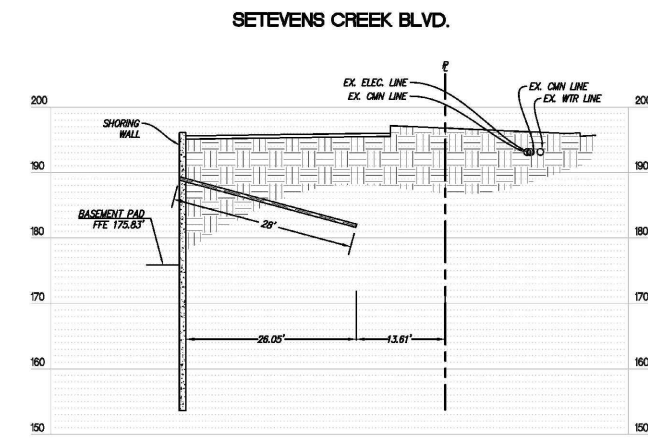
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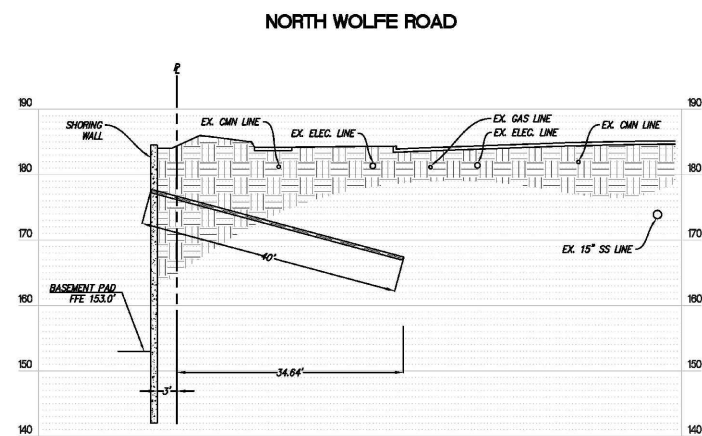
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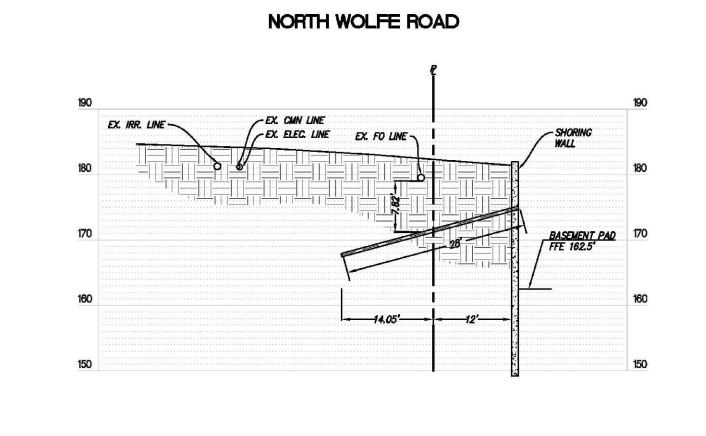
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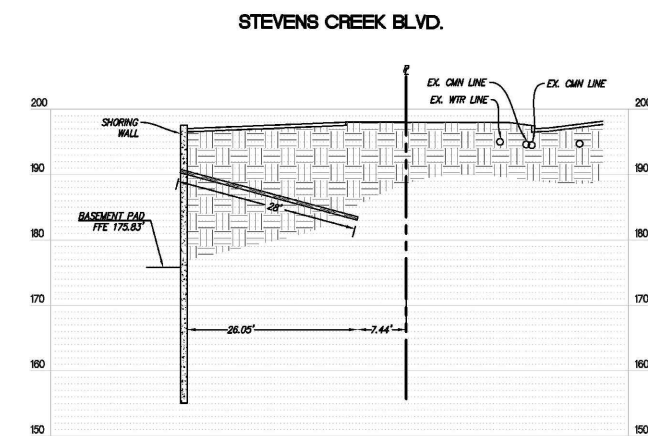
SECTION 8



SECTION 3



SECTION 6



SECTION 9

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 DWG Name: 314MIN1588-008

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
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 PALO ALTO, CALIFORNIA

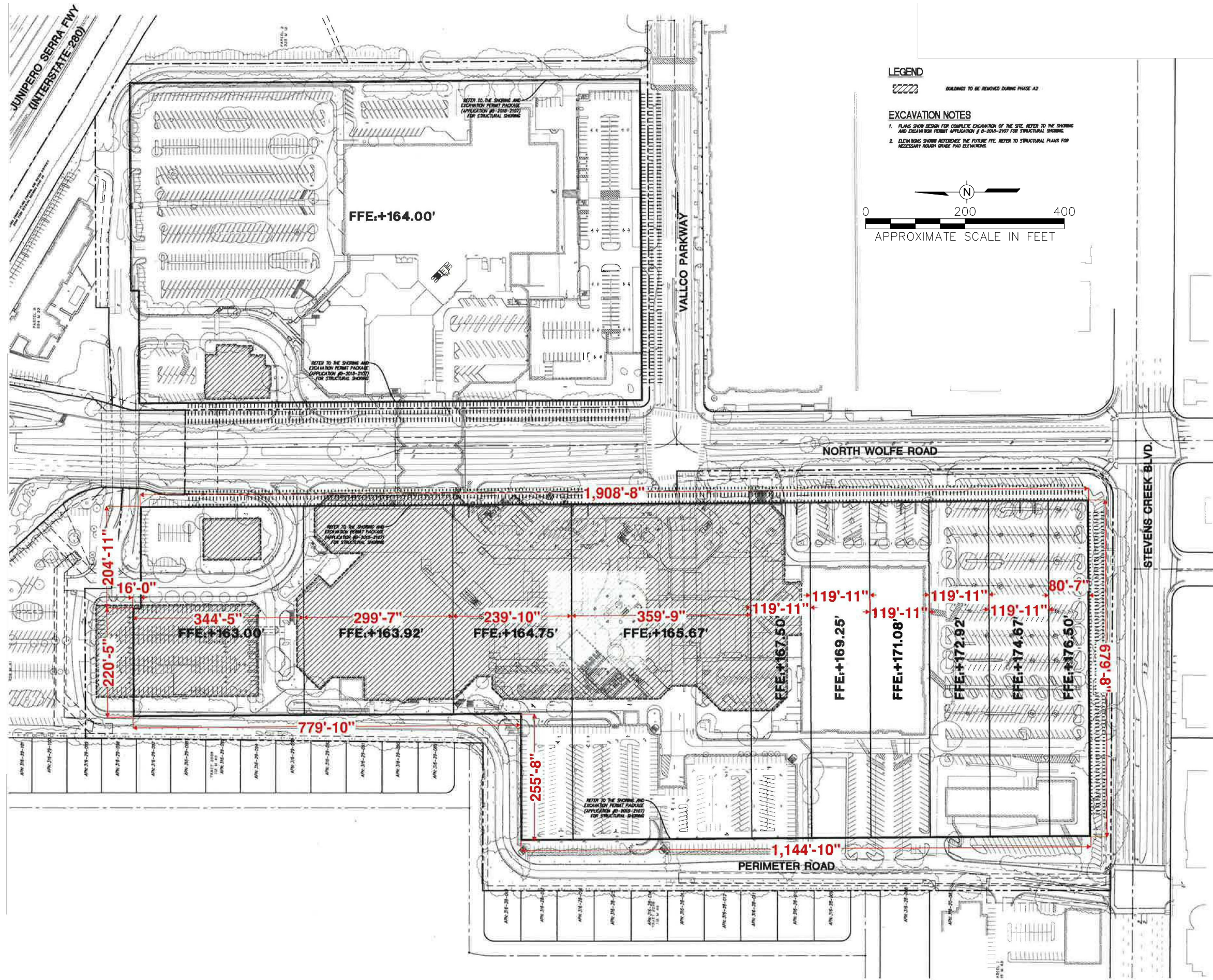
Figure 4
 EXCAVATION CROSS SECTIONS
 FOR MALL REDEVELOPMENT

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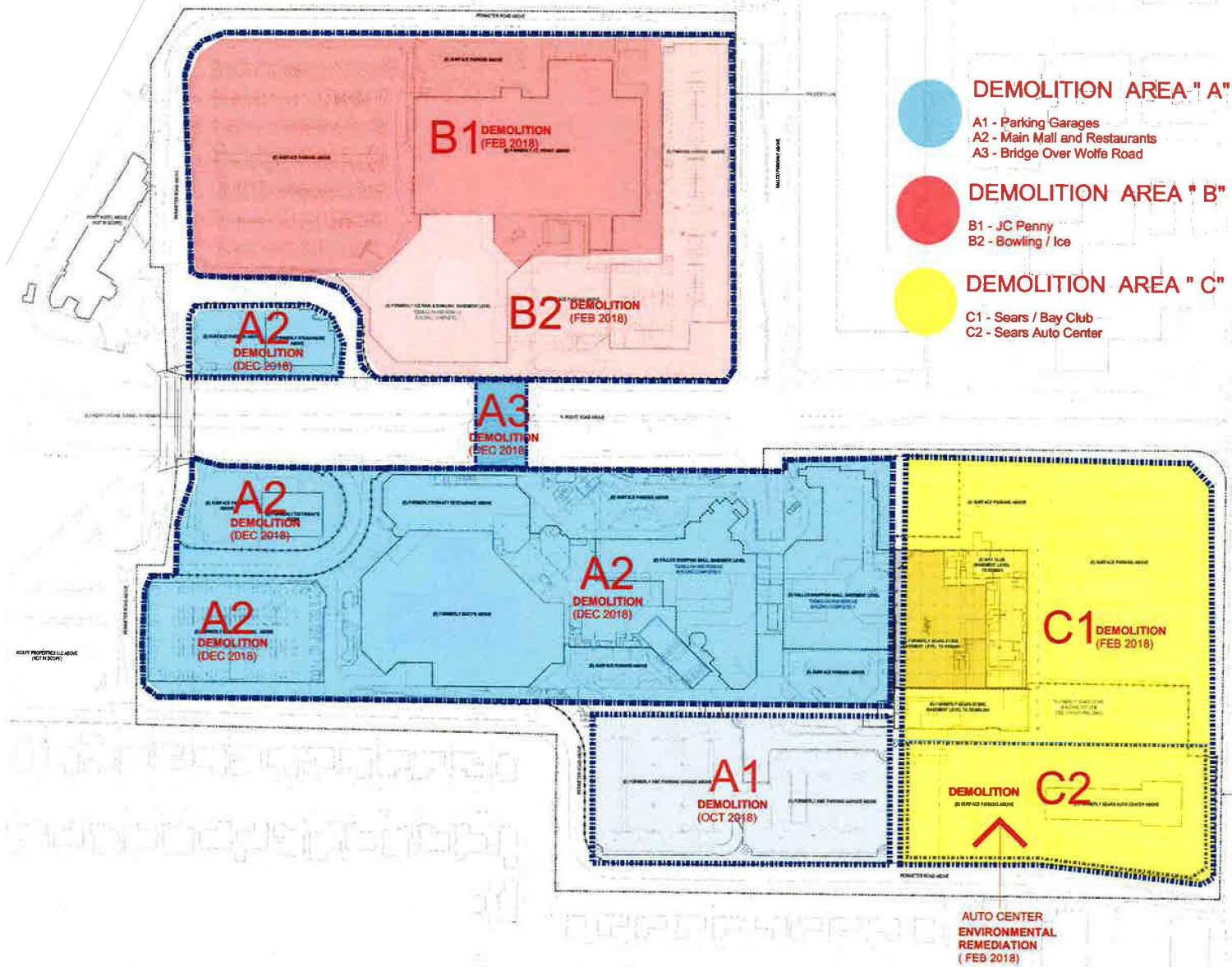


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Figure 5
 REDEVELOPMENT EXCAVATION AREAS

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Figure 6

DEMOLITION PHASING

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 VALLCO PROPERTY OWNER, LLC
 PALO ALTO, CALIFORNIA

Drawn By: LS 4/9/2019
 Checked:
 Approved:
 DWG Name: 314MN1588-007

TABLES



Table 1

Sample Rationale and Analysis
Former Valco Mall

Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD		
S-1 & S-2	10/30/2018	Direct Push	1	Potential surface releases at Sears Automotive Center Historical agricultural activities	x	x	x		x	x		x						
			5	Potential releases near USTs southeast of Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
			15	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
			20	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
S-3 & S-4	10/30/2018	Direct Push	1	Potential releases near oil-water separator east of Sears Automotive Center Historical agricultural activities	x	x	x	x	x	x		x						
			5	Potential releases near oil-water separator east of Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
			15	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
			20	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
S-5 through S-8	10/30/2018	Direct Push	1	Potential surface releases at Sears Automotive Center Historical agricultural activities	x	x	x	x	x	x		x						
			5	Potential releases near Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near Sears Automotive Center			x		x	x		x						
			15	Potential releases near Sears Automotive Center			x		x	x		x						
			20	Potential releases near Sears Automotive Center			x		x	x		x						
W-1 through W-5	10/31/2018	Direct Push	1	Spatial characterization on west side of Wolfe Road Historical agricultural activities	x	x	x	x	x	x		x						
			5	Spatial characterization across former Mall	x	x	x		x	x		x						
			10	Spatial characterization across former Mall			x		x	x		x						
			15	Spatial characterization across former Mall			x		x	x		x						
			20	Spatial characterization across former Mall			x		x	x		x						
E-2	10/31/2018	Direct Push	1	Spatial characterization across former Mall Historical agricultural activities	x	x	x	x	x	x		x						
			5	Spatial characterization across former Mall	x	x	x		x	x		x						
			10	Spatial characterization across former Mall			x		x	x		x						
			15	Spatial characterization across former Mall			x		x	x		x						
			20	Spatial characterization across former Mall			x		x	x		x						

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Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD		
SB-001 through SB-007	1/10/2019	Hand Auger	0.5	Historical agricultural buildings and activities	x			x										
			1	Historical agricultural buildings and activities	x			x										
			2	Historical agricultural buildings and activities	x			x										
			3	Historical agricultural buildings and activities	x			x										
E-1	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			15	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
E-2	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
E-3	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			15	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
E-4 through E-6	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x		
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x		
E-7	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x		
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x		
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x		
E-7	9/6/2016	Direct Push	10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x			
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x			
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x			

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Sample Rationale and Analysis
Former Valco Mall

Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD	
E-8	9/6/2016	Direct Push	0	Historical agricultural activities Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			15	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x

Abbreviations

ft bgs: feet below ground surface

PCBs: polychlorinated biphenyls by EPA Method 8082

PAHs: polycyclic aromatic hydrocarbons by EPA Method 8270

TPHg: total petroleum hydrocarbons as gasoline by EPA Method 8015M

TPHd, mo: total petroleum hydrocarbons as diesel and motor oil by EPA Method 8015M

SVOCs: semi-volatile organic compounds by EPA Method 8270

VOCs: volatile organic compounds by EPA Method 8260

TCDD: Tetrachlorodibenzodioxin by EPA method 1613B

Notes:

(a) Samples from 2016 were collected by Geosphere. Samples from 2018 were collected by WSP

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> ^[6] (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
S-1-(1)	0.54	J 3.7	160	0.45	0.19	J 65	15	31	7.1	0.052	0.39
S-1-(5)	0.49	J 3.1	140	0.52	0.18	J 87	16	29	6.4	0.05	0.26
S-1-(10)	0.33	J 4.1	200	0.64	0.2	J 94	21	46	8.1	0.049	0.25
S-1-(15)	0.23	J 3	130	0.57	0.2	J 93	18	37	5.7	0.088	0.24
S-1-(20)	0.45	J 4	100	0.47	0.2	J 45	11	28	6.4	0.099	0.58
S-2-(1)	0.46	J 3.6	190	0.54	0.18	J 76	18	41	7.6	0.062	0.19
S-2-(5)	0.45	J 3.1	180	0.42	0.19	J 74	13	28	5.1	0.032	0.76
S-2-(10)	0.38	J 3	250	0.47	0.18	J 80	14	27	5.1	0.045	1.5
S-2-(15)	0.29	J 3.9	110	0.46	0.13	J 52	10	30	6	0.12	0.41
S-2-(20)	0.55	J 4.1	110	0.5	0.2	J 44	11	27	6.4	0.13	0.53
S-3-(1)	0.53	J 4	230	0.43	0.24	J 45	12	29	5.9	0.06	0.58
S-3-(5)	0.44	J 3.9	150	0.55	0.2	J 83	18	41	7.6	0.055	0.3
S-3-(10)	0.81	J 2.5	150	0.53	0.2	J 93	16	28	5.5	0.042	0.32
S-3-(15)	0.28	J 4.9	98	0.56	0.15	J 48	10	29	7.5	0.081	0.7
S-3-(20)	0.64	J 3.9	120	0.47	0.17	J 39	10	26	6.2	0.095	0.55
S-4-(1)	0.45	J 4.5	160	0.51	0.26	78	17	39	15	0.053	0.36
S-4-(5)	0.37	J 3.1	190	0.5	0.18	J 79	19	34	6.9	0.087	0.29
S-4-(10)	0.4	J 3.3	140	0.53	0.18	J 80	18	37	7.2	0.039	0.33
S-4-(15)	0.51	J 6.2	150	0.69	0.25	54	14	42	10	0.093	0.91
S-4-(20)	0.61	J 5	110	0.55	0.23	J 48	13	32	7.6	0.12	0.67
S-5-(1)	0.46	J 3.4	180	0.57	0.15	J 78	16	37	7.4	0.054	0.21
S-5-(5)	0.53	J 4.1	180	0.57	0.19	J 88	19	43	8.3	0.052	0.24
S-5-(10)	0.44	J 3.2	150	0.62	0.24	94	17	39	6.7	0.061	0.3
S-5-(15)	0.7	J 2.7	99	0.45	0.095	J 61	13	26	4.4	0.044	0.67
S-5-(20)	0.3	J 2.8	82	0.33	0.1	J 36	8.4	23	4.6	0.082	0.53
S-6-(1)	0.45	J 2.7	150	0.32	0.17	J 45	10	25	12	0.065	1.1
S-6-(5)	0.46	J 3.1	100	0.42	0.17	J 64	14	27	6.3	0.052	0.31
S-6-(10)	0.4	J 4.8	120	0.48	0.15	J 45	11	26	6.8	0.071	0.75
S-6-(15)	0.34	J 4.9	110	0.57	0.19	J 47	11	30	7.2	0.18	0.69
S-6-(20)	0.15	J 3.7	120	0.46	0.19	J 80	17	33	5.8	0.12	0.37
S-7-(2)	0.34	J 2.7	120	0.48	0.19	J 62	15	35	8.2	0.67	0.3
S-7-(5)	0.45	J 4	160	0.54	0.19	J 70	16	34	7.1	0.056	0.35
S-7-(10)	0.51	J 4.1	130	0.57	0.19	J 61	16	38	7.2	0.071	0.44
S-7-(15)	0.3	J 4.1	78	0.51	0.17	J 49	11	26	6.5	0.12	0.68
S-7-(20)	0.9	J 2.6	69	0.37	0.12	J 40	10	31	4.8	0.11	0.63
S-8-(1)	0.85	J 1.8	110	0.23	0.29	33	8.3	15	2.9	0.036	0.37
S-8-(5)	0.5	J 3.8	190	0.6	0.37	88	20	41	7.8	0.052	0.19
S-8-(10)	0.41	J 3.6	120	0.51	0.35	71	13	30	6.5	0.054	0.22
S-8-(15)	0.57	J 4.9	120	0.53	0.27	J 52	12	30	7	0.13	0.63
S-8-(20)	0.55	J 4.5	110	0.51	0.36	49	12	33	7.1	0.043	0.74
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
W-1-(1)	0.71 J	3.8	140	0.41	0.33	60	14	35	8.2	0.083	0.84
W-1-(5)	0.43 J	5.1	150	0.53	0.33	61	15	37	8	0.14	0.46
W-1-(10)	0.39 J	4.9	140	0.55	0.44	51	13	30	8.3	0.083	0.64
W-1-(15)	0.33 J	5.3	130	0.56	0.37	47	13	34	8.3	0.14	0.68
W-1-(20)	2 U	4.5	160	0.59	0.33	79	18	39	7.2	0.11	0.13 J
W-2-(2)	2 U	2.8	130	0.57	0.3	60	13	27	5.3	0.059	0.23 J
W-2-(5)	1.9 U	5.2	97	0.67	0.31	56	15	39	5.4	0.11	0.13 J
W-2-(10)	2 U	3.7	81	0.6	0.35	58	11	35	5	0.12	0.21 J
W-2-(15)	2 U	4.1	100	0.64	0.29	47	11	37	6.3	0.13	0.2 J
W-2-(20)	1.9 U	3.5	110	0.55	0.71	60	9.7	26	4.9	0.081	2
W-3-(1)	2 U	3.4	460	0.24	0.45	27	8.6	19	1.1	0.24	0.31
W-3-(5)	2 U	5	99	0.69	0.35	57	16	43	6.7	0.15	0.23 J
W-3-(10)	2 U	3.9	84	0.59	0.31	54	12	29	5.1	0.076	0.21 J
W-3-(15)	1.9 U	5.9	130	0.68	0.36	53	13	39	8.1	0.073	0.26
W-3-(20)	1.9 U	5.9	130	0.76	0.44	44	13	33	9.1	0.16	0.61
W-4-(1)	2 U	5	200	0.72	0.43	88	18	40	8	0.13	0.2 J
W-4-(5)	1.9 U	4	150	0.61	0.37	58	14	26	6.3	0.063	0.17 J
W-4-(10)	2 U	8.1	180	0.95	0.57	71	23	58	12	0.11	0.54
W-4-(15)	0.65 J	5.8	130	0.61	0.38	51	14	36	8.6	0.13	0.72
W-4-(20)	0.26 J	5	130	0.6	0.48	51	13	34	8.3	0.088	0.65
W-5-(1)	0.33 J	3.5	210	0.55	0.4	70	17	37	7.4	0.058	0.23 J
W-5-(5)	0.4 J	2.5	79	0.3	0.25 J	33	8.2	15	5.4	0.089	0.23 J
W-5-(10)	0.54 J	3.9	130	0.52	0.4	75	17	37	7.4	0.076	0.3
W-5-(15)	0.4 J	4.5	130	0.53	0.39	55	12	26	7.2	0.09	0.61
W-5-(20)	0.47 J	4.4	100	0.51	0.43	63	16	38	7.3	0.11	0.41
E-2-(1)	1.9 U	2.5	180	0.7	0.44	82	20	37	6.7	0.038	0.11 J
E-2-(5)	1.8 U	3.3	150	0.67	0.42	81	18	35	9	0.061	0.23 U
E-2-(10)	2 U	4	200	0.68	0.37	86	17	38	7.6	0.072	0.25 U
E-2-(15)	1.9 U	3.6	220	0.68	0.39	83	20	30	6.4	0.072	0.23 U
E-2-(20)	2 U	4.6	170	0.73	0.36	81	16	37	8.5	0.033	0.19 J
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
E1-1	5 U	2.5	344	1.3 U	1 U	32.9	13 U	25.4	7.4	0.087	13 U
E1-2	4.7 U	3.5	174	1.2 U	0.94 U	84.9	19.7	38.1	9.1	0.045	12 U
E1-3	4.8 U	24 U	76.4	1.2 U	0.96 U	54.7	12 U	23.3	4.8 U	0.063	12 U
E1-4	3.7 U	3	96.7	0.92 U	0.74 U	89.6	19.6	30.2	7.3	0.043	9.2 U
E1-8	3.7 U	3.6	90.9	0.93 U	0.74 U	27.8	9.3 U	19.3	7.4	0.45	9.3 U
E2-1	3.2 U	3.3	111	0.81 U	0.65 U	50.9	13	27.1	7.7	0.092	8.1 U
E2-2	3.4 U	3.1	218	0.86 U	0.69 U	74.4	16.1	35	9.3	0.04 U	8.6 U
E2-3	3.9 U	3.1	198	0.97 U	0.78 U	79.8	18.8	36.4	9.3	0.038 U	9.7 U
E2-5	4.3 U	3.7	164	1.1 U	0.86 U	72.6	17.7	37	8.5	0.1	11 U
E2-7	4.6 U	3	128	1.1 U	0.92 U	67.7	16.1	35	7.6	0.093	11 U
E3-1	3.5 U	3.2	152	0.88 U	0.7 U	62	14.2	29.6	8.1	0.042	8.8 U
E3-2	4.1 U	2.7	143	1 U	0.83 U	65.1	15.2	30.9	9.1	0.042	10 U
E3-4	3.4 U	3.2	147	0.86 U	0.69 U	66.1	15.5	30.6	7.4	0.1	8.6 U
E3-6	3.8 U	3.1	120	0.94 U	0.75 U	78.1	12.6	27.7	6.9	0.062	9.4 U
E4-1	4.2 U	3.9	172	1.1 U	0.85 U	82.5	17.9	39	9.6	0.098	11 U
E4-2	3.7 U	4.5	167	0.92 U	0.74 U	65.3	16.7	32	10.5	0.044	9.2 U
E4-3	4.4 U	4.7	140	1.1 U	0.88 U	58.7	15.8	34.1	9.7	0.12	11 U
E5-1	3.3 U	3.8	364	0.83 U	0.66 U	66.6	14.7	33.1	15.7	0.09	8.3 U
E5-2	4.6 U	4.1	158	1.1 U	0.92 U	74.1	16.5	33.5	14.4	0.048	11 U
E5-3	4.5 U	2.9	136	1.1 U	0.89 U	73.2	16.9	33.3	8.1	0.045	11 U
E6-1	3.6 U	3.5	135	0.91 U	0.73 U	77.3	16.5	35.1	15.1	0.13	9.1 U
E6-2	4.8 U	3.5	199	1.2 U	0.96 U	78.8	18.1	37	9	0.056	12 U
E6-4	4.2 U	2.4	135	1.1 U	0.85 U	82.3	18.3	34	7.7	0.047	11 U
E7-1	4.7 U	2.4 U	156	1.2 U	0.94 U	69	14.8	33.9	10.3	0.048	12 U
E7-2	4.2 U	3	164	1.1 U	0.84 U	71.4	19.3	34.9	9.2	0.039 U	11 U
E7-3	4.4 U	2.7	139	1.1 U	0.88 U	69	17.2	33.4	7.6	0.04 U	11 U
E7-5	4.2 U	4.2	115	1.1 U	0.84 U	56.7	11.4	31.1	8.5	0.12	11 U
E8-1	4.8 U	3.7	142	1.2 U	0.95 U	70.4	14.6	33.8	37.5	0.12	12 U
E8-2	4.6 U	3	177	1.2 U	0.93 U	76.3	17.6	35.5	9.1	0.037 U	12 U
E8-3	3.8 U	3.1	112	0.95 U	0.76 U	77.5	18.1	33.5	8.2	0.055	9.5 U
E8-4	4.5 U	4.4	86.7	1.1 U	0.89 U	49.5	11.1	25.1	8.2	0.065	11 U
E8-5	4.7 U	3.6	115	1.2 U	0.93 U	48.9	12 U	27.3	7.4	0.086	12 U
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

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Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
S-1-(1)	87	2 U	0.27 U	0.53 U	51	49
S-1-(5)	74	2 U	0.26 U	0.53 U	69	47
S-1-(10)	110	2 U	0.27 U	0.54 U	64	65
S-1-(15)	85	2 U	0.25 U	0.49 U	81	52
S-1-(20)	57	1.9 U	0.24 U	0.48 U	43	46
S-2-(1)	86	1.9 U	0.24 U	0.49 U	52	58
S-2-(5)	67	2 U	0.25 U	0.51 U	60	43
S-2-(10)	68	2 U	0.27 U	0.54 U	66	42
S-2-(15)	61	1.9 U	0.24 U	0.47 U	43	44
S-2-(20)	58	2 U	0.26 U	0.52 U	41	46
S-3-(1)	55	2 U	0.26 U	0.53 U	46	47
S-3-(5)	96	2 U	0.25 U	0.5 U	60	60
S-3-(10)	80	2 U	0.25 U	0.51 U	75	47
S-3-(15)	64	1.9 U	0.23 U	0.46 U	45	52
S-3-(20)	50	1.9 U	0.24 U	0.48 U	39	42
S-4-(1)	84	1.9 U	0.24 U	0.49 U	60	64
S-4-(5)	90	2 U	0.27 U	0.54 U	59	51
S-4-(10)	82	2 U	0.26 U	0.52 U	54	54
S-4-(15)	67	1.8 U	0.23 U	0.46 U	53	73
S-4-(20)	63	2 U	0.27 U	0.54 U	46	56
S-5-(1)	92	2 U	0.27 U	0.53 U	50	55
S-5-(5)	100	2 U	0.26 U	0.52 U	62	63
S-5-(10)	73	1.8 U	0.23 U	0.46 U	76	56
S-5-(15)	59	2 U	0.26 U	0.52 U	56	42
S-5-(20)	31	1.9 U	0.23 U	0.46 U	45	41
S-6-(1)	53	2 U	0.27 U	0.55 U	39	70
S-6-(5)	71	2 U	0.25 U	0.51 U	46	45
S-6-(10)	56	2 U	0.27 U	0.54 U	46	50
S-6-(15)	63	2 U	0.25 U	0.49 U	43	52
S-6-(20)	85	2 U	0.27 U	0.54 U	66	46
S-7-(2)	68	2 U	0.27 U	0.53 U	56	60
S-7-(5)	80	2 U	0.26 U	0.53 U	53	58
S-7-(10)	59	1.9 U	0.23 U	0.47 U	68	58
S-7-(15)	56	2 U	0.25 U	0.5 U	39	45
S-7-(20)	40	2 U	0.27 U	0.54 U	49	44
S-8-(1)	50	1.8 U	0.23 U	0.45 U	23	26
S-8-(5)	99	1.9 U	0.24 U	0.47 U	60	57
S-8-(10)	64	1.9 U	0.24 U	0.47 U	54	48
S-8-(15)	63	2 U	0.27 U	0.54 U	46	49
S-8-(20)	59	2 U	0.26 U	0.52 U	48	49
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
W-1-(1)	79	2 U	0.26 U	0.52 U	51	55
W-1-(5)	93	2 U	0.25 U	0.49 U	48	56
W-1-(10)	54	2 U	0.25 U	0.5 U	45	64
W-1-(15)	69	1.9 U	0.24 U	0.48 U	43	57
W-1-(20)	100	2 U	0.25 U	0.49 U	61	57
W-2-(2)	55	2 U	0.27 U	0.55 U	59	48
W-2-(5)	62	1.9 U	0.24 U	0.48 U	68	55
W-2-(10)	69	2 U	0.27 U	0.55 U	66	53
W-2-(15)	50	2 U	0.26 U	0.52 U	68	56
W-2-(20)	57	1.9 U	1.1	0.48 U	56	44
W-3-(1)	47	2 U	0.27 U	0.54 U	29	31
W-3-(5)	79	2 U	0.27 U	0.53 U	70	54
W-3-(10)	65	2 U	0.26 U	0.53 U	63	49
W-3-(15)	74	1.9 U	0.24 U	0.49 U	55	55
W-3-(20)	65	1.9 U	0.24 U	0.47 U	55	66
W-4-(1)	96	2 U	0.25 U	0.5 U	71	64
W-4-(5)	66	1.9 U	0.23 U	0.47 U	60	57
W-4-(10)	120	2 U	0.27 U	0.53 U	79	89
W-4-(15)	70	2 U	0.25 U	0.5 U	49	60
W-4-(20)	59	1.9 U	0.24 U	0.49 U	49	69
W-5-(1)	91	2 U	0.25 U	0.5 U	46	59
W-5-(5)	43	2 U	0.27 U	0.54 U	27	35
W-5-(10)	97	2 U	0.27 U	0.53 U	52	59
W-5-(15)	58	2 U	0.25 U	0.5 U	45	55
W-5-(20)	72	1.9 U	0.24 U	0.48 U	54	56
E-2-(1)	92	1.9 U	0.24 U	0.47 U	67	54
E-2-(5)	85	1.8 U	0.23 U	0.45 U	68	54
E-2-(10)	100	2 U	0.25 U	0.5 U	68	57
E-2-(15)	85	1.9 U	0.23 U	0.47 U	72	49
E-2-(20)	89	2 U	0.26 U	0.52 U	66	58
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[2][3]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
E1-1	36.7	5 U	2.5 U	2.5 U	37.2	44.7
E1-2	105	4.7 U	2.4 U	2.4 U	64.1	58.3
E1-3	48.7	4.8 U	2.4 U	2.4 U	59.5	35.2
E1-4	87.6	3.7 U	1.8 U	1.8 U	69	48.5
E1-8	36.2	3.7 U	1.9 U	1.9 U	31.2	47.5
E2-1	69.1	3.2 U	1.6 U	1.6 U	36.5	46
E2-2	94.4	3.4 U	1.7 U	1.7 U	47.2	52.6
E2-3	100	3.9 U	1.9 U	1.9 U	49.2	54.8
E2-5	95.6	4.3 U	2.2 U	2.2 U	53.4	53.8
E2-7	90.8	4.6 U	2.3 U	2.3 U	44.5	56.5
E3-1	70.9	3.5 U	1.8 U	1.8 U	47.2	55.2
E3-2	77.5	4.1 U	2.1 U	2.1 U	50	52
E3-4	78.2	3.4 U	1.7 U	1.7 U	54.7	47
E3-6	65.5	3.8 U	1.9 U	1.9 U	66.7	47.7
E4-1	101	4.2 U	2.1 U	2.1 U	61.4	59.7
E4-2	82.4	3.7 U	1.8 U	1.8 U	52.5	56.6
E4-3	93.7	4.4 U	2.2 U	2.2 U	49.2	58
E5-1	72.5	3.3 U	1.7 U	1.7 U	60.9	61.9
E5-2	86.1	4.6 U	2.3 U	2.3 U	59.6	64.6
E5-3	86.9	4.5 U	2.2 U	2.2 U	52.2	52.9
E6-1	82.6	3.6 U	1.8 U	1.8 U	60.3	58
E6-2	98.4	4.8 U	2.4 U	2.4 U	54	57.1
E6-4	81.8	4.2 U	2.1 U	2.1 U	63.9	47.9
E7-1	82.5	4.7 U	2.4 U	2.4 U	51.2	52.2
E7-2	96.6	4.2 U	2.1 U	2.1 U	41.8	53
E7-3	68.6	4.4 U	2.2 U	2.2 U	60.1	51.9
E7-5	68.4	4.2 U	2.1 U	2.1 U	46.4	52.7
E8-1	81.1	4.8 U	2.4 U	2.4 U	52.2	54
E8-2	93.4	4.6 U	2.3 U	2.3 U	52.7	52.7
E8-3	83.1	3.8 U	1.9 U	1.9 U	53.9	49
E8-4	61.8	4.5 U	2.2 U	2.2 U	44.9	49.6
E8-5	62.6	4.7 U	2.3 U	2.3 U	43	50
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][5]}	<u>Lead</u> (mg/kg)	<u>Arsenic</u> ^[6] (mg/kg)
SB-001-(0.5)	38	5.1
SB-001-(1)	56	4.9
SB-001-(2)	6.2	4.4
SB-001-(3)	4.7	3.4
SB-002-(0.5)	16	4.2
SB-002-(1)	8.5	4.0
SB-002-(2)	9.6	4.2
SB-002-(3)	5.9	4.0
SB-003-(0.5)	11	5.2
SB-003-(1)	4.5	2.8
SB-003-(2)	3.3	2.4
SB-003-(3)	5.8	3.4
SB-004-(0.5)	30	6
SB-004-(1)	14	4.1
SB-004-(2)	30 B	6.3
SB-004-(3)	17 B	4.0
SB-005-(0.5)	21 B	4.9
SB-005-(1)	21 B	5.8
SB-005-(2)	6.5 B	4.9
SB-005-(3)	6.2 B	4.4
SB-006-(0.5)	6.7 B	5.6
SB-006-(1)	6.6 B	4.9
SB-006-(2)	5.5 B	4.7
SB-006-(3)	6.5 B	3.9
SB-007-(0.5)	5.2 B	2.7
SB-007-(1)	7.7 B	4.5
SB-007-(2)	6.7 B	4.5
SB-007-(3)	5.9 B	4.9
ESLs Residential (mg/kg)	82	[4]
RSLs Residential (mg/kg)	400	12 ^[4]

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

Notes:

mg/kg = micrograms per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

B = analyte detected in the associated method blank and in the sample

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than the reporting limit; results in red font indicate exceedance of screening levels.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

[4] Risk-based screening level concentrations of arsenic in soil are often below naturally occurring (background) concentrations. DTSC recognizes 12 mg/kg as the upper bound estimate for background concentrations in California. SF Water Board cited that Duvergé (2011) conducted a study of regional background concentrations of arsenic and proposed an upper estimate for background arsenic (99th percentile) of 11 mg/kg.

[5] Samples collected by WSP on 1/10/2019. Sample nomenclature is as follows: "sample type - sample location - (depth)".

[6] All Arsenic concentrations are below background concentrations established by the SF Water Board and DTSC.

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
S-1-(1)	1 U	12 Y	270
S-1-(5)	1.1 U	1.3 Y	3.3 J
S-1-(10)	1.1 U	0.48 JY	5 U
S-1-(15)	1 U	0.99 JY	5 U
S-1-(20)	1.1 U	0.55 JY	1.8 JY
S-2-(1)	1.1 U	0.82 JY	5.3
S-2-(5)	1.1 U	11 Y	260
S-2-(10)	1.1 U	22 Y	500
S-2-(15)	1.1 U	0.4 JY	5 U
S-2-(20)	1.1 U	0.42 JY	5 U
S-3-(1)	0.93 U	68 Y	1,600
S-3-(5)	1 U	0.87 JY	2.1 JY
S-3-(10)	1.1 U	2.2 Y	8.2
S-3-(15)	1.1 U	0.93 JY	15
S-3-(20)	0.94 U	1.2 Y	11
S-4-(1)	1.1 U	14 Y	34
S-4-(5)	1.1 U	6.4 Y	100
S-4-(10)	1.1 U	1 Y	9.1
S-4-(15)	1 U	3.8 Y	68
S-4-(20)	1.1 U	1.1 Y	13
S-5-(1)	0.95 U	13 Y	34
S-5-(5)	1.1 U	1.3 Y	2.1 J
S-5-(10)	0.99 U	4.6 Y	97
S-5-(15)	1 U	0.33 JY	5 U
S-5-(20)	0.94 U	1.2 Y	18
S-6-(1)	0.91 U	68 Y	790
S-6-(5)	0.94 U	4 Y	37
S-6-(10)	0.94 U	0.59 JY	5 UB
S-6-(15)	1 U	0.55 JY	5 UB
S-6-(20)	1.1 U	0.57 JY	5 U
S-7-(2)	3.2 Y	61	21
S-7-(5)	0.97 U	0.96 J	1.7 J
S-7-(10)	1.1 U	0.74 JY	5 U
S-7-(15)	0.14 J	0.57 JY	5 U
S-7-(20)	1 U	0.83 JY	1.6 JB
S-8-(1)	1 U	36 Y	1,100
S-8-(5)	1 U	0.76 JY	1.5 JB
S-8-(10)	1.1 U	0.7 JY	5 UB
S-8-(15)	0.94 U	0.85 JY	1.7 J
S-8-(20)	1.1 U	0.7 JY	2.2 J
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
W-1-(1)	1 U	12 Y	220
W-1-(5)	0.94 U	1.1 Y	12 B
W-1-(10)	0.93 U	2.3 Y	14
W-1-(15)	1 U	1.4 Y	20
W-1-(20)	0.91 U	0.61 J	5 U
W-2-(2)	0.93 U	5.5 J	98
W-2-(5)	0.94 U	0.61 J	1.9 J
W-2-(10)	0.93 U	0.74 J	3.8 J
W-2-(15)	0.99 U	2.4 B Y	2.4 J
W-2-(20)	1.1 U	41 B Y	440
W-3-(1)	0.93 U	4.7 B Y	25
W-3-(5)	1.1 U	2.4 B Y	2.4 J
W-3-(10)	0.97 U	1.9 B Y	2.2 J
W-3-(15)	0.93 U	1.1 B Y	5 U
W-3-(20)	1.1 U	1.6 B Y	2.1 J
W-4-(1)	1.1 U	4.5 B Y	11
W-4-(5)	1.1 U	3 Y	14
W-4-(10)	1.1 U	1.5 Y	6
W-4-(15)	0.94 U	0.6 J	2.1 J
W-4-(20)	1.1 U	1.1 Y	15
W-5-(1)	0.97 U	1.7 Y	4.5 JYZB
W-5-(5)	0.92 U	0.7 JY	5.8 B
W-5-(10)	0.93 U	0.71 JY	3.3 JYZB
W-5-(15)	1 U	0.66 JY	7.5 B
W-5-(20)	1.1 U	0.83 JY	3.3 JB
E-2-(1)	0.91 U	0.79 J	2.8 J
E-2-(5)	1.1 U	11 Y	44
E-2-(10)	0.93 U	1.5 Y	13
E-2-(15)	1.1 U	2.7 Y	28
E-2-(20)	0.91 U	1.5 Y	3.1 J
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

Summary of TPH Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
E1-1	2.7 U	120 J	841
E1-2	2.5 U	2.4 U	2.4 U
E1-3	2.4 U	2.5 U	2.5 U
E1-4	2.2 U	2.5 U	2.78 J
E1-8	2.5 U	2.6 U	2.6 U
E2-1	2.4 U	2.86 J	11.4
E2-2	2.2 U	2.5 U	2.5 U
E2-3	2.6 U	2.6 U	2.6 U
E2-5	2.6 U	2.5 U	2.5 U
E2-7	2.7 U	2.6 U	2.6 U
E3-1	2.8 U	2.5 U	6.52
E3-2	2.5 U	4.6 J	6.48
E3-4	2.7 U	2.4 U	2.4 J
E3-6	2.4 U	2.5 U	2.5 U
E4-1	2.2 U	2.5 U	3.6 J
E4-2	2.6 U	2.5 U	2.5 U
E4-3	3.1 U	2.5 U	2.5 U
E5-1	2.8 U	88.3	218
E5-2	2.4 U	3.02 J	10.8
E5-3	2.1 U	2.5 U	3.77 J
E6-1	2.8 U	6.24	23.9
E6-2	2.2 U	2.5 U	7.59
E6-4	2.3 U	2.5 U	3.42 J
E7-1	2.1 U	10.1	29.7
E7-2	2.1 U	2.5 U	5.22
E7-3	2.1 U	2.5 U	2.5 U
E7-5	2.4 U	2.5 U	2.5 U
E8-1	1.9 U	10.5	44.5
E8-2	2.1 U	2.5 U	7.88
E8-3	1.9 U	2.5 U	2.5 U
E8-4	2.4 U	2.5 U	2.5 U
E8-5	2.2 U	2.5 U	2.5 U
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

Notes:

mg/kg = micrograms per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

Y = Sample exhibits chromatographic pattern which does not resemble standard

B = compound was detected in associated method blank

Z = Sample exhibits unknown single peak or peaks

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates

[2] Bold results indicate the concentration is greater than the reporting limit; results in red font indicate exceedance of screening levels.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-1-(1) (µg/kg)	S-1-(5) (µg/kg)	S-2-(1) (µg/kg)	S-2-(5) (µg/kg)	S-3-(1) (µg/kg)	S-3-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	320 U	10 U	10 U	1,000 U	990 U	10 U
2-Methylnaphthalene	2.40E+05	2.4E+05	250 U	10 U	10 U	1,000 U	990 U	10 U
Benzo(a)anthracene	1.10E+03	1.1E+03	210 U	10 U	10 U	1,000 U	1,000 U	10 U
Benzo(a)pyrene	1.10E+02	1.1E+02	210 U	9 U	8.8 U	880 U	870 U	8.8 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	210 U	9 U	9 U	900 U	890 U	9 U
Benzo(g,h,i)perylene	--	--	210 U	10 U	10 U	1,000 U	1,000 U	10 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	210 U	9 U	9.5 U	950 U	940 U	9.5 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	210 U	13 U	13 U	1,300 U	1,300 U	13 U
Chrysene	1.10E+05	1.1E+05	210 U	11 U	11 U	1,100 U	1,100 U	11 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	210 U	9 U	9.4 U	940 U	930 U	9.4 U
Di-n-butylphthalate	--	6.3E+06	240 U	12 U	12 U	1,200 U	1,200 U	12 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	210 U	9 U	8.9 U	890 U	880 U	8.9 U
Pyrene	1.80E+06	1.8E+06	210 U	11 U	11 U	1,100 U	1,100 U	11 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-4-(1) (µg/kg)	S-4-(5) (µg/kg)	S-5-(1) (µg/kg)	S-5-(5) (µg/kg)	S-6-(1) (µg/kg)	S-6-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	100 U	99 U	13 U	10 U	250 U	20 U
2-Methylnaphthalene	2.40E+05	2.4E+05	100 U	99 U	9.9 U	10 U	250 U	20 U
Benzo(a)anthracene	1.10E+03	1.1E+03	100 U	100 U	8.4 U	10 U	250 U	20 U
Benzo(a)pyrene	1.10E+02	1.1E+02	88 U	87 U	8.4 U	8.8 U	220 U	18 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	90 U	89 U	8.4 U	9 U	220 U	18 U
Benzo(g,h,i)perylene	--	--	100 U	100 U	8.4 U	10 U	250 U	20 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	95 U	94 U	8.4 U	9.6 U	240 U	19 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	130 U	130 U	9 J	13 U	330 U	26 U
Chrysene	1.10E+05	1.1E+05	110 U	110 U	8.4 U	11 U	280 U	23 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	94 U	92 U	8.4 U	9.4 U	230 U	19 U
Di-n-butylphthalate	--	6.3E+06	120 U	120 U	9.5 U	12 U	300 U	24 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	89 U	87 U	8.4 U	8.9 U	220 U	18 U
Pyrene	1.80E+06	1.8E+06	110 U	110 U	8.4 U	11 U	270 U	22 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-7-(2) (µg/kg)	S-7-(5) (µg/kg)	S-8-(1) (µg/kg)	S-8-(5) (µg/kg)	W-1-(1) (µg/kg)	W-1-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	150 J	13 U	990 U	13 U	1,300 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	590	9.9 U	990 U	10 U	990 U	20 U
Benzo(a)anthracene	1.10E+03	1.1E+03	52 U	8.3 U	1,000 U	8.5 U	840 U	17 U
Benzo(a)pyrene	1.10E+02	1.1E+02	44 U	8.3 U	870 U	8.5 U	840 U	17 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	45 U	8.3 U	890 U	8.5 U	840 U	17 U
Benzo(g,h,i)perylene	--	--	51 U	8.3 U	1,000 U	8.5 U	840 U	17 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	48 U	8.3 U	940 U	8.5 U	840 U	17 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	66 U	8.5 U	1,300 U	8.6 U	850 U	17 U
Chrysene	1.10E+05	1.1E+05	57 U	8.3 U	1,100 U	8.5 U	840 U	17 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	47 U	8.3 U	930 U	8.5 U	840 U	17 U
Di-n-butylphthalate	--	6.3E+06	61 U	12 J	1,200 U	9.6 U	950 U	19 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	44 U	8.3 U	870 U	8.5 U	840 U	17 U
Pyrene	1.80E+06	1.8E+06	55 U	8.3 U	1,100 U	8.5 U	840 U	17 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	W-2-(2) (µg/kg)	W-2-(5) (µg/kg)	W-3-(1) (µg/kg)	W-3-(5) (µg/kg)	W-4-(1) (µg/kg)	W-4-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	260 U	13 U	100 U	10 U	50 U	50 U
2-Methylnaphthalene	2.40E+05	2.4E+05	200 U	9.9 U	100 U	10 U	50 U	50 U
Benzo(a)anthracene	1.10E+03	1.1E+03	170 U	8.4 U	100 U	10 U	51 U	51 U
Benzo(a)pyrene	1.10E+02	1.1E+02	170 U	8.4 U	88 U	8.9 U	44 U	44 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	170 U	8.4 U	90 U	9.1 U	45 U	45 U
Benzo(g,h,i)perylene	--	--	170 U	8.4 U	100 U	10 U	50 U	51 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	170 U	8.4 U	95 U	9.6 U	47 U	48 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	170 U	8.5 U	130 U	13 U	65 U	65 U
Chrysene	1.10E+05	1.1E+05	170 U	8.4 U	110 U	11 U	56 U	57 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	170 U	8.4 U	93 U	9.5 U	46 U	47 U
Di-n-butylphthalate	--	6.3E+06	190 U	11 J	120 U	12 U	60 U	61 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	170 U	8.4 U	88 U	9 U	44 U	44 U
Pyrene	1.80E+06	1.8E+06	170 U	8.4 U	110 U	11 U	54 U	55 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	W-5-(1) (µg/kg)	W-5-(5) (µg/kg)	E-2-(1) (µg/kg)	E-2-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	13 U	26 U	13 U	130 U
2-Methylnaphthalene	2.40E+05	2.4E+05	9.9 U	20 U	9.8 U	99 U
Benzo(a)anthracene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Benzo(a)pyrene	1.10E+02	1.1E+02	8.4 U	17 U	8.3 U	83 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Benzo(g,h,i)perylene	--	--	8.4 U	17 U	8.3 U	83 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	8.4 U	17 U	8.3 U	83 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	8.5 U	17 U	18 J	85 U
Chrysene	1.10E+05	1.1E+05	8.4 U	17 U	8.3 U	83 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	8.4 U	17 U	8.3 U	83 U
Di-n-butylphthalate	--	6.3E+06	9.5 U	19 U	9.4 U	95 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Pyrene	1.80E+06	1.8E+06	8.4 U	17 U	8.3 U	83 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E1-1 ^[6] (µg/kg)	E1-2 ^[6] (µg/kg)	E1-3 ^[6] (µg/kg)	E1-4 ^[6] (µg/kg)	E1-8 ^[6] (µg/kg)	E2-1 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	110 U	26 U	27 U	27 U	26 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	178 J	26 U	27 U	27 U	26 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	14 U	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	29.7 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	41.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(g,h,i)perylene	--	--	31.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	20.3 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	38.8 J
Chrysene	1.10E+05	1.1E+05	55.3	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	17.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	66 U	66 U	66 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	14 U	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Pyrene	1.80E+06	1.8E+06	68 U	16 U	17 U	17 U	16 U	16 U
1-Methylnaphthalene	--	1.8E+04	168 J	26 U	27 U	27 U	26 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E2-2 ^[6] (µg/kg)	E2-3 ^[6] (µg/kg)	E2-5 ^[6] (µg/kg)	E2-7 ^[6] (µg/kg)	E3-1 ^[6] (µg/kg)	E3-2 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	27 U	26 U	26 U	27 U	26 U	27 U
2-Methylnaphthalene	2.40E+05	2.4E+05	27 U	26 U	26 U	27 U	26 U	27 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(g,h,i)perylene	--	--	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	34 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Di-n-butylphthalate	--	6.3E+06	66 U	66 U	66 U	67 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Pyrene	1.80E+06	1.8E+06	17 U	16 U	16 U	17 U	16 U	17 U
1-Methylnaphthalene	--	1.8E+04	27 U	26 U	26 U	27 U	26 U	27 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E3-4 ^[6] (µg/kg)	E3-6 ^[6] (µg/kg)	E4-1 ^[6] (µg/kg)	E4-2 ^[6] (µg/kg)	E4-3 ^[6] (µg/kg)	E5-1 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	28 U	27 U	27 U	26 U	27 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	28 U	27 U	27 U	26 U	27 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	24.6
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	23.3
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	19.4
Benzo(g,h,i)perylene	--	--	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	40.2
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	7.3 J
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	34 U	33 U	34 U	33 U	34 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	85.8
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	12.6 J
Di-n-butylphthalate	--	6.3E+06	66 U	67 U	67 U	68 U	66 U	67.0 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	9.3 J
Pyrene	1.80E+06	1.8E+06	17 U	17 U	17 U	16 U	17 U	30.9 J
1-Methylnaphthalene	--	1.8E+04	28 U	27 U	27 U	26 U	27 U	26.0 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E5-2 ^[6] (µg/kg)	E5-3 ^[6] (µg/kg)	E6-1 ^[6] (µg/kg)	E6-2 ^[6] (µg/kg)	E6-4 ^[6] (µg/kg)	E7-1 ^[6] (µg/kg)	E7-2 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	26 U	27 U	27 U	27 U	27 U	27 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	26 U	27 U	27 U	27 U	27 U	27 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.3 U	3.4 U	4.0 J	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(g,h,i)perylene	--	--	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.3 U	3.4 U	4.9 J	3.4 U	3.4 U	3.4 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	66 U	66 U	67 U	67 U	67 U	66 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Pyrene	1.80E+06	1.8E+06	16 U	17 U	17 U	17 U	17 U	17 U	17 U
1-Methylnaphthalene	--	1.8E+04	26 U	27 U	27 U	27 U	27 U	27 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E7-3 ^[6] (µg/kg)	E7-5 ^[6] (µg/kg)	E8-1 ^[6] (µg/kg)	E8-2 ^[6] (µg/kg)	E8-3 ^[6] (µg/kg)	E8-4 ^[6] (µg/kg)	E8-5 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	27 U	27 U	26 U	26 U	27 U	26 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	27 U	27 U	26 U	26 U	27 U	26 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(g,h,i)perylene	--	--	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	67 U	67 U	67 U	66 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Pyrene	1.80E+06	1.8E+06	17 U	17 U	16 U	16 U	17 U	17 U	16 U
1-Methylnaphthalene	--	1.8E+04	27 U	27 U	26 U	26 U	27 U	26 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Vallco Mall**

Notes:

ug/kg = milligrams per kilogram

U = compound was not detected at a concentration greater than the method detection limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

ND = compound was not detected at a concentration greater than the method detection limit

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)".

[2] Bold results indicate the concentration is greater than the reporting limit.

[3] Only SVOCs or PAHs detected above the method detection limit in at least one boring are shown. All other SVOC or PAH compounds were not detected

[4] = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

[5] Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018. Concentration in $\mu\text{g}/\text{kg}$.

[6] Samples collected by Geosphere consultants, inc. on September 6, 2016

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	4,4'-DDD (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)	alpha-Chlordane ^[5] (µg/kg)
S-1-(1)	1.5 U	19 J	11 J	0.61 U	1 U	1.8 U
S-1-(5)	0.079 U	9.1 #	3.4	0.061 U	0.1 U	0.18 U
S-2-(1)	0.57 J	3.5 #	1.3 J	0.06 U	0.099 U	0.18 U
S-2-(5)	1.6 U	1.6 U	1.8 U	1.2 U	2 U	3.6 U
S-3-(1)	4 U	4 U	4.5 U	3 U	5 U	8.9 U
S-3-(5)	0.59 J C	3.3 #	0.34 U	0.061 U	0.1 U	0.18 U
S-4-(1)	6.3 #	65 #	1.2 J C	0.14 J C	0.23 J	0.18 U
S-4-(5)	0.079 U	0.098 U	0.089 U	0.06 U	0.099 U	0.18 U
S-5-(1)	0.16 U	0.18 J C	0.65 U	0.12 U	0.2 U	0.35 U
S-5-(5)	0.48 J	1.5 J	0.088 U	0.06 U	0.098 U	0.17 U
S-6-(1)	0.15 U	1.2 J	0.33 U	0.091 U	0.087 U	0.14 U
S-6-(5)	1.6 U	1.6 U	1.7 U	1.2 U	2 U	3.5 U
S-7-(2)	3.2 C	63 #	7.4 C #	0.97 J C	0.09 U	4.2 C #
S-7-(5)	0.19 J C	0.88 J	0.85 J	0.061 U	0.1 U	0.18 U
S-8-(1)	0.81 U	1.5 J C	0.92 U	0.62 U	1 U	1.8 U
S-8-(5)	0.082 U	0.082 U	0.092 U	0.062 U	0.1 U	0.18 U
W-1-(1)	0.16 U	0.16 U	0.18 U	0.13 U	0.21 U	0.37 U
W-1-(5)	0.08 U	0.08 U	0.09 U	0.061 U	0.1 U	0.18 U
W-2-(2)	1.5 J C	0.08	38 #	0.46 U	0.44 U	0.7 U
W-2-(5)	0.078 U	0.078 U	0.088 U	0.06 U	0.099 U	0.18 U
W-3-(1)	0.078 U	0.35 J	0.088 U	0.06 U	0.099 U	0.18 U
W-3-(5)	0.08 U	0.08 U	0.09 U	0.061 U	0.1 U	0.18 U
W-4-(1)	2.4	35	13 #	0.061 U	0.1 U	0.15 J C
W-4-(5)	0.079 U	0.079 U	0.09 U	0.061 U	0.1 U	0.18 U
W-5-(1)	0.15 U	1.7 J	0.77 J	0.061 U	0.1 U	0.18 U
W-5-(5)	0.082 U	0.082 U	0.092 U	0.063 U	0.1 U	0.18 U
E-2-(1)	0.08 U	0.33 J	0.09 U	0.061 U	0.1 U	0.18 U
E-2-(5)	47 #	81 #	1.7 U	4.2 J	0.5 U	1.2 J C
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--	4.80E+02
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01	1.7E+03

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	4,4'-DDD (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)	alpha-Chlordane ^{[5][9]} (µg/kg)
E1-1	12 U	11 U	13 U	10 U	10 U	140 U
E1-2	0.56 U	0.53 U	0.64 U	0.5 U	0.5 U	6.5 U
E1-3	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.8 U
E1-4	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E1-8	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E2-1	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E2-2	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E2-3	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E2-5	0.56 U	0.53 U	0.64 U	0.5 U	0.5 U	6.5 U
E2-7	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E3-1	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E3-2	1.7 J	20.8	0.65 U	0.51 U	0.51 U	6.7 U
E3-4	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E3-6	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E4-1	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E4-2	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E4-3	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E5-1	22.6 J	5.4 U	33.6 J	5.1 U	5.2 U	68 U
E5-2	2.8 U	24.7	8.4 J	2.5 U	2.5 U	33 U
E5-3	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E6-1	29.5 J	140	70.2	5.1 U	5.1 U	67 U
E6-2	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E6-4	0.59 U	0.55 U	0.67 U	0.52 U	0.52 U	6.8 U
E7-1	2.9 U	8.8 J	3.3 U	2.5 U	2.6 U	33 U
E7-2	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.8 U
E7-3	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E7-5	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E8-1	0.56 U	0.63 J	1.2 J	0.49 U	0.5 U	6.5 U
E8-2	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E8-3	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E8-4	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E8-5	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--	4.80E+02
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01	1.7E+03

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)
S-1-(1)	0.64 U	0.8 U	3.8 J	0.8 U	0.8 U	0.74 U	0.66 U
S-1-(5)	0.064 U	0.079 U	0.79 J	0.079 U	0.079 U	0.074 U	0.066 U
S-2-(1)	0.063 U	0.079 U	0.99 J	0.11 U	0.079 U	0.073 U	0.065 U
S-2-(5)	1.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.5 U	1.3 U
S-3-(1)	3.2 U	4 U	4 U	4 U	4 U	3.7 U	3.3 U
S-3-(5)	0.065 U	0.08 U	0.17 J	0.08 U	0.08 U	0.18 U	0.066 U
S-4-(1)	0.087 J C	0.094 J C	15 #	0.079 U	0.079 U	0.18 U	0.066 U
S-4-(5)	0.064 U	0.079 U	0.079 U	0.079 U	0.079 U	0.073 U	0.066 U
S-5-(1)	0.13 U	0.16 U	0.16 U	0.16 U	0.18 J C	0.35 U	0.6 J C
S-5-(5)	0.063 U	0.078 U	0.8 J	0.078 U	0.078 U	0.072 U	0.065 U
S-6-(1)	0.11 U	0.15 U	0.086 U	0.11 U	0.12 U	0.17 U	0.2 U
S-6-(5)	1.3 U	1.6 U	2.2 J	1.6 U	1.6 U	1.4 U	4 U
S-7-(2)	0.065 U	0.16 U	36 C #	0.08 U	0.08 U	0.18 U	15 #
S-7-(5)	0.065 U	0.08 U	0.54 J	0.11 U	0.08 U	0.18 U	0.067 U
S-8-(1)	0.66 U	0.81 U	0.81 U	0.81 U	0.81 U	0.75 U	0.68 U
S-8-(5)	0.066 U	0.082 U	0.082 U	0.082 U	0.082 U	0.076 U	0.068 U
W-1-(1)	0.13 U	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U	0.14 U
W-1-(5)	0.064 U	0.08 U	0.08 U	0.11 U	0.08 U	0.074 U	0.066 U
W-2-(2)	0.56 U	0.77 U	2.5 J	0.53 U	0.6 U	0.87 U	1 U
W-2-(5)	0.063 U	0.078 U	0.11 J C	0.21 J	0.078 U	0.073 U	0.2 U
W-3-(1)	0.063 U	0.078 U	0.078 U	0.078 U	0.078 U	0.073 U	0.2 U
W-3-(5)	0.064 U	0.08 U	0.08 U	0.08 U	0.08 U	0.074 U	0.21 U
W-4-(1)	0.064 U	0.08 U	2.9	0.08 U	0.08 U	0.074 U	0.21 U
W-4-(5)	0.064 U	0.079 U	0.079 U	0.079 U	0.079 U	0.074 U	0.21 U
W-5-(1)	0.064 U	0.08 U	0.15 J	0.08 U	0.08 U	0.074 U	0.066 U
W-5-(5)	0.066 U	0.082 U	0.082 U	0.11 U	0.082 U	0.076 U	0.068 U
E-2-(1)	0.065 U	0.08 U	0.24 J	0.08 U	0.08 U	0.074 U	0.066 U
E-2-(5)	0.32 U	0.4 U	81 #	0.6 J C	0.4 U	0.37 U	0.33 U
ESLs Residential (µg/kg)	--	--	3.70E+01	4.20E+05	4.20E+05	--	2.10E+04
RSLs Residential (µg/kg)	3.0E+02	--	3.4E+01	4.7E+05	470,000	--	1.9E+04

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)
E1-1	10 U	9.9 U	13 U	9.9 U	13 U	13 U	13 U
E1-2	0.5 U	0.48 U	0.61 U	0.48 U	0.6 U	0.61 U	0.61 U
E1-3	0.52 U	0.49 U	0.64 U	0.49 U	0.63 U	63 U	0.63 U
E1-4	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E1-8	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E2-1	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E2-2	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E2-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E2-5	0.5 U	0.48 U	0.61 U	0.48 U	0.6 U	0.61 U	0.61 U
E2-7	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E3-1	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E3-2	0.51 U	0.49 U	2.5 J	0.49 U	0.62 U	0.62 U	0.62 U
E3-4	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E3-6	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E4-1	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E4-2	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E4-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E5-1	5.2 U	4.9 U	6.4 U	4.9 U	6.3 U	6.3 U	6.3 U
E5-2	2.5 U	2.4 U	5.5 J	2.4 U	3.1 U	3.1 U	3.1 U
E5-3	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E6-1	5.1 U	4.9 U	32.2	4.9 U	6.2 U	6.2 U	6.2 U
E6-2	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E6-4	0.52 U	0.5 U	0.64 U	0.5 U	0.63 U	0.64 U	0.63 U
E7-1	2.6 U	2.4 U	4.9 J	8.3 U	8.3 U	3.1 U	3.1 U
E7-2	0.52 U	0.49 U	0.64 U	0.49 U	0.63 U	0.63 U	0.63 U
E7-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E7-5	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E8-1	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-2	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-3	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E8-4	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-5	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
ESLs Residential (µg/kg)	--	--	3.70E+01	4.20E+05	4.20E+05	--	2.10E+04
RSLs Residential (µg/kg)	3.0E+02	--	3.4E+01	4.7E+05	470,000	--	1.9E+04

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	Endrin aldehyde (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^[5] (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
S-1-(1)	5.9 U	0.81 U	1.2 J C	0.8 U	0.77 U	15 U	130 U
S-1-(5)	0.59 U	0.08 U	0.33 J	0.079 U	0.077 U	1.5 U	13 U
S-2-(1)	0.58 U	0.079 U	0.24 J C	0.079 U	0.076 U	1.5 U	13 U
S-2-(5)	12 U	1.6 U	2.2 U	1.6 U	1.5 U	30 U	270 U
S-3-(1)	29 U	4 U	5.5 U	4 U	3.8 U	76 U	660 U
S-3-(5)	0.59 U	0.081 U	0.34 J	0.08 U	0.077 U	1.5 U	13 U
S-4-(1)	0.58 U	0.12 U	0.14 U	0.079 U	0.076 U	1.5 U	13 U
S-4-(5)	0.58 U	0.08 U	0.14 U	0.079 U	0.076 U	1.5 U	13 U
S-5-(1)	1.1 U	0.16 U	0.27 U	0.16 U	0.15 U	3 U	26 U
S-5-(5)	0.57 U	0.079 U	0.23 J C	0.078 U	0.083 U	1.5 U	13 U
S-6-(1)	0.67 U	0.12 U	0.23 J	0.12 U	0.083 U	2.6 U	11 U
S-6-(5)	11 U	1.6 U	2.2 U	1.6 U	1.5 U	30 U	260 U
S-7-(2)	3.1 C #	0.081 U	22 C	0.08 U	10 C	2.7 U	13 U
S-7-(5)	0.59 U	0.081 U	0.14 J C	0.08 U	0.17 J	1.5 U	13 U
S-8-(1)	6 U	0.82 U	1.1 U	0.81 U	0.78 U	15 U	140 U
S-8-(5)	0.6 U	0.083 U	0.11 U	0.082 U	0.079 U	1.6 U	14 U
W-1-(1)	1.2 U	0.17 U	0.23 U	0.16 U	0.16 U	3.1 U	27 U
W-1-(5)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
W-2-(2)	3.4 U	0.61 U	0.67 U	0.6 U	0.42 U	13 U	57 U
W-2-(5)	0.58 U	0.079 U	0.11 U	0.078 U	0.075 U	1.5 U	13 U
W-3-(1)	0.58 U	0.079 U	0.11 U	0.078 U	0.076 U	1.5 U	13 U
W-3-(5)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
W-4-(1)	0.59 U	0.081 U	0.41 J C	0.08 U	0.077 U	1.5 U	13 U
W-4-(5)	0.59 U	0.08 U	0.11 U	0.079 U	0.077 U	1.5 U	13 U
W-5-(1)	0.59 U	0.081 U	0.22 J	0.08 U	0.077 U	1.5 U	13 U
W-5-(5)	0.6 U	0.083 U	0.11 U	0.082 U	0.079 U	1.6 U	14 U
E-2-(1)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
E-2-(5)	2.9 U	0.4 U	0.68 U	0.4 U	0.38 U	7.6 U	66 U
ESLs Residential (µg/kg)	--	5.50E+02	4.80E+02	1.20E+02	6.20E+01	3.50E+05	5.10E+02
RSLs Residential (µg/kg)	--	5.7E+02	1.7E+03	1.3E+02	7.0E+01	3.2E+05	4.9E+02

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	Endrin aldehyde (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^{[5][9]} (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
E1-1	13 U	10 U	140 U	11 U	12 U	17 U	680 U
E1-2	0.61 U	0.5 U	6.5 U	0.56 U	0.57 U	0.84 U	33 U
E1-3	0.63 U	0.52 U	6.8 U	0.57 U	0.59 U	0.87 U	34 U
E1-4	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E1-8	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E2-1	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E2-2	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E2-3	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E2-5	0.61 U	0.5 U	6.5 U	0.56 U	0.57 U	0.84 U	33 U
E2-7	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E3-1	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E3-2	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E3-4	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E3-6	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E4-1	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E4-2	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E4-3	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E5-1	6.3 U	5.2 U	68 U	5.7 U	5.9 U	8.7 U	340 U
E5-2	3.1 U	2.5 U	33 U	2.8 U	2.9 U	4.3 U	170 U
E5-3	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E6-1	6.2 U	5.1 U	67 U	5.7 U	5.8 U	8.6 U	330 U
E6-2	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E6-4	0.63 U	0.52 U	6.8 U	0.58 U	0.6 U	0.87 U	34 U
E7-1	3.1 U	2.6 U	33 U	2.8 U	2.9 U	4.3 U	170 U
E7-2	0.63 U	0.52 U	6.8 U	0.57 U	0.59 U	0.87 U	34 U
E7-3	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E7-5	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E8-1	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-2	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-3	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E8-4	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-5	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
ESLs Residential (µg/kg)	--	5.50E+02	4.80E+02	1.20E+02	6.20E+01	3.50E+05	5.10E+02
RSLs Residential (µg/kg)	--	5.7E+02	1.7E+03	1.3E+02	7.0E+01	3.2E+05	4.9E+02

Table 5

Summary of Pesticide Concentrations
Former Vallco Mall

<u>Sample ID</u> ^{[2][4][7]}	p,p'-DDD (µg/kg)	p,p'-DDE (µg/kg)	p,p'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)
SB-001-(0.5)	5 U	20	20	5 U	5 U
SB-001-(1)	3	72	57	2 U	2 U
SB-001-(2)	1 U	4.4	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	4.3	1.8	1 U	1 U
SB-002-(2)	1 U	9.1	3.1	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	5 U	18	14	5 U	5 U
SB-003-(1)	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2	2.9	2 U	2 U
SB-004-(0.5)	2 U	7.5	3.2 P	2 U	2 U
SB-004-(1)	5 U	9.6	9.5	5 U	5 U
SB-004-(2)	1.3	200	85	1 U	1 U
SB-004-(3)	1 U	7.8	2.7	1 U	1 U
SB-005-(0.5)	2 U	52	23	2 U	2 U
SB-005-(1)	2.6	110	32	2 U	2 U
SB-005-(2)	1 U	1.7	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1.7	1.3	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01

Table 5

Summary of Pesticide Concentrations
Former Vallco Mall

<u>Sample ID</u> ^{[2][4][7]}	alpha-Chlordane [5] (µg/kg)	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)
SB-001-(0.5)	5 U	5 U	5 U	5 U	5 U
SB-001-(1)	2 U	2 U	2 U	2.9	2 U
SB-001-(2)	1 U	1 U	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	1 U	1 U	1 U	1 U
SB-002-(2)	1 U	1 U	1 U	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	12	5 U	5 U	5.7	5 U
SB-003-(1)	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2 U	2 U	2 U	2 U
SB-004-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-004-(1)	5 U	5 U	5 U	5 U	5 U
SB-004-(2)	1.3 P	1 U	1 U	4.7	1 U
SB-004-(3)	1 U	1 U	1 U	1 U	1 U
SB-005-(0.5)	2 U	2 U	2 U	2.6	2 U
SB-005-(1)	2 U	2 U	2 U	3.5	2 U
SB-005-(2)	1 U	1 U	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1 U	1 U	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	4.80E+02	--	--	3.70E+01	4.20E+05
RSLs Residential (µg/kg)	1.7E+03	3.0E+02	--	3.4E+01	4.7E+05

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][4][7]}	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)	Endrin aldehyde (µg/kg)	Endrin ketone (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^[5] (µg/kg)
SB-001-(0.5)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-001-(1)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-001-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	5 U	5 U	5 U	5 U	5 U	5 U	11
SB-003-(1)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-004-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-004-(1)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-004-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-004-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-005-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-005-(1)	2 U	2 U	2 U	2 U	2 U	2 U	2.6
SB-005-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	4.20E+05	--	2.10E+04	--	--	5.50E+02	4.80E+02
RSLs Residential (µg/kg)	470,000	--	1.9E+04	--	--	5.7E+02	1.7E+03

Table 5

Summary of Pesticide Concentrations
Former Vallco Mall

Sample ID ^{[2][4][7]}	Chlordane (Technical) (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Hexachlorobenzene (µg/kg)	Hexachlorocyclopentadiene (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
SB-001-(0.5)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-001-(1)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-001-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-001-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-002-(1)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-003-(0.5)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-003-(1)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-003-(2)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-003-(3)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-004-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-004-(1)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-004-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-004-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-005-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-005-(1)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-005-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-005-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(0.5)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(1)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(3)	250 U	10 U	10 U	100 U	200 U	10 U	500 U
SB-007-(0.5)	500 U	20 U	20 U	200 U	400 U	20 U	1000 U
SB-007-(1)	500 U	20 U	20 U	200 U	400 U	20 U	1000 U
SB-007-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-007-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
ESLs Residential (µg/kg)	4.80E+02	#####	6.20E+01	1.80E+02	--	--	5.10E+02
RLS Residential (µg/kg)	1.7E+03	1.3E+02	7.0E+01	2.10E+02	1.80E+03	3.2E+05	4.9E+02

Table 5

**Summary of Pesticide Concentrations
Former Valco Mall**

Notes:

ug/kg = milligrams per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018. Concentration in µg/kg.

U = compound was not detected at a concentration greater than the method detection limit or reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

C = Presence confirmed, but relative percent difference (RPD) between columns exceeds 40%

= Continuing calibration verification (CCV) drift outside limits; average CCV drift within limits per method requirement.

P = Agreement between quantitative confirmation results exceed method recommended limits

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than reporting limit, results in red font indicate an exceedance of residential RSLs.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

[4] Samples collected by WSP on 1/10/19. Sample nomenclature is as follows: "sample type - sample location - (depth)". Gray gradient indicates increased depth.

[5] Screening level listed is for chlordane. Chlordane is a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components of which alpha-chlordane and gamma-chlordane are included

[6] Screening level listed is for Endosulfan. Endosulfan is a mix of Endosulfan I and Endosulfan II.

[7] The reporting limit is listed for non-detect compounds, indicated by a 'U' qualifier.

[8] The method detection limit is listed for non-detect compounds, indicated by a 'U' qualifier.

[9] The concentration listed is for Chlordane.

Table 6

**Summary of Herbicide Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	2,4,5-TP									
	2,4,5-T (µg/kg)	(Silvex) (µg/kg)	2,4-D (µg/kg)	2,4-DB (µg/kg)	Dalapon (µg/kg)	Dicamba (µg/kg)	Dichlorprop (µg/kg)	Dinoseb (µg/kg)	MCPA (µg/kg)	MCPP (µg/kg)
S-1-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
S-1-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-2-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-2-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-3-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-3-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-4-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
S-4-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-5-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-5-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-6-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-6-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-7-(2)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-7-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-8-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-8-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
ESLs Residential (µg/kg)	7.80E+06	--	--	--	--	--	--	--	--	--
RSLs Residential (µg/kg)	6.3E+05	5.1E+05	7.0E+05	1.9E+06	1.9E+06	1.9E+06	--	6.3E+04	3.2E+04	6.3E+04

Table 6

**Summary of Herbicide Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	2,4,5-TP									
	2,4,5-T (µg/kg)	(Silvex) (µg/kg)	2,4-D (µg/kg)	2,4-DB (µg/kg)	Dalapon (µg/kg)	Dicamba (µg/kg)	Dichloroprop (µg/kg)	Dinoseb (µg/kg)	MCPA (µg/kg)	MCPP (µg/kg)
W-1-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-1-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-2-(2)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
W-2-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-3-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-3-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-4-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-4-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-5-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-5-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
E-2-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
E-2-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
ESLs Residential (µg/kg)	7.80E+06	--	--	--	--	--	--	--	--	--
RSLs Residential (µg/kg)	6.3E+05	5.1E+05	7.0E+05	1.9E+06	1.9E+06	1.9E+06	--	6.3E+04	3.2E+04	6.3E+04

Notes:

µg/kg = milligrams per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the method detection limit shown

-- = not applicable or not available

[1] Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than the method detection limit,

Table 1

Sample Rationale and Analysis
Former Valco Mall

Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD		
S-1 & S-2	10/30/2018	Direct Push	1	Potential surface releases at Sears Automotive Center Historical agricultural activities	x	x	x		x	x		x						
			5	Potential releases near USTs southeast of Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
			15	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
			20	Potential releases near USTs southeast of Sears Automotive Center			x		x	x		x						
S-3 & S-4	10/30/2018	Direct Push	1	Potential releases near oil-water separator east of Sears Automotive Center Historical agricultural activities	x	x	x	x	x	x		x						
			5	Potential releases near oil-water separator east of Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
			15	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
			20	Potential releases near oil-water separator east of Sears Automotive Center			x		x	x		x						
S-5 through S-8	10/30/2018	Direct Push	1	Potential surface releases at Sears Automotive Center Historical agricultural activities	x	x	x	x	x	x		x						
			5	Potential releases near Sears Automotive Center	x	x	x		x	x		x						
			10	Potential releases near Sears Automotive Center			x		x	x		x						
			15	Potential releases near Sears Automotive Center			x		x	x		x						
			20	Potential releases near Sears Automotive Center			x		x	x		x						
W-1 through W-5	10/31/2018	Direct Push	1	Spatial characterization on west side of Wolfe Road Historical agricultural activities	x	x	x	x	x	x		x						
			5	Spatial characterization across former Mall	x	x	x		x	x		x						
			10	Spatial characterization across former Mall			x		x	x		x						
			15	Spatial characterization across former Mall			x		x	x		x						
			20	Spatial characterization across former Mall			x		x	x		x						
E-2	10/31/2018	Direct Push	1	Spatial characterization across former Mall Historical agricultural activities	x	x	x	x	x	x		x						
			5	Spatial characterization across former Mall	x	x	x		x	x		x						
			10	Spatial characterization across former Mall			x		x	x		x						
			15	Spatial characterization across former Mall			x		x	x		x						
			20	Spatial characterization across former Mall			x		x	x		x						

Table 1

Sample Rationale and Analysis
Former Valco Mall

Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD		
SB-001 through SB-007	1/10/2019	Hand Auger	0.5	Historical agricultural buildings and activities	x			x										
			1	Historical agricultural buildings and activities	x			x										
			2	Historical agricultural buildings and activities	x			x										
			3	Historical agricultural buildings and activities	x			x										
E-1	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			15	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
E-2	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	x
E-3	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			15	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
E-4 through E-6	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
E-7	9/6/2016	Direct Push	0	Historical agricultural activities	x													
				Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			10	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x	x	x	
			20	Spatial characterization across former Mall	x	x		x	x	x	x	x	x	x	x			

Table 1

Sample Rationale and Analysis
Former Valco Mall

Location	Collection Date (a)	Drilling Method	Approximate Depth (ft bgs)	Purpose	Pesticides	Herbicides	Title 22 Metals	Lead & Arsenic	TPHg	TPHd, mo	VOCs	SVOCs	PAHs	PCBs	Asbestos	2,3,7,8- TCDD	
E-8	9/6/2016	Direct Push	0	Historical agricultural activities Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	
			5	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			10	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			15	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x
			20	Spatial characterization across former Mall	x		x		x	x	x	x	x	x	x	x	x

Abbreviations

ft bgs: feet below ground surface

PCBs: polychlorinated biphenyls by EPA Method 8082

PAHs: polycyclic aromatic hydrocarbons by EPA Method 8270

TPHg: total petroleum hydrocarbons as gasoline by EPA Method 8015M

TPHd, mo: total petroleum hydrocarbons as diesel and motor oil by EPA Method 8015M

SVOCs: semi-volatile organic compounds by EPA Method 8270

VOCs: volatile organic compounds by EPA Method 8260

TCDD: Tetrachlorodibenzodioxin by EPA method 1613B

Notes:

(a) Samples from 2016 were collected by Geosphere. Samples from 2018 were collected by WSP

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> ^[6] (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
S-1-(1)	0.54	J 3.7	160	0.45	0.19	J 65	15	31	7.1	0.052	0.39
S-1-(5)	0.49	J 3.1	140	0.52	0.18	J 87	16	29	6.4	0.05	0.26
S-1-(10)	0.33	J 4.1	200	0.64	0.2	J 94	21	46	8.1	0.049	0.25
S-1-(15)	0.23	J 3	130	0.57	0.2	J 93	18	37	5.7	0.088	0.24
S-1-(20)	0.45	J 4	100	0.47	0.2	J 45	11	28	6.4	0.099	0.58
S-2-(1)	0.46	J 3.6	190	0.54	0.18	J 76	18	41	7.6	0.062	0.19
S-2-(5)	0.45	J 3.1	180	0.42	0.19	J 74	13	28	5.1	0.032	0.76
S-2-(10)	0.38	J 3	250	0.47	0.18	J 80	14	27	5.1	0.045	1.5
S-2-(15)	0.29	J 3.9	110	0.46	0.13	J 52	10	30	6	0.12	0.41
S-2-(20)	0.55	J 4.1	110	0.5	0.2	J 44	11	27	6.4	0.13	0.53
S-3-(1)	0.53	J 4	230	0.43	0.24	J 45	12	29	5.9	0.06	0.58
S-3-(5)	0.44	J 3.9	150	0.55	0.2	J 83	18	41	7.6	0.055	0.3
S-3-(10)	0.81	J 2.5	150	0.53	0.2	J 93	16	28	5.5	0.042	0.32
S-3-(15)	0.28	J 4.9	98	0.56	0.15	J 48	10	29	7.5	0.081	0.7
S-3-(20)	0.64	J 3.9	120	0.47	0.17	J 39	10	26	6.2	0.095	0.55
S-4-(1)	0.45	J 4.5	160	0.51	0.26	78	17	39	15	0.053	0.36
S-4-(5)	0.37	J 3.1	190	0.5	0.18	J 79	19	34	6.9	0.087	0.29
S-4-(10)	0.4	J 3.3	140	0.53	0.18	J 80	18	37	7.2	0.039	0.33
S-4-(15)	0.51	J 6.2	150	0.69	0.25	54	14	42	10	0.093	0.91
S-4-(20)	0.61	J 5	110	0.55	0.23	J 48	13	32	7.6	0.12	0.67
S-5-(1)	0.46	J 3.4	180	0.57	0.15	J 78	16	37	7.4	0.054	0.21
S-5-(5)	0.53	J 4.1	180	0.57	0.19	J 88	19	43	8.3	0.052	0.24
S-5-(10)	0.44	J 3.2	150	0.62	0.24	94	17	39	6.7	0.061	0.3
S-5-(15)	0.7	J 2.7	99	0.45	0.095	J 61	13	26	4.4	0.044	0.67
S-5-(20)	0.3	J 2.8	82	0.33	0.1	J 36	8.4	23	4.6	0.082	0.53
S-6-(1)	0.45	J 2.7	150	0.32	0.17	J 45	10	25	12	0.065	1.1
S-6-(5)	0.46	J 3.1	100	0.42	0.17	J 64	14	27	6.3	0.052	0.31
S-6-(10)	0.4	J 4.8	120	0.48	0.15	J 45	11	26	6.8	0.071	0.75
S-6-(15)	0.34	J 4.9	110	0.57	0.19	J 47	11	30	7.2	0.18	0.69
S-6-(20)	0.15	J 3.7	120	0.46	0.19	J 80	17	33	5.8	0.12	0.37
S-7-(2)	0.34	J 2.7	120	0.48	0.19	J 62	15	35	8.2	0.67	0.3
S-7-(5)	0.45	J 4	160	0.54	0.19	J 70	16	34	7.1	0.056	0.35
S-7-(10)	0.51	J 4.1	130	0.57	0.19	J 61	16	38	7.2	0.071	0.44
S-7-(15)	0.3	J 4.1	78	0.51	0.17	J 49	11	26	6.5	0.12	0.68
S-7-(20)	0.9	J 2.6	69	0.37	0.12	J 40	10	31	4.8	0.11	0.63
S-8-(1)	0.85	J 1.8	110	0.23	0.29	33	8.3	15	2.9	0.036	0.37
S-8-(5)	0.5	J 3.8	190	0.6	0.37	88	20	41	7.8	0.052	0.19
S-8-(10)	0.41	J 3.6	120	0.51	0.35	71	13	30	6.5	0.054	0.22
S-8-(15)	0.57	J 4.9	120	0.53	0.27	J 52	12	30	7	0.13	0.63
S-8-(20)	0.55	J 4.5	110	0.51	0.36	49	12	33	7.1	0.043	0.74
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
W-1-(1)	0.71 J	3.8	140	0.41	0.33	60	14	35	8.2	0.083	0.84
W-1-(5)	0.43 J	5.1	150	0.53	0.33	61	15	37	8	0.14	0.46
W-1-(10)	0.39 J	4.9	140	0.55	0.44	51	13	30	8.3	0.083	0.64
W-1-(15)	0.33 J	5.3	130	0.56	0.37	47	13	34	8.3	0.14	0.68
W-1-(20)	2 U	4.5	160	0.59	0.33	79	18	39	7.2	0.11	0.13 J
W-2-(2)	2 U	2.8	130	0.57	0.3	60	13	27	5.3	0.059	0.23 J
W-2-(5)	1.9 U	5.2	97	0.67	0.31	56	15	39	5.4	0.11	0.13 J
W-2-(10)	2 U	3.7	81	0.6	0.35	58	11	35	5	0.12	0.21 J
W-2-(15)	2 U	4.1	100	0.64	0.29	47	11	37	6.3	0.13	0.2 J
W-2-(20)	1.9 U	3.5	110	0.55	0.71	60	9.7	26	4.9	0.081	2
W-3-(1)	2 U	3.4	460	0.24	0.45	27	8.6	19	1.1	0.24	0.31
W-3-(5)	2 U	5	99	0.69	0.35	57	16	43	6.7	0.15	0.23 J
W-3-(10)	2 U	3.9	84	0.59	0.31	54	12	29	5.1	0.076	0.21 J
W-3-(15)	1.9 U	5.9	130	0.68	0.36	53	13	39	8.1	0.073	0.26
W-3-(20)	1.9 U	5.9	130	0.76	0.44	44	13	33	9.1	0.16	0.61
W-4-(1)	2 U	5	200	0.72	0.43	88	18	40	8	0.13	0.2 J
W-4-(5)	1.9 U	4	150	0.61	0.37	58	14	26	6.3	0.063	0.17 J
W-4-(10)	2 U	8.1	180	0.95	0.57	71	23	58	12	0.11	0.54
W-4-(15)	0.65 J	5.8	130	0.61	0.38	51	14	36	8.6	0.13	0.72
W-4-(20)	0.26 J	5	130	0.6	0.48	51	13	34	8.3	0.088	0.65
W-5-(1)	0.33 J	3.5	210	0.55	0.4	70	17	37	7.4	0.058	0.23 J
W-5-(5)	0.4 J	2.5	79	0.3	0.25 J	33	8.2	15	5.4	0.089	0.23 J
W-5-(10)	0.54 J	3.9	130	0.52	0.4	75	17	37	7.4	0.076	0.3
W-5-(15)	0.4 J	4.5	130	0.53	0.39	55	12	26	7.2	0.09	0.61
W-5-(20)	0.47 J	4.4	100	0.51	0.43	63	16	38	7.3	0.11	0.41
E-2-(1)	1.9 U	2.5	180	0.7	0.44	82	20	37	6.7	0.038	0.11 J
E-2-(5)	1.8 U	3.3	150	0.67	0.42	81	18	35	9	0.061	0.23 U
E-2-(10)	2 U	4	200	0.68	0.37	86	17	38	7.6	0.072	0.25 U
E-2-(15)	1.9 U	3.6	220	0.68	0.39	83	20	30	6.4	0.072	0.23 U
E-2-(20)	2 U	4.6	170	0.73	0.36	81	16	37	8.5	0.033	0.19 J
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3]}	<u>Antimony</u> (mg/kg)	<u>Arsenic</u> (mg/kg)	<u>Barium</u> (mg/kg)	<u>Beryllium</u> (mg/kg)	<u>Cadmium</u> (mg/kg)	<u>Chromium</u> (mg/kg)	<u>Cobalt</u> (mg/kg)	<u>Copper</u> (mg/kg)	<u>Lead</u> (mg/kg)	<u>Mercury</u> (mg/kg)	<u>Molybdenum</u> (mg/kg)
E1-1	5 U	2.5	344	1.3 U	1 U	32.9	13 U	25.4	7.4	0.087	13 U
E1-2	4.7 U	3.5	174	1.2 U	0.94 U	84.9	19.7	38.1	9.1	0.045	12 U
E1-3	4.8 U	24 U	76.4	1.2 U	0.96 U	54.7	12 U	23.3	4.8 U	0.063	12 U
E1-4	3.7 U	3	96.7	0.92 U	0.74 U	89.6	19.6	30.2	7.3	0.043	9.2 U
E1-8	3.7 U	3.6	90.9	0.93 U	0.74 U	27.8	9.3 U	19.3	7.4	0.45	9.3 U
E2-1	3.2 U	3.3	111	0.81 U	0.65 U	50.9	13	27.1	7.7	0.092	8.1 U
E2-2	3.4 U	3.1	218	0.86 U	0.69 U	74.4	16.1	35	9.3	0.04 U	8.6 U
E2-3	3.9 U	3.1	198	0.97 U	0.78 U	79.8	18.8	36.4	9.3	0.038 U	9.7 U
E2-5	4.3 U	3.7	164	1.1 U	0.86 U	72.6	17.7	37	8.5	0.1	11 U
E2-7	4.6 U	3	128	1.1 U	0.92 U	67.7	16.1	35	7.6	0.093	11 U
E3-1	3.5 U	3.2	152	0.88 U	0.7 U	62	14.2	29.6	8.1	0.042	8.8 U
E3-2	4.1 U	2.7	143	1 U	0.83 U	65.1	15.2	30.9	9.1	0.042	10 U
E3-4	3.4 U	3.2	147	0.86 U	0.69 U	66.1	15.5	30.6	7.4	0.1	8.6 U
E3-6	3.8 U	3.1	120	0.94 U	0.75 U	78.1	12.6	27.7	6.9	0.062	9.4 U
E4-1	4.2 U	3.9	172	1.1 U	0.85 U	82.5	17.9	39	9.6	0.098	11 U
E4-2	3.7 U	4.5	167	0.92 U	0.74 U	65.3	16.7	32	10.5	0.044	9.2 U
E4-3	4.4 U	4.7	140	1.1 U	0.88 U	58.7	15.8	34.1	9.7	0.12	11 U
E5-1	3.3 U	3.8	364	0.83 U	0.66 U	66.6	14.7	33.1	15.7	0.09	8.3 U
E5-2	4.6 U	4.1	158	1.1 U	0.92 U	74.1	16.5	33.5	14.4	0.048	11 U
E5-3	4.5 U	2.9	136	1.1 U	0.89 U	73.2	16.9	33.3	8.1	0.045	11 U
E6-1	3.6 U	3.5	135	0.91 U	0.73 U	77.3	16.5	35.1	15.1	0.13	9.1 U
E6-2	4.8 U	3.5	199	1.2 U	0.96 U	78.8	18.1	37	9	0.056	12 U
E6-4	4.2 U	2.4	135	1.1 U	0.85 U	82.3	18.3	34	7.7	0.047	11 U
E7-1	4.7 U	2.4 U	156	1.2 U	0.94 U	69	14.8	33.9	10.3	0.048	12 U
E7-2	4.2 U	3	164	1.1 U	0.84 U	71.4	19.3	34.9	9.2	0.039 U	11 U
E7-3	4.4 U	2.7	139	1.1 U	0.88 U	69	17.2	33.4	7.6	0.04 U	11 U
E7-5	4.2 U	4.2	115	1.1 U	0.84 U	56.7	11.4	31.1	8.5	0.12	11 U
E8-1	4.8 U	3.7	142	1.2 U	0.95 U	70.4	14.6	33.8	37.5	0.12	12 U
E8-2	4.6 U	3	177	1.2 U	0.93 U	76.3	17.6	35.5	9.1	0.037 U	12 U
E8-3	3.8 U	3.1	112	0.95 U	0.76 U	77.5	18.1	33.5	8.2	0.055	9.5 U
E8-4	4.5 U	4.4	86.7	1.1 U	0.89 U	49.5	11.1	25.1	8.2	0.065	11 U
E8-5	4.7 U	3.6	115	1.2 U	0.93 U	48.9	12 U	27.3	7.4	0.086	12 U
ESLs Residential (mg/kg)	11	[4]	15,000	16	78	--	23	3,100	80	13	390
RSLs Residential (mg/kg)	31	12 ^[4]	15,000	160	71	--	23	3,100	400	11	390

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
S-1-(1)	87	2 U	0.27 U	0.53 U	51	49
S-1-(5)	74	2 U	0.26 U	0.53 U	69	47
S-1-(10)	110	2 U	0.27 U	0.54 U	64	65
S-1-(15)	85	2 U	0.25 U	0.49 U	81	52
S-1-(20)	57	1.9 U	0.24 U	0.48 U	43	46
S-2-(1)	86	1.9 U	0.24 U	0.49 U	52	58
S-2-(5)	67	2 U	0.25 U	0.51 U	60	43
S-2-(10)	68	2 U	0.27 U	0.54 U	66	42
S-2-(15)	61	1.9 U	0.24 U	0.47 U	43	44
S-2-(20)	58	2 U	0.26 U	0.52 U	41	46
S-3-(1)	55	2 U	0.26 U	0.53 U	46	47
S-3-(5)	96	2 U	0.25 U	0.5 U	60	60
S-3-(10)	80	2 U	0.25 U	0.51 U	75	47
S-3-(15)	64	1.9 U	0.23 U	0.46 U	45	52
S-3-(20)	50	1.9 U	0.24 U	0.48 U	39	42
S-4-(1)	84	1.9 U	0.24 U	0.49 U	60	64
S-4-(5)	90	2 U	0.27 U	0.54 U	59	51
S-4-(10)	82	2 U	0.26 U	0.52 U	54	54
S-4-(15)	67	1.8 U	0.23 U	0.46 U	53	73
S-4-(20)	63	2 U	0.27 U	0.54 U	46	56
S-5-(1)	92	2 U	0.27 U	0.53 U	50	55
S-5-(5)	100	2 U	0.26 U	0.52 U	62	63
S-5-(10)	73	1.8 U	0.23 U	0.46 U	76	56
S-5-(15)	59	2 U	0.26 U	0.52 U	56	42
S-5-(20)	31	1.9 U	0.23 U	0.46 U	45	41
S-6-(1)	53	2 U	0.27 U	0.55 U	39	70
S-6-(5)	71	2 U	0.25 U	0.51 U	46	45
S-6-(10)	56	2 U	0.27 U	0.54 U	46	50
S-6-(15)	63	2 U	0.25 U	0.49 U	43	52
S-6-(20)	85	2 U	0.27 U	0.54 U	66	46
S-7-(2)	68	2 U	0.27 U	0.53 U	56	60
S-7-(5)	80	2 U	0.26 U	0.53 U	53	58
S-7-(10)	59	1.9 U	0.23 U	0.47 U	68	58
S-7-(15)	56	2 U	0.25 U	0.5 U	39	45
S-7-(20)	40	2 U	0.27 U	0.54 U	49	44
S-8-(1)	50	1.8 U	0.23 U	0.45 U	23	26
S-8-(5)	99	1.9 U	0.24 U	0.47 U	60	57
S-8-(10)	64	1.9 U	0.24 U	0.47 U	54	48
S-8-(15)	63	2 U	0.27 U	0.54 U	46	49
S-8-(20)	59	2 U	0.26 U	0.52 U	48	49
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
W-1-(1)	79	2 U	0.26 U	0.52 U	51	55
W-1-(5)	93	2 U	0.25 U	0.49 U	48	56
W-1-(10)	54	2 U	0.25 U	0.5 U	45	64
W-1-(15)	69	1.9 U	0.24 U	0.48 U	43	57
W-1-(20)	100	2 U	0.25 U	0.49 U	61	57
W-2-(2)	55	2 U	0.27 U	0.55 U	59	48
W-2-(5)	62	1.9 U	0.24 U	0.48 U	68	55
W-2-(10)	69	2 U	0.27 U	0.55 U	66	53
W-2-(15)	50	2 U	0.26 U	0.52 U	68	56
W-2-(20)	57	1.9 U	1.1	0.48 U	56	44
W-3-(1)	47	2 U	0.27 U	0.54 U	29	31
W-3-(5)	79	2 U	0.27 U	0.53 U	70	54
W-3-(10)	65	2 U	0.26 U	0.53 U	63	49
W-3-(15)	74	1.9 U	0.24 U	0.49 U	55	55
W-3-(20)	65	1.9 U	0.24 U	0.47 U	55	66
W-4-(1)	96	2 U	0.25 U	0.5 U	71	64
W-4-(5)	66	1.9 U	0.23 U	0.47 U	60	57
W-4-(10)	120	2 U	0.27 U	0.53 U	79	89
W-4-(15)	70	2 U	0.25 U	0.5 U	49	60
W-4-(20)	59	1.9 U	0.24 U	0.49 U	49	69
W-5-(1)	91	2 U	0.25 U	0.5 U	46	59
W-5-(5)	43	2 U	0.27 U	0.54 U	27	35
W-5-(10)	97	2 U	0.27 U	0.53 U	52	59
W-5-(15)	58	2 U	0.25 U	0.5 U	45	55
W-5-(20)	72	1.9 U	0.24 U	0.48 U	54	56
E-2-(1)	92	1.9 U	0.24 U	0.47 U	67	54
E-2-(5)	85	1.8 U	0.23 U	0.45 U	68	54
E-2-(10)	100	2 U	0.25 U	0.5 U	68	57
E-2-(15)	85	1.9 U	0.23 U	0.47 U	72	49
E-2-(20)	89	2 U	0.26 U	0.52 U	66	58
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[2][3]}	<u>Nickel</u> (mg/kg)	<u>Selenium</u> (mg/kg)	<u>Silver</u> (mg/kg)	<u>Thallium</u> (mg/kg)	<u>Vanadium</u> (mg/kg)	<u>Zinc</u> (mg/kg)
E1-1	36.7	5 U	2.5 U	2.5 U	37.2	44.7
E1-2	105	4.7 U	2.4 U	2.4 U	64.1	58.3
E1-3	48.7	4.8 U	2.4 U	2.4 U	59.5	35.2
E1-4	87.6	3.7 U	1.8 U	1.8 U	69	48.5
E1-8	36.2	3.7 U	1.9 U	1.9 U	31.2	47.5
E2-1	69.1	3.2 U	1.6 U	1.6 U	36.5	46
E2-2	94.4	3.4 U	1.7 U	1.7 U	47.2	52.6
E2-3	100	3.9 U	1.9 U	1.9 U	49.2	54.8
E2-5	95.6	4.3 U	2.2 U	2.2 U	53.4	53.8
E2-7	90.8	4.6 U	2.3 U	2.3 U	44.5	56.5
E3-1	70.9	3.5 U	1.8 U	1.8 U	47.2	55.2
E3-2	77.5	4.1 U	2.1 U	2.1 U	50	52
E3-4	78.2	3.4 U	1.7 U	1.7 U	54.7	47
E3-6	65.5	3.8 U	1.9 U	1.9 U	66.7	47.7
E4-1	101	4.2 U	2.1 U	2.1 U	61.4	59.7
E4-2	82.4	3.7 U	1.8 U	1.8 U	52.5	56.6
E4-3	93.7	4.4 U	2.2 U	2.2 U	49.2	58
E5-1	72.5	3.3 U	1.7 U	1.7 U	60.9	61.9
E5-2	86.1	4.6 U	2.3 U	2.3 U	59.6	64.6
E5-3	86.9	4.5 U	2.2 U	2.2 U	52.2	52.9
E6-1	82.6	3.6 U	1.8 U	1.8 U	60.3	58
E6-2	98.4	4.8 U	2.4 U	2.4 U	54	57.1
E6-4	81.8	4.2 U	2.1 U	2.1 U	63.9	47.9
E7-1	82.5	4.7 U	2.4 U	2.4 U	51.2	52.2
E7-2	96.6	4.2 U	2.1 U	2.1 U	41.8	53
E7-3	68.6	4.4 U	2.2 U	2.2 U	60.1	51.9
E7-5	68.4	4.2 U	2.1 U	2.1 U	46.4	52.7
E8-1	81.1	4.8 U	2.4 U	2.4 U	52.2	54
E8-2	93.4	4.6 U	2.3 U	2.3 U	52.7	52.7
E8-3	83.1	3.8 U	1.9 U	1.9 U	53.9	49
E8-4	61.8	4.5 U	2.2 U	2.2 U	44.9	49.6
E8-5	62.6	4.7 U	2.3 U	2.3 U	43	50
ESLs Residential (mg/kg)	820	390	390	0.78	390	23,000
RSLs Residential (mg/kg)	490	390	390	--	390	23,000

Table 2

Summary of Metal Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][5]}	<u>Lead</u> (mg/kg)	<u>Arsenic</u> ^[6] (mg/kg)
SB-001-(0.5)	38	5.1
SB-001-(1)	56	4.9
SB-001-(2)	6.2	4.4
SB-001-(3)	4.7	3.4
SB-002-(0.5)	16	4.2
SB-002-(1)	8.5	4.0
SB-002-(2)	9.6	4.2
SB-002-(3)	5.9	4.0
SB-003-(0.5)	11	5.2
SB-003-(1)	4.5	2.8
SB-003-(2)	3.3	2.4
SB-003-(3)	5.8	3.4
SB-004-(0.5)	30	6
SB-004-(1)	14	4.1
SB-004-(2)	30 B	6.3
SB-004-(3)	17 B	4.0
SB-005-(0.5)	21 B	4.9
SB-005-(1)	21 B	5.8
SB-005-(2)	6.5 B	4.9
SB-005-(3)	6.2 B	4.4
SB-006-(0.5)	6.7 B	5.6
SB-006-(1)	6.6 B	4.9
SB-006-(2)	5.5 B	4.7
SB-006-(3)	6.5 B	3.9
SB-007-(0.5)	5.2 B	2.7
SB-007-(1)	7.7 B	4.5
SB-007-(2)	6.7 B	4.5
SB-007-(3)	5.9 B	4.9
ESLs Residential (mg/kg)	82	[4]
RSLs Residential (mg/kg)	400	12 ^[4]

Table 2

**Summary of Metal Concentrations
Former Valco Mall**

Notes:

mg/kg = micrograms per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

B = analyte detected in the associated method blank and in the sample

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than the reporting limit; results in red font indicate exceedance of screening levels.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

[4] Risk-based screening level concentrations of arsenic in soil are often below naturally occurring (background) concentrations. DTSC recognizes 12 mg/kg as the upper bound estimate for background concentrations in California. SF Water Board cited that Duvergé (2011) conducted a study of regional background concentrations of arsenic and proposed an upper estimate for background arsenic (99th percentile) of 11 mg/kg.

[5] Samples collected by WSP on 1/10/2019. Sample nomenclature is as follows: "sample type - sample location - (depth)".

[6] All Arsenic concentrations are below background concentrations established by the SF Water Board and DTSC.

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
S-1-(1)	1 U	12 Y	270
S-1-(5)	1.1 U	1.3 Y	3.3 J
S-1-(10)	1.1 U	0.48 JY	5 U
S-1-(15)	1 U	0.99 JY	5 U
S-1-(20)	1.1 U	0.55 JY	1.8 JY
S-2-(1)	1.1 U	0.82 JY	5.3
S-2-(5)	1.1 U	11 Y	260
S-2-(10)	1.1 U	22 Y	500
S-2-(15)	1.1 U	0.4 JY	5 U
S-2-(20)	1.1 U	0.42 JY	5 U
S-3-(1)	0.93 U	68 Y	1,600
S-3-(5)	1 U	0.87 JY	2.1 JY
S-3-(10)	1.1 U	2.2 Y	8.2
S-3-(15)	1.1 U	0.93 JY	15
S-3-(20)	0.94 U	1.2 Y	11
S-4-(1)	1.1 U	14 Y	34
S-4-(5)	1.1 U	6.4 Y	100
S-4-(10)	1.1 U	1 Y	9.1
S-4-(15)	1 U	3.8 Y	68
S-4-(20)	1.1 U	1.1 Y	13
S-5-(1)	0.95 U	13 Y	34
S-5-(5)	1.1 U	1.3 Y	2.1 J
S-5-(10)	0.99 U	4.6 Y	97
S-5-(15)	1 U	0.33 JY	5 U
S-5-(20)	0.94 U	1.2 Y	18
S-6-(1)	0.91 U	68 Y	790
S-6-(5)	0.94 U	4 Y	37
S-6-(10)	0.94 U	0.59 JY	5 UB
S-6-(15)	1 U	0.55 JY	5 UB
S-6-(20)	1.1 U	0.57 JY	5 U
S-7-(2)	3.2 Y	61	21
S-7-(5)	0.97 U	0.96 J	1.7 J
S-7-(10)	1.1 U	0.74 JY	5 U
S-7-(15)	0.14 J	0.57 JY	5 U
S-7-(20)	1 U	0.83 JY	1.6 JB
S-8-(1)	1 U	36 Y	1,100
S-8-(5)	1 U	0.76 JY	1.5 JB
S-8-(10)	1.1 U	0.7 JY	5 UB
S-8-(15)	0.94 U	0.85 JY	1.7 J
S-8-(20)	1.1 U	0.7 JY	2.2 J
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
W-1-(1)	1 U	12 Y	220
W-1-(5)	0.94 U	1.1 Y	12 B
W-1-(10)	0.93 U	2.3 Y	14
W-1-(15)	1 U	1.4 Y	20
W-1-(20)	0.91 U	0.61 J	5 U
W-2-(2)	0.93 U	5.5 J	98
W-2-(5)	0.94 U	0.61 J	1.9 J
W-2-(10)	0.93 U	0.74 J	3.8 J
W-2-(15)	0.99 U	2.4 B Y	2.4 J
W-2-(20)	1.1 U	41 B Y	440
W-3-(1)	0.93 U	4.7 B Y	25
W-3-(5)	1.1 U	2.4 B Y	2.4 J
W-3-(10)	0.97 U	1.9 B Y	2.2 J
W-3-(15)	0.93 U	1.1 B Y	5 U
W-3-(20)	1.1 U	1.6 B Y	2.1 J
W-4-(1)	1.1 U	4.5 B Y	11
W-4-(5)	1.1 U	3 Y	14
W-4-(10)	1.1 U	1.5 Y	6
W-4-(15)	0.94 U	0.6 J	2.1 J
W-4-(20)	1.1 U	1.1 Y	15
W-5-(1)	0.97 U	1.7 Y	4.5 JYZB
W-5-(5)	0.92 U	0.7 JY	5.8 B
W-5-(10)	0.93 U	0.71 JY	3.3 JYZB
W-5-(15)	1 U	0.66 JY	7.5 B
W-5-(20)	1.1 U	0.83 JY	3.3 JB
E-2-(1)	0.91 U	0.79 J	2.8 J
E-2-(5)	1.1 U	11 Y	44
E-2-(10)	0.93 U	1.5 Y	13
E-2-(15)	1.1 U	2.7 Y	28
E-2-(20)	0.91 U	1.5 Y	3.1 J
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

Summary of TPH Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3]}	<u>TPH-g</u> (mg/kg)	<u>TPH-d</u> (mg/kg)	<u>TPH-mo</u> (mg/kg)
E1-1	2.7 U	120 J	841
E1-2	2.5 U	2.4 U	2.4 U
E1-3	2.4 U	2.5 U	2.5 U
E1-4	2.2 U	2.5 U	2.78 J
E1-8	2.5 U	2.6 U	2.6 U
E2-1	2.4 U	2.86 J	11.4
E2-2	2.2 U	2.5 U	2.5 U
E2-3	2.6 U	2.6 U	2.6 U
E2-5	2.6 U	2.5 U	2.5 U
E2-7	2.7 U	2.6 U	2.6 U
E3-1	2.8 U	2.5 U	6.52
E3-2	2.5 U	4.6 J	6.48
E3-4	2.7 U	2.4 U	2.4 J
E3-6	2.4 U	2.5 U	2.5 U
E4-1	2.2 U	2.5 U	3.6 J
E4-2	2.6 U	2.5 U	2.5 U
E4-3	3.1 U	2.5 U	2.5 U
E5-1	2.8 U	88.3	218
E5-2	2.4 U	3.02 J	10.8
E5-3	2.1 U	2.5 U	3.77 J
E6-1	2.8 U	6.24	23.9
E6-2	2.2 U	2.5 U	7.59
E6-4	2.3 U	2.5 U	3.42 J
E7-1	2.1 U	10.1	29.7
E7-2	2.1 U	2.5 U	5.22
E7-3	2.1 U	2.5 U	2.5 U
E7-5	2.4 U	2.5 U	2.5 U
E8-1	1.9 U	10.5	44.5
E8-2	2.1 U	2.5 U	7.88
E8-3	1.9 U	2.5 U	2.5 U
E8-4	2.4 U	2.5 U	2.5 U
E8-5	2.2 U	2.5 U	2.5 U
ESLs Residential (mg/kg)	430	260	12,000
RSLs Residential (mg/kg)	RSLs are for TPH aliphatic and aromatic analytes only		

Table 3

**Summary of TPH Concentrations
Former Valco Mall**

Notes:

mg/kg = micrograms per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

Y = Sample exhibits chromatographic pattern which does not resemble standard

B = compound was detected in associated method blank

Z = Sample exhibits unknown single peak or peaks

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates

[2] Bold results indicate the concentration is greater than the reporting limit; results in red font indicate exceedance of screening levels.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-1-(1) (µg/kg)	S-1-(5) (µg/kg)	S-2-(1) (µg/kg)	S-2-(5) (µg/kg)	S-3-(1) (µg/kg)	S-3-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	320 U	10 U	10 U	1,000 U	990 U	10 U
2-Methylnaphthalene	2.40E+05	2.4E+05	250 U	10 U	10 U	1,000 U	990 U	10 U
Benzo(a)anthracene	1.10E+03	1.1E+03	210 U	10 U	10 U	1,000 U	1,000 U	10 U
Benzo(a)pyrene	1.10E+02	1.1E+02	210 U	9 U	8.8 U	880 U	870 U	8.8 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	210 U	9 U	9 U	900 U	890 U	9 U
Benzo(g,h,i)perylene	--	--	210 U	10 U	10 U	1,000 U	1,000 U	10 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	210 U	9 U	9.5 U	950 U	940 U	9.5 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	210 U	13 U	13 U	1,300 U	1,300 U	13 U
Chrysene	1.10E+05	1.1E+05	210 U	11 U	11 U	1,100 U	1,100 U	11 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	210 U	9 U	9.4 U	940 U	930 U	9.4 U
Di-n-butylphthalate	--	6.3E+06	240 U	12 U	12 U	1,200 U	1,200 U	12 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	210 U	9 U	8.9 U	890 U	880 U	8.9 U
Pyrene	1.80E+06	1.8E+06	210 U	11 U	11 U	1,100 U	1,100 U	11 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-4-(1) (µg/kg)	S-4-(5) (µg/kg)	S-5-(1) (µg/kg)	S-5-(5) (µg/kg)	S-6-(1) (µg/kg)	S-6-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	100 U	99 U	13 U	10 U	250 U	20 U
2-Methylnaphthalene	2.40E+05	2.4E+05	100 U	99 U	9.9 U	10 U	250 U	20 U
Benzo(a)anthracene	1.10E+03	1.1E+03	100 U	100 U	8.4 U	10 U	250 U	20 U
Benzo(a)pyrene	1.10E+02	1.1E+02	88 U	87 U	8.4 U	8.8 U	220 U	18 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	90 U	89 U	8.4 U	9 U	220 U	18 U
Benzo(g,h,i)perylene	--	--	100 U	100 U	8.4 U	10 U	250 U	20 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	95 U	94 U	8.4 U	9.6 U	240 U	19 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	130 U	130 U	9 J	13 U	330 U	26 U
Chrysene	1.10E+05	1.1E+05	110 U	110 U	8.4 U	11 U	280 U	23 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	94 U	92 U	8.4 U	9.4 U	230 U	19 U
Di-n-butylphthalate	--	6.3E+06	120 U	120 U	9.5 U	12 U	300 U	24 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	89 U	87 U	8.4 U	8.9 U	220 U	18 U
Pyrene	1.80E+06	1.8E+06	110 U	110 U	8.4 U	11 U	270 U	22 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	S-7-(2) (µg/kg)	S-7-(5) (µg/kg)	S-8-(1) (µg/kg)	S-8-(5) (µg/kg)	W-1-(1) (µg/kg)	W-1-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	150 J	13 U	990 U	13 U	1,300 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	590	9.9 U	990 U	10 U	990 U	20 U
Benzo(a)anthracene	1.10E+03	1.1E+03	52 U	8.3 U	1,000 U	8.5 U	840 U	17 U
Benzo(a)pyrene	1.10E+02	1.1E+02	44 U	8.3 U	870 U	8.5 U	840 U	17 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	45 U	8.3 U	890 U	8.5 U	840 U	17 U
Benzo(g,h,i)perylene	--	--	51 U	8.3 U	1,000 U	8.5 U	840 U	17 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	48 U	8.3 U	940 U	8.5 U	840 U	17 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	66 U	8.5 U	1,300 U	8.6 U	850 U	17 U
Chrysene	1.10E+05	1.1E+05	57 U	8.3 U	1,100 U	8.5 U	840 U	17 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	47 U	8.3 U	930 U	8.5 U	840 U	17 U
Di-n-butylphthalate	--	6.3E+06	61 U	12 J	1,200 U	9.6 U	950 U	19 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	44 U	8.3 U	870 U	8.5 U	840 U	17 U
Pyrene	1.80E+06	1.8E+06	55 U	8.3 U	1,100 U	8.5 U	840 U	17 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	W-2-(2) (µg/kg)	W-2-(5) (µg/kg)	W-3-(1) (µg/kg)	W-3-(5) (µg/kg)	W-4-(1) (µg/kg)	W-4-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	260 U	13 U	100 U	10 U	50 U	50 U
2-Methylnaphthalene	2.40E+05	2.4E+05	200 U	9.9 U	100 U	10 U	50 U	50 U
Benzo(a)anthracene	1.10E+03	1.1E+03	170 U	8.4 U	100 U	10 U	51 U	51 U
Benzo(a)pyrene	1.10E+02	1.1E+02	170 U	8.4 U	88 U	8.9 U	44 U	44 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	170 U	8.4 U	90 U	9.1 U	45 U	45 U
Benzo(g,h,i)perylene	--	--	170 U	8.4 U	100 U	10 U	50 U	51 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	170 U	8.4 U	95 U	9.6 U	47 U	48 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	170 U	8.5 U	130 U	13 U	65 U	65 U
Chrysene	1.10E+05	1.1E+05	170 U	8.4 U	110 U	11 U	56 U	57 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	170 U	8.4 U	93 U	9.5 U	46 U	47 U
Di-n-butylphthalate	--	6.3E+06	190 U	11 J	120 U	12 U	60 U	61 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	170 U	8.4 U	88 U	9 U	44 U	44 U
Pyrene	1.80E+06	1.8E+06	170 U	8.4 U	110 U	11 U	54 U	55 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--	--	--

Table 4

Summary of SVOC and PAH Concentrations
Former Valco Mall

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	W-5-(1) (µg/kg)	W-5-(5) (µg/kg)	E-2-(1) (µg/kg)	E-2-(5) (µg/kg)
Naphthalene	3.80E+03	3.8E+03	13 U	26 U	13 U	130 U
2-Methylnaphthalene	2.40E+05	2.4E+05	9.9 U	20 U	9.8 U	99 U
Benzo(a)anthracene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Benzo(a)pyrene	1.10E+02	1.1E+02	8.4 U	17 U	8.3 U	83 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Benzo(g,h,i)perylene	--	--	8.4 U	17 U	8.3 U	83 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	8.4 U	17 U	8.3 U	83 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	8.5 U	17 U	18 J	85 U
Chrysene	1.10E+05	1.1E+05	8.4 U	17 U	8.3 U	83 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	8.4 U	17 U	8.3 U	83 U
Di-n-butylphthalate	--	6.3E+06	9.5 U	19 U	9.4 U	95 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	8.4 U	17 U	8.3 U	83 U
Pyrene	1.80E+06	1.8E+06	8.4 U	17 U	8.3 U	83 U
1-Methylnaphthalene	--	1.8E+04	--	--	--	--

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E1-1 ^[6] (µg/kg)	E1-2 ^[6] (µg/kg)	E1-3 ^[6] (µg/kg)	E1-4 ^[6] (µg/kg)	E1-8 ^[6] (µg/kg)	E2-1 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	110 U	26 U	27 U	27 U	26 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	178 J	26 U	27 U	27 U	26 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	14 U	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	29.7 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	41.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(g,h,i)perylene	--	--	31.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	20.3 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	38.8 J
Chrysene	1.10E+05	1.1E+05	55.3	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	17.6 J	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	66 U	66 U	66 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	14 U	3.2 U	3.3 U	3.4 U	3.2 U	3.3 U
Pyrene	1.80E+06	1.8E+06	68 U	16 U	17 U	17 U	16 U	16 U
1-Methylnaphthalene	--	1.8E+04	168 J	26 U	27 U	27 U	26 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E2-2 ^[6] (µg/kg)	E2-3 ^[6] (µg/kg)	E2-5 ^[6] (µg/kg)	E2-7 ^[6] (µg/kg)	E3-1 ^[6] (µg/kg)	E3-2 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	27 U	26 U	26 U	27 U	26 U	27 U
2-Methylnaphthalene	2.40E+05	2.4E+05	27 U	26 U	26 U	27 U	26 U	27 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(g,h,i)perylene	--	--	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	34 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Di-n-butylphthalate	--	6.3E+06	66 U	66 U	66 U	67 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.2 U	3.3 U	3.4 U	3.2 U	3.4 U
Pyrene	1.80E+06	1.8E+06	17 U	16 U	16 U	17 U	16 U	17 U
1-Methylnaphthalene	--	1.8E+04	27 U	26 U	26 U	27 U	26 U	27 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E3-4 ^[6] (µg/kg)	E3-6 ^[6] (µg/kg)	E4-1 ^[6] (µg/kg)	E4-2 ^[6] (µg/kg)	E4-3 ^[6] (µg/kg)	E5-1 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	28 U	27 U	27 U	26 U	27 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	28 U	27 U	27 U	26 U	27 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	24.6
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	23.3
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	19.4
Benzo(g,h,i)perylene	--	--	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	40.2
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	7.3 J
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	34 U	33 U	34 U	33 U	34 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	85.8
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	12.6 J
Di-n-butylphthalate	--	6.3E+06	66 U	67 U	67 U	68 U	66 U	67.0 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.3 U	3.4 U	3.3 U	3.4 U	9.3 J
Pyrene	1.80E+06	1.8E+06	17 U	17 U	17 U	16 U	17 U	30.9 J
1-Methylnaphthalene	--	1.8E+04	28 U	27 U	27 U	26 U	27 U	26.0 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E5-2 ^[6] (µg/kg)	E5-3 ^[6] (µg/kg)	E6-1 ^[6] (µg/kg)	E6-2 ^[6] (µg/kg)	E6-4 ^[6] (µg/kg)	E7-1 ^[6] (µg/kg)	E7-2 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	26 U	27 U	27 U	27 U	27 U	27 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	26 U	27 U	27 U	27 U	27 U	27 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.3 U	3.4 U	4.0 J	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(g,h,i)perylene	--	--	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.3 U	3.4 U	4.9 J	3.4 U	3.4 U	3.4 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	66 U	66 U	67 U	67 U	67 U	66 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.3 U
Pyrene	1.80E+06	1.8E+06	16 U	17 U	17 U	17 U	17 U	17 U	17 U
1-Methylnaphthalene	--	1.8E+04	26 U	27 U	27 U	27 U	27 U	27 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Valco Mall**

Sample ID ^{[1][2][3]}	ESL Residential (µg/kg) ^[4]	RSLs Residential (µg/kg) ^[5]	E7-3 ^[6] (µg/kg)	E7-5 ^[6] (µg/kg)	E8-1 ^[6] (µg/kg)	E8-2 ^[6] (µg/kg)	E8-3 ^[6] (µg/kg)	E8-4 ^[6] (µg/kg)	E8-5 ^[6] (µg/kg)
Naphthalene	3.80E+03	3.8E+03	27 U	27 U	26 U	26 U	27 U	26 U	26 U
2-Methylnaphthalene	2.40E+05	2.4E+05	27 U	27 U	26 U	26 U	27 U	26 U	26 U
Benzo(a)anthracene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(a)pyrene	1.10E+02	1.1E+02	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(b)fluoranthene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(g,h,i)perylene	--	--	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Benzo(k)fluoranthene	1.10E+04	1.1E+04	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
bis(2-Ethylhexyl)phthalate	3.90E+04	3.9E+04	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Chrysene	1.10E+05	1.1E+05	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Dibenz(a,h)anthracene	1.10E+02	1.1E+02	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Di-n-butylphthalate	--	6.3E+06	67 U	67 U	67 U	67 U	66 U	66 U	67 U
Indeno(1,2,3-cd)pyrene	1.10E+03	1.1E+03	3.4 U	3.4 U	3.3 U	3.2 U	3.3 U	3.3 U	3.3 U
Pyrene	1.80E+06	1.8E+06	17 U	17 U	16 U	16 U	17 U	17 U	16 U
1-Methylnaphthalene	--	1.8E+04	27 U	27 U	26 U	26 U	27 U	26 U	26 U

Table 4

**Summary of SVOC and PAH Concentrations
Former Vallco Mall**

Notes:

ug/kg = milligrams per kilogram

U = compound was not detected at a concentration greater than the method detection limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

ND = compound was not detected at a concentration greater than the method detection limit

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)".

[2] Bold results indicate the concentration is greater than the reporting limit.

[3] Only SVOCs or PAHs detected above the method detection limit in at least one boring are shown. All other SVOC or PAH compounds were not detected

[4] = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

[5] Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018. Concentration in $\mu\text{g}/\text{kg}$.

[6] Samples collected by Geosphere consultants, inc. on September 6, 2016

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	4,4'-DDD (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)	alpha-Chlordane ^[5] (µg/kg)
S-1-(1)	1.5 U	19 J	11 J	0.61 U	1 U	1.8 U
S-1-(5)	0.079 U	9.1 #	3.4	0.061 U	0.1 U	0.18 U
S-2-(1)	0.57 J	3.5 #	1.3 J	0.06 U	0.099 U	0.18 U
S-2-(5)	1.6 U	1.6 U	1.8 U	1.2 U	2 U	3.6 U
S-3-(1)	4 U	4 U	4.5 U	3 U	5 U	8.9 U
S-3-(5)	0.59 J C	3.3 #	0.34 U	0.061 U	0.1 U	0.18 U
S-4-(1)	6.3 #	65 #	1.2 J C	0.14 J C	0.23 J	0.18 U
S-4-(5)	0.079 U	0.098 U	0.089 U	0.06 U	0.099 U	0.18 U
S-5-(1)	0.16 U	0.18 J C	0.65 U	0.12 U	0.2 U	0.35 U
S-5-(5)	0.48 J	1.5 J	0.088 U	0.06 U	0.098 U	0.17 U
S-6-(1)	0.15 U	1.2 J	0.33 U	0.091 U	0.087 U	0.14 U
S-6-(5)	1.6 U	1.6 U	1.7 U	1.2 U	2 U	3.5 U
S-7-(2)	3.2 C	63 #	7.4 C #	0.97 J C	0.09 U	4.2 C #
S-7-(5)	0.19 J C	0.88 J	0.85 J	0.061 U	0.1 U	0.18 U
S-8-(1)	0.81 U	1.5 J C	0.92 U	0.62 U	1 U	1.8 U
S-8-(5)	0.082 U	0.082 U	0.092 U	0.062 U	0.1 U	0.18 U
W-1-(1)	0.16 U	0.16 U	0.18 U	0.13 U	0.21 U	0.37 U
W-1-(5)	0.08 U	0.08 U	0.09 U	0.061 U	0.1 U	0.18 U
W-2-(2)	1.5 J C	0.08	38 #	0.46 U	0.44 U	0.7 U
W-2-(5)	0.078 U	0.078 U	0.088 U	0.06 U	0.099 U	0.18 U
W-3-(1)	0.078 U	0.35 J	0.088 U	0.06 U	0.099 U	0.18 U
W-3-(5)	0.08 U	0.08 U	0.09 U	0.061 U	0.1 U	0.18 U
W-4-(1)	2.4	35	13 #	0.061 U	0.1 U	0.15 J C
W-4-(5)	0.079 U	0.079 U	0.09 U	0.061 U	0.1 U	0.18 U
W-5-(1)	0.15 U	1.7 J	0.77 J	0.061 U	0.1 U	0.18 U
W-5-(5)	0.082 U	0.082 U	0.092 U	0.063 U	0.1 U	0.18 U
E-2-(1)	0.08 U	0.33 J	0.09 U	0.061 U	0.1 U	0.18 U
E-2-(5)	47 #	81 #	1.7 U	4.2 J	0.5 U	1.2 J C
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--	4.80E+02
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01	1.7E+03

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	4,4'-DDD (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)	alpha-Chlordane ^{[5][9]} (µg/kg)
E1-1	12 U	11 U	13 U	10 U	10 U	140 U
E1-2	0.56 U	0.53 U	0.64 U	0.5 U	0.5 U	6.5 U
E1-3	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.8 U
E1-4	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E1-8	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E2-1	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E2-2	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E2-3	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E2-5	0.56 U	0.53 U	0.64 U	0.5 U	0.5 U	6.5 U
E2-7	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E3-1	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E3-2	1.7 J	20.8	0.65 U	0.51 U	0.51 U	6.7 U
E3-4	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E3-6	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E4-1	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E4-2	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.7 U
E4-3	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E5-1	22.6 J	5.4 U	33.6 J	5.1 U	5.2 U	68 U
E5-2	2.8 U	24.7	8.4 J	2.5 U	2.5 U	33 U
E5-3	0.57 U	0.53 U	0.65 U	0.5 U	0.51 U	6.6 U
E6-1	29.5 J	140	70.2	5.1 U	5.1 U	67 U
E6-2	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E6-4	0.59 U	0.55 U	0.67 U	0.52 U	0.52 U	6.8 U
E7-1	2.9 U	8.8 J	3.3 U	2.5 U	2.6 U	33 U
E7-2	0.58 U	0.54 U	0.66 U	0.51 U	0.52 U	6.8 U
E7-3	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E7-5	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
E8-1	0.56 U	0.63 J	1.2 J	0.49 U	0.5 U	6.5 U
E8-2	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E8-3	0.57 U	0.53 U	0.64 U	0.5 U	0.51 U	6.6 U
E8-4	0.56 U	0.52 U	0.64 U	0.49 U	0.5 U	6.5 U
E8-5	0.57 U	0.54 U	0.65 U	0.51 U	0.51 U	6.7 U
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--	4.80E+02
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01	1.7E+03

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)
S-1-(1)	0.64 U	0.8 U	3.8 J	0.8 U	0.8 U	0.74 U	0.66 U
S-1-(5)	0.064 U	0.079 U	0.79 J	0.079 U	0.079 U	0.074 U	0.066 U
S-2-(1)	0.063 U	0.079 U	0.99 J	0.11 U	0.079 U	0.073 U	0.065 U
S-2-(5)	1.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.5 U	1.3 U
S-3-(1)	3.2 U	4 U	4 U	4 U	4 U	3.7 U	3.3 U
S-3-(5)	0.065 U	0.08 U	0.17 J	0.08 U	0.08 U	0.18 U	0.066 U
S-4-(1)	0.087 J C	0.094 J C	15 #	0.079 U	0.079 U	0.18 U	0.066 U
S-4-(5)	0.064 U	0.079 U	0.079 U	0.079 U	0.079 U	0.073 U	0.066 U
S-5-(1)	0.13 U	0.16 U	0.16 U	0.16 U	0.18 J C	0.35 U	0.6 J C
S-5-(5)	0.063 U	0.078 U	0.8 J	0.078 U	0.078 U	0.072 U	0.065 U
S-6-(1)	0.11 U	0.15 U	0.086 U	0.11 U	0.12 U	0.17 U	0.2 U
S-6-(5)	1.3 U	1.6 U	2.2 J	1.6 U	1.6 U	1.4 U	4 U
S-7-(2)	0.065 U	0.16 U	36 C #	0.08 U	0.08 U	0.18 U	15 #
S-7-(5)	0.065 U	0.08 U	0.54 J	0.11 U	0.08 U	0.18 U	0.067 U
S-8-(1)	0.66 U	0.81 U	0.81 U	0.81 U	0.81 U	0.75 U	0.68 U
S-8-(5)	0.066 U	0.082 U	0.082 U	0.082 U	0.082 U	0.076 U	0.068 U
W-1-(1)	0.13 U	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U	0.14 U
W-1-(5)	0.064 U	0.08 U	0.08 U	0.11 U	0.08 U	0.074 U	0.066 U
W-2-(2)	0.56 U	0.77 U	2.5 J	0.53 U	0.6 U	0.87 U	1 U
W-2-(5)	0.063 U	0.078 U	0.11 J C	0.21 J	0.078 U	0.073 U	0.2 U
W-3-(1)	0.063 U	0.078 U	0.078 U	0.078 U	0.078 U	0.073 U	0.2 U
W-3-(5)	0.064 U	0.08 U	0.08 U	0.08 U	0.08 U	0.074 U	0.21 U
W-4-(1)	0.064 U	0.08 U	2.9	0.08 U	0.08 U	0.074 U	0.21 U
W-4-(5)	0.064 U	0.079 U	0.079 U	0.079 U	0.079 U	0.074 U	0.21 U
W-5-(1)	0.064 U	0.08 U	0.15 J	0.08 U	0.08 U	0.074 U	0.066 U
W-5-(5)	0.066 U	0.082 U	0.082 U	0.11 U	0.082 U	0.076 U	0.068 U
E-2-(1)	0.065 U	0.08 U	0.24 J	0.08 U	0.08 U	0.074 U	0.066 U
E-2-(5)	0.32 U	0.4 U	81 #	0.6 J C	0.4 U	0.37 U	0.33 U
ESLs Residential (µg/kg)	--	--	3.70E+01	4.20E+05	4.20E+05	--	2.10E+04
RSLs Residential (µg/kg)	3.0E+02	--	3.4E+01	4.7E+05	470,000	--	1.9E+04

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)
E1-1	10 U	9.9 U	13 U	9.9 U	13 U	13 U	13 U
E1-2	0.5 U	0.48 U	0.61 U	0.48 U	0.6 U	0.61 U	0.61 U
E1-3	0.52 U	0.49 U	0.64 U	0.49 U	0.63 U	63 U	0.63 U
E1-4	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E1-8	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E2-1	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E2-2	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E2-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E2-5	0.5 U	0.48 U	0.61 U	0.48 U	0.6 U	0.61 U	0.61 U
E2-7	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E3-1	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E3-2	0.51 U	0.49 U	2.5 J	0.49 U	0.62 U	0.62 U	0.62 U
E3-4	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E3-6	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E4-1	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E4-2	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.63 U	0.62 U
E4-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E5-1	5.2 U	4.9 U	6.4 U	4.9 U	6.3 U	6.3 U	6.3 U
E5-2	2.5 U	2.4 U	5.5 J	2.4 U	3.1 U	3.1 U	3.1 U
E5-3	0.51 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.62 U
E6-1	5.1 U	4.9 U	32.2	4.9 U	6.2 U	6.2 U	6.2 U
E6-2	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E6-4	0.52 U	0.5 U	0.64 U	0.5 U	0.63 U	0.64 U	0.63 U
E7-1	2.6 U	2.4 U	4.9 J	8.3 U	8.3 U	3.1 U	3.1 U
E7-2	0.52 U	0.49 U	0.64 U	0.49 U	0.63 U	0.63 U	0.63 U
E7-3	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E7-5	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
E8-1	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-2	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-3	0.5 U	0.48 U	0.62 U	0.48 U	0.61 U	0.62 U	0.61 U
E8-4	0.5 U	0.47 U	0.61 U	0.47 U	0.6 U	0.61 U	0.6 U
E8-5	0.51 U	0.49 U	0.63 U	0.49 U	0.62 U	0.62 U	0.62 U
ESLs Residential (µg/kg)	--	--	3.70E+01	4.20E+05	4.20E+05	--	2.10E+04
RSLs Residential (µg/kg)	3.0E+02	--	3.4E+01	4.7E+05	470,000	--	1.9E+04

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[1][2][8]}	Endrin aldehyde (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^[5] (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
S-1-(1)	5.9 U	0.81 U	1.2 J C	0.8 U	0.77 U	15 U	130 U
S-1-(5)	0.59 U	0.08 U	0.33 J	0.079 U	0.077 U	1.5 U	13 U
S-2-(1)	0.58 U	0.079 U	0.24 J C	0.079 U	0.076 U	1.5 U	13 U
S-2-(5)	12 U	1.6 U	2.2 U	1.6 U	1.5 U	30 U	270 U
S-3-(1)	29 U	4 U	5.5 U	4 U	3.8 U	76 U	660 U
S-3-(5)	0.59 U	0.081 U	0.34 J	0.08 U	0.077 U	1.5 U	13 U
S-4-(1)	0.58 U	0.12 U	0.14 U	0.079 U	0.076 U	1.5 U	13 U
S-4-(5)	0.58 U	0.08 U	0.14 U	0.079 U	0.076 U	1.5 U	13 U
S-5-(1)	1.1 U	0.16 U	0.27 U	0.16 U	0.15 U	3 U	26 U
S-5-(5)	0.57 U	0.079 U	0.23 J C	0.078 U	0.083 U	1.5 U	13 U
S-6-(1)	0.67 U	0.12 U	0.23 J	0.12 U	0.083 U	2.6 U	11 U
S-6-(5)	11 U	1.6 U	2.2 U	1.6 U	1.5 U	30 U	260 U
S-7-(2)	3.1 C #	0.081 U	22 C	0.08 U	10 C	2.7 U	13 U
S-7-(5)	0.59 U	0.081 U	0.14 J C	0.08 U	0.17 J	1.5 U	13 U
S-8-(1)	6 U	0.82 U	1.1 U	0.81 U	0.78 U	15 U	140 U
S-8-(5)	0.6 U	0.083 U	0.11 U	0.082 U	0.079 U	1.6 U	14 U
W-1-(1)	1.2 U	0.17 U	0.23 U	0.16 U	0.16 U	3.1 U	27 U
W-1-(5)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
W-2-(2)	3.4 U	0.61 U	0.67 U	0.6 U	0.42 U	13 U	57 U
W-2-(5)	0.58 U	0.079 U	0.11 U	0.078 U	0.075 U	1.5 U	13 U
W-3-(1)	0.58 U	0.079 U	0.11 U	0.078 U	0.076 U	1.5 U	13 U
W-3-(5)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
W-4-(1)	0.59 U	0.081 U	0.41 J C	0.08 U	0.077 U	1.5 U	13 U
W-4-(5)	0.59 U	0.08 U	0.11 U	0.079 U	0.077 U	1.5 U	13 U
W-5-(1)	0.59 U	0.081 U	0.22 J	0.08 U	0.077 U	1.5 U	13 U
W-5-(5)	0.6 U	0.083 U	0.11 U	0.082 U	0.079 U	1.6 U	14 U
E-2-(1)	0.59 U	0.081 U	0.11 U	0.08 U	0.077 U	1.5 U	13 U
E-2-(5)	2.9 U	0.4 U	0.68 U	0.4 U	0.38 U	7.6 U	66 U
ESLs Residential (µg/kg)	--	5.50E+02	4.80E+02	1.20E+02	6.20E+01	3.50E+05	5.10E+02
RSLs Residential (µg/kg)	--	5.7E+02	1.7E+03	1.3E+02	7.0E+01	3.2E+05	4.9E+02

Table 5
Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][3][8]}	Endrin aldehyde (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^{[5][9]} (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
E1-1	13 U	10 U	140 U	11 U	12 U	17 U	680 U
E1-2	0.61 U	0.5 U	6.5 U	0.56 U	0.57 U	0.84 U	33 U
E1-3	0.63 U	0.52 U	6.8 U	0.57 U	0.59 U	0.87 U	34 U
E1-4	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E1-8	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E2-1	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E2-2	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E2-3	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E2-5	0.61 U	0.5 U	6.5 U	0.56 U	0.57 U	0.84 U	33 U
E2-7	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E3-1	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	8.5 U	33 U
E3-2	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E3-4	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E3-6	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E4-1	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E4-2	0.62 U	0.51 U	6.7 U	0.57 U	0.59 U	0.86 U	34 U
E4-3	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E5-1	6.3 U	5.2 U	68 U	5.7 U	5.9 U	8.7 U	340 U
E5-2	3.1 U	2.5 U	33 U	2.8 U	2.9 U	4.3 U	170 U
E5-3	0.62 U	0.51 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E6-1	6.2 U	5.1 U	67 U	5.7 U	5.8 U	8.6 U	330 U
E6-2	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E6-4	0.63 U	0.52 U	6.8 U	0.58 U	0.6 U	0.87 U	34 U
E7-1	3.1 U	2.6 U	33 U	2.8 U	2.9 U	4.3 U	170 U
E7-2	0.63 U	0.52 U	6.8 U	0.57 U	0.59 U	0.87 U	34 U
E7-3	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E7-5	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
E8-1	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-2	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-3	0.61 U	0.5 U	6.6 U	0.56 U	0.58 U	0.85 U	33 U
E8-4	0.6 U	0.5 U	6.5 U	0.55 U	0.57 U	0.83 U	32 U
E8-5	0.62 U	0.51 U	6.7 U	0.57 U	0.58 U	0.86 U	33 U
ESLs Residential (µg/kg)	--	5.50E+02	4.80E+02	1.20E+02	6.20E+01	3.50E+05	5.10E+02
RSLs Residential (µg/kg)	--	5.7E+02	1.7E+03	1.3E+02	7.0E+01	3.2E+05	4.9E+02

Table 5

Summary of Pesticide Concentrations
Former Vallco Mall

<u>Sample ID</u> ^{[2][4][7]}	p,p'-DDD (µg/kg)	p,p'-DDE (µg/kg)	p,p'-DDT (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)
SB-001-(0.5)	5 U	20	20	5 U	5 U
SB-001-(1)	3	72	57	2 U	2 U
SB-001-(2)	1 U	4.4	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	4.3	1.8	1 U	1 U
SB-002-(2)	1 U	9.1	3.1	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	5 U	18	14	5 U	5 U
SB-003-(1)	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2	2.9	2 U	2 U
SB-004-(0.5)	2 U	7.5	3.2 P	2 U	2 U
SB-004-(1)	5 U	9.6	9.5	5 U	5 U
SB-004-(2)	1.3	200	85	1 U	1 U
SB-004-(3)	1 U	7.8	2.7	1 U	1 U
SB-005-(0.5)	2 U	52	23	2 U	2 U
SB-005-(1)	2.6	110	32	2 U	2 U
SB-005-(2)	1 U	1.7	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1.7	1.3	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	2.70E+03	1.80E+03	1.90E+03	3.50E+01	--
RSLs Residential (µg/kg)	1.9E+03	2.0E+03	1.9E+03	3.9E+01	8.6E+01

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][4][7]}	alpha-Chlordane [5] (µg/kg)	beta-BHC (µg/kg)	delta-BHC (µg/kg)	Dieldrin (µg/kg)	Endosulfan I ^[6] (µg/kg)
SB-001-(0.5)	5 U	5 U	5 U	5 U	5 U
SB-001-(1)	2 U	2 U	2 U	2.9	2 U
SB-001-(2)	1 U	1 U	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	1 U	1 U	1 U	1 U
SB-002-(2)	1 U	1 U	1 U	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	12	5 U	5 U	5.7	5 U
SB-003-(1)	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2 U	2 U	2 U	2 U
SB-004-(0.5)	2 U	2 U	2 U	2 U	2 U
SB-004-(1)	5 U	5 U	5 U	5 U	5 U
SB-004-(2)	1.3 P	1 U	1 U	4.7	1 U
SB-004-(3)	1 U	1 U	1 U	1 U	1 U
SB-005-(0.5)	2 U	2 U	2 U	2.6	2 U
SB-005-(1)	2 U	2 U	2 U	3.5	2 U
SB-005-(2)	1 U	1 U	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1 U	1 U	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	4.80E+02	--	--	3.70E+01	4.20E+05
RSLs Residential (µg/kg)	1.7E+03	3.0E+02	--	3.4E+01	4.7E+05

Table 5

Summary of Pesticide Concentrations
Former Valco Mall

<u>Sample ID</u> ^{[2][4][7]}	Endosulfan II ^[6] (µg/kg)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)	Endrin aldehyde (µg/kg)	Endrin ketone (µg/kg)	gamma-BHC (µg/kg)	gamma-Chlordane ^[5] (µg/kg)
SB-001-(0.5)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-001-(1)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-001-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-001-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-002-(1)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-002-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-003-(0.5)	5 U	5 U	5 U	5 U	5 U	5 U	11
SB-003-(1)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-003-(2)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-003-(3)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-004-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-004-(1)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SB-004-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-004-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-005-(0.5)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SB-005-(1)	2 U	2 U	2 U	2 U	2 U	2 U	2.6
SB-005-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-005-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(0.5)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(1)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-006-(3)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SB-007-(0.5)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
SB-007-(1)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
SB-007-(2)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-007-(3)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ESLs Residential (µg/kg)	4.20E+05	--	2.10E+04	--	--	5.50E+02	4.80E+02
RSLs Residential (µg/kg)	470,000	--	1.9E+04	--	--	5.7E+02	1.7E+03

Table 5

Summary of Pesticide Concentrations
Former Vallco Mall

Sample ID ^{[2][4][7]}	Chlordane (Technical) (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Hexachlorobenzene (µg/kg)	Hexachlorocyclopentadiene (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
SB-001-(0.5)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-001-(1)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-001-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-001-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-002-(1)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-002-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-003-(0.5)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-003-(1)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-003-(2)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-003-(3)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-004-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-004-(1)	120 U	5 U	5 U	50 U	100 U	5 U	250 U
SB-004-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-004-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-005-(0.5)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-005-(1)	50 U	2 U	2 U	20 U	40 U	2 U	100 U
SB-005-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-005-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(0.5)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(1)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-006-(3)	250 U	10 U	10 U	100 U	200 U	10 U	500 U
SB-007-(0.5)	500 U	20 U	20 U	200 U	400 U	20 U	1000 U
SB-007-(1)	500 U	20 U	20 U	200 U	400 U	20 U	1000 U
SB-007-(2)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
SB-007-(3)	25 U	1 U	1 U	10 U	20 U	1 U	50 U
ESLs Residential (µg/kg)	4.80E+02	#####	6.20E+01	1.80E+02	--	--	5.10E+02
RLS Residential (µg/kg)	1.7E+03	1.3E+02	7.0E+01	2.10E+02	1.80E+03	3.2E+05	4.9E+02

Table 5

**Summary of Pesticide Concentrations
Former Valco Mall**

Notes:

ug/kg = milligrams per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018. Concentration in µg/kg.

U = compound was not detected at a concentration greater than the method detection limit or reporting limit shown

J = compound was detected at a concentration less than the laboratory reporting limit, but greater than the method detection limit

C = Presence confirmed, but relative percent difference (RPD) between columns exceeds 40%

= Continuing calibration verification (CCV) drift outside limits; average CCV drift within limits per method requirement.

P = Agreement between quantitative confirmation results exceed method recommended limits

-- = not applicable or not available

[1] Samples collected by WSP on 10/30 & 10/31/18. Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than reporting limit, results in red font indicate an exceedance of residential RSLs.

[3] Samples collected by Geosphere consultants, inc. on September 6, 2016

[4] Samples collected by WSP on 1/10/19. Sample nomenclature is as follows: "sample type - sample location - (depth)". Gray gradient indicates increased depth.

[5] Screening level listed is for chlordane. Chlordane is a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components of which alpha-chlordane and gamma-chlordane are included

[6] Screening level listed is for Endosulfan. Endosulfan is a mix of Endosulfan I and Endosulfan II.

[7] The reporting limit is listed for non-detect compounds, indicated by a 'U' qualifier.

[8] The method detection limit is listed for non-detect compounds, indicated by a 'U' qualifier.

[9] The concentration listed is for Chlordane.

Table 6

**Summary of Herbicide Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	2,4,5-TP									
	2,4,5-T (µg/kg)	(Silvex) (µg/kg)	2,4-D (µg/kg)	2,4-DB (µg/kg)	Dalapon (µg/kg)	Dicamba (µg/kg)	Dichlorprop (µg/kg)	Dinoseb (µg/kg)	MCPA (µg/kg)	MCPP (µg/kg)
S-1-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
S-1-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-2-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-2-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-3-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-3-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-4-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
S-4-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-5-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-5-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-6-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-6-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-7-(2)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-7-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
S-8-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
S-8-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
ESLs Residential (µg/kg)	7.80E+06	--	--	--	--	--	--	--	--	--
RSLs Residential (µg/kg)	6.3E+05	5.1E+05	7.0E+05	1.9E+06	1.9E+06	1.9E+06	--	6.3E+04	3.2E+04	6.3E+04

Table 6

**Summary of Herbicide Concentrations
Former Valco Mall**

<u>Sample ID</u> ^{[1][2]}	2,4,5-TP									
	2,4,5-T (µg/kg)	(Silvex) (µg/kg)	2,4-D (µg/kg)	2,4-DB (µg/kg)	Dalapon (µg/kg)	Dicamba (µg/kg)	Dichloroprop (µg/kg)	Dinoseb (µg/kg)	MCPA (µg/kg)	MCPP (µg/kg)
W-1-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-1-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-2-(2)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5 U	2000 U	3100 U
W-2-(5)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-3-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-3-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
W-4-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-4-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-5-(1)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
W-5-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2000 U	3100 U
E-2-(1)	1.1 U	2.3 U	14 U	16 U	72 U	1.2 U	17 U	5.1 U	2000 U	3100 U
E-2-(5)	1.1 U	2.3 U	14 U	16 U	73 U	1.2 U	17 U	5.1 U	2100 U	3200 U
ESLs Residential (µg/kg)	7.80E+06	--	--	--	--	--	--	--	--	--
RSLs Residential (µg/kg)	6.3E+05	5.1E+05	7.0E+05	1.9E+06	1.9E+06	1.9E+06	--	6.3E+04	3.2E+04	6.3E+04

Notes:

µg/kg = milligrams per kilogram

ESLs Residential = Environmental Screening Levels (ESLs) for direct exposure to human health for residential shallow soil exposure as established by the San Francisco (SF) Water Board, revised January 2019. Screening levels listed are for either cancer risk or non-cancer hazards; if a screening level for both cancer risk and non-cancer hazards existed, the lower screening level was listed.

RSLs Residential = Regional Screening Levels (RSLs) for exposure to cancer/noncancer residential soil established by the Department of Toxic Substances Control (DTSC), revised November 2018.

U = compound was not detected at a concentration greater than the method detection limit shown

-- = not applicable or not available

[1] Sample nomenclature is as follows: "sample location - (sample depth)". Gray gradient indicates increased depth.

[2] Bold results indicate the concentration is greater than the method detection limit,

APPENDIX

A

SEARS CLOSURE REPORT

December 6, 1999

Mr. Scott DeMuth
Department 824C
Sears Roebuck & Company
3333 Beverley Road
Hoffman Estates, IL 60179

Dear Mr. DeMuth:

Subject: Fuel Leak Site Case Closure—Sears Automotive Center, 10101 North Wolfe Road, Cupertino, CA 95014; Case No. 14-486

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Santa Clara Valley Water District is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual contamination exists at the site; however, concentration levels are below regulatory concern.

If you have any questions, please call Ms. Rita Chan at (408) 265-2607, extension 2643. Thank you.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Engineering Unit Manager
Leaking Underground Storage Tank Oversight Program


Enclosures:

1. Case Closure Letter
2. Case Closure Summary

cc: Mr. Chuck Headlee (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Steve Gubber
Santa Clara County Fire Department
14700 Winchester Boulevard
Los Gatos, CA 95030-1818

Ms. Nancy Commoncho
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

R. Chan (w/orig enc), Database (w/enc) 

RC:fd:FL9482ccl

December 6, 1999

Mr. Scott DeMuth
Department 824C
Sears Roebuck & Company
3333 Beverley Road
Hoffman Estates, IL 60179

Dear Mr. DeMuth:

Subject: Fuel Leak Site Case Closure—Sears Automotive Center, 10101 North Wolfe Road,
Cupertino, CA 95014; Case No. 14-486

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Engineering Unit Manager
Leaking Underground Storage Tank Oversight Program

CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

I. AGENCY INFORMATION

Date: November 29, 1999

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Rita S. Chan, P.E.	Title: Assistant Civil Engineer

II. CASE INFORMATION

Site Facility Name: Sears Automotive Center		
Site Facility Address: 10101 North Wolfe Road, Cupertino, CA 95014		
RB LUSTIS Case No.: —	Local Case No.: 07S1W18G01f	LOP Case No.: 14-486
URF Filing Date: 11/02/94	SWEEPS No.: —	APN: 316-20-080
Responsible Parties	Addresses	Phone Number
Mr. Scott DeMuth Sears Roebuck & Company	Department 824C 3333 Beverley Road Hoffman Estates, IL 60179	(847) 286-5530

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
—	12,000	Gasoline	Removed	03/85
—	12,000	Gasoline	Removed	03/85
—	5,000	Gasoline	Removed	03/85
—	5,000	Gasoline	Removed	03/85
—	550	Oil	Removed	03/85
—	550	Oil	Removed	03/85
Piping			Removed	Between 10/17/94 and 10/20/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown		
Site characterization complete? Yes	Date Approved By Oversight Agency: —	
Monitoring wells installed? No	Number: —	Proper screened interval? —
Highest GW Depth Below Ground Surface: *	Lowest Depth: *	Flow Direction: —
Most Sensitive Current Use: Potential drinking water		

*Groundwater was not encountered during any of the investigations performed at the site.

Summary of Production Wells in Vicinity: Two production wells are found within ¼ mile of this site. Both wells are reported to be abandoned. Based upon the level of residual contamination at the site and the proximity of these wells to the subject site, the wells identified as part of this survey are not likely to be affected by the reported release.

Are drinking water wells affected? No

Aquifer Name: Santa Clara Valley Groundwater Basin

Is surface water affected? No

Nearest SW Name: Calabazas Creek (~970 feet east-southeast of site)

Off-Site Beneficial Use Impacts (Addresses/Locations): None known

Reports on file? Yes

Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	Two at 12,000 gallons Two at 5,000 gallons Two at 550 gallons	None reported	03/85
Piping	Unknown	None reported	10/94
Free Product	—	—	—
Soil	10 cubic yards	Transported by Southwest Soil Remediation, Inc.	05/31/95
Groundwater	—	—	—
Barrels	—	—	—

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After ¹		Before	After	Before	After ¹
TPH (Gas)	3,000	ND	—	—	Xylene	150	0.55	—	—
TPH (Diesel)	ND	—	—	—	Ethylbenzene	23	0.0061	—	—
Benzene	2.4	ND	—	—	Oil & Grease	—	—	—	—
Toluene	16	ND	—	—	Lead	11	20	—	—
Other (8240/8270)	—	—	—	—	MTBE	—	ND ²	—	—

Description of Interim Remediation Activities:

March 1985—Four underground storage tanks (UST) containing gasoline (two at 12,000 gallons and two at 5,000 gallons), two 550-gallon USTs containing oil, and product dispensers were removed.

October 1994—The dispenser islands and product lines were removed.

November 1994—Additional soil was excavated. Soil sampling was performed at the east end of the product-line trench south of Dispenser Island A and at the former oil UST product lines.

July 1999—A verification assessment was conducted to verify the hydrocarbon concentrations in soil and groundwater. Soil samples were collected from seven boring locations (GP-1 through GP-7) using direct-push technology. GP-1 was advanced to a depth of 44 feet below ground surface (bgs), while GP-2 through GP-7 were drilled to a depth of 24 feet bgs. Soil samples were collected at 4-foot intervals. Volatile organic compounds were monitored in the field using a photoionization detector. The bottom samples from each boring were analyzed. Groundwater was not encountered in any of the borings; therefore, no water samples were collected or analyzed.

ND = Not detected

¹Groundwater was not encountered in any of the seven borings. GP-2 through GP-7 were advanced to a depth of 24 feet bgs; GP-1 was advanced to a depth of 44 feet bgs.

²Detection limit of 0.05 parts per million (ppm).


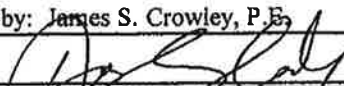
IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Santa Clara Valley Water District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

<p>Considerations and/or Variances:</p> <ul style="list-style-type: none"> The disposal destinations of the removed USTs and piping were not reported. The majority of pollution associated with the UST release was overexcavated. Analytical results for verification soil samples did not indicate the presence of petroleum compounds with the exception of Ethylbenzene (0.0061 ppm) and Xylenes (0.55 ppm). No fuel oxygenates including Methyl tert-Butyl Ether, Di-Isopropyl Ether, Ethyl tert-Butyl Ether, tert-Butyl Alcohol, and tert-Amyl Methyl Ether were detected in the verification soil samples. In addition, analytical results did not indicate the detection of ethanol, 1,2-dibromoethane, and 1,2 dichloroethane. <p>Conclusion: Based on soil sampling results obtained from the verification assessment at the site, residual contamination in the subsurface from the former USTs are minimal. In addition, due to the location of deep groundwater, Santa Clara Valley Water District staff does not believe that the residual contamination at the site would pose a significant risk to the groundwater beneath the site. Therefore, no further corrective action is required at this time.</p>
--

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Rita S. Chan, P.E.	Title: Assistant Civil Engineer
Signature: 	Date: 12/2/99
Approved by: James S. Crowley, P.E.	Title: Engineering Unit Manager
Signature: 	Date: 12/2/99

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Chuck Headlee	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: <i>See attached sheet for signature</i>	Date: <i>12/6/99</i>

Attachments:

1. Site Vicinity Map
2. Site Plan
3. Analytical results for soil samples collected in October and November 1994 and sample locations
4. Analytical results for soil samples collected in July 1999 and sample locations.

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file

Dec-02-99 01:50P

P.06

VII. REGIONAL BOARD NOTIFICATION

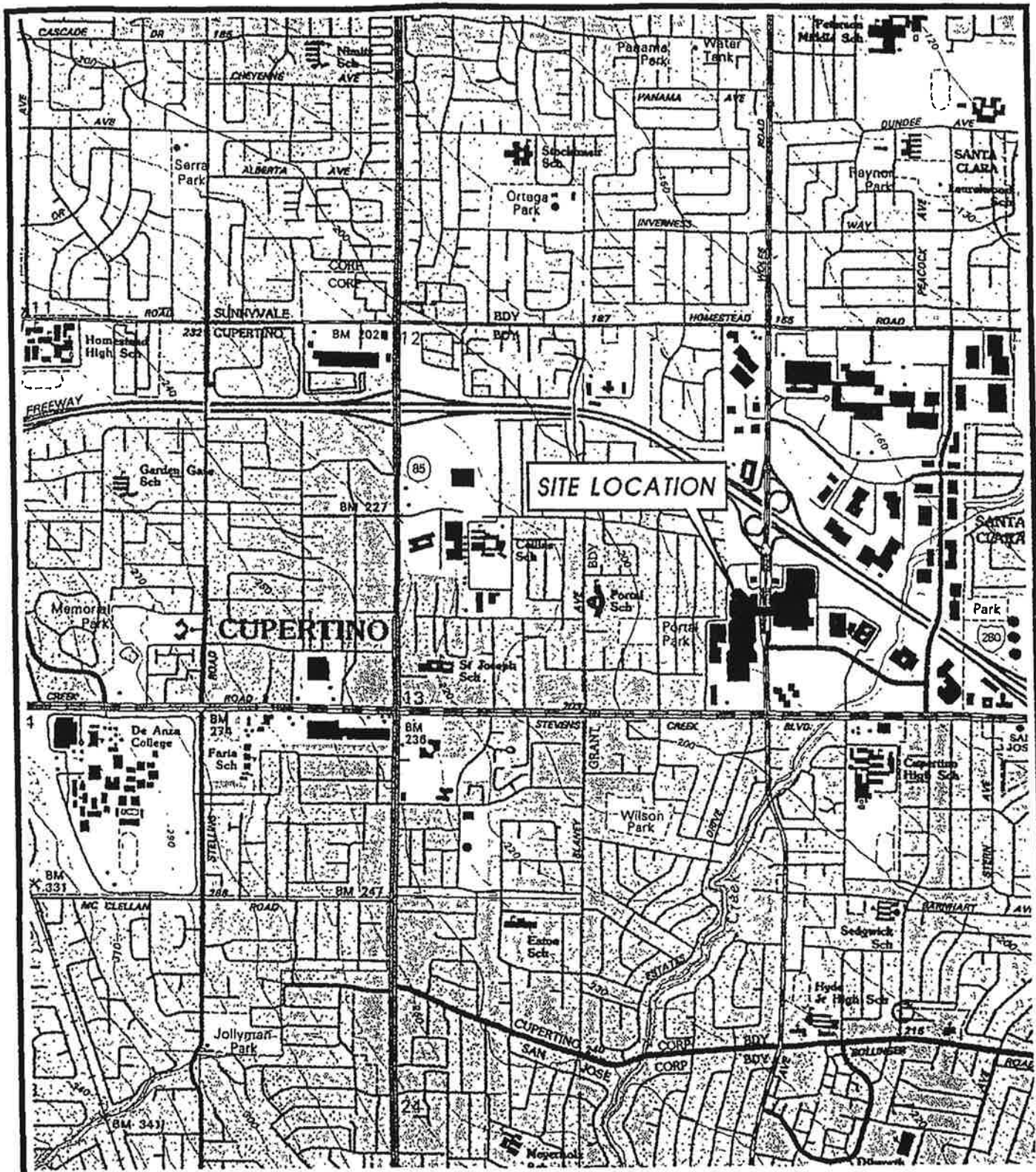
Regional Board Staff Name: Chuck Headlee	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 12/2/99
Signature: <i>Chuck Headlee</i>	Date: 12/3/99


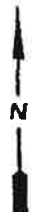
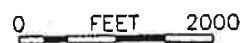
Attachments:

1. Site Vicinity Map
2. Site Plan
3. Analytical results for soil samples collected in October and November 1994 and sample locations
4. Analytical results for soil samples collected in July 1999 and sample locations.

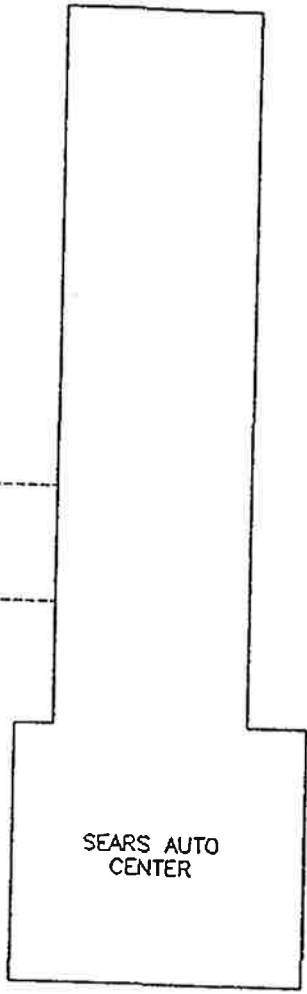
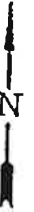
This document and the related CASP, CE, CSURC LETTER, shall be retained by the lead agency as part of the official site file.

Post-it* Fax Note	7671	Date	# of pages 1
To <i>Rita Chan</i>		From <i>Chuck Headlee</i>	
Co./Dept.		Co.	
Phone #		Phone #	
Fax <i>(408) 267-5057</i>		Fax #	

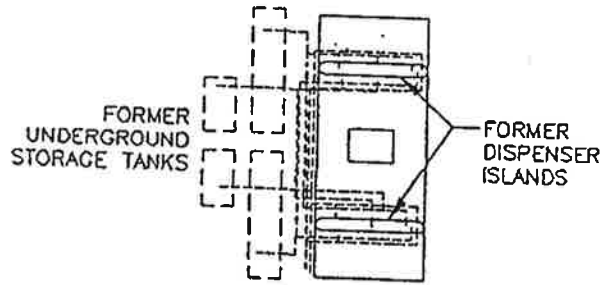


 IT CORPORATION		SCALE: 	SITE LOCATION MAP	
		CLIENT: SEARS ROEBUCK, & COMPANY STORE NO. 1468	DATE: 11/20/98	
		LOCATION: 10101 WOLFE ROAD CUPERTINO, CALIFORNIA	FIGURE: 1	

SOURCE: U.S.G.S. 7.5' QUAD SHEET
 CUPERTINO, CALIFORNIA
 PHOTOREVISED 1991



FORMER USED OIL TANK
FORMER MOTOR OIL TANK



STEVENS CREEK BOULEVARD

NOTES:
1. MAP ADAPTED FROM SITE UTILITY PLAN, CHARLES LUCKMAN ASSOCIATES, 04/30/69.



FLUOR DANIEL GTI



SITE PLAN

CLIENT: SEARS MERCHANDISE GROUP STORE No. 1468		FILE: 0023SM (1:600)	PROJECT NO.: 02020023	PM	PE/RC
LOCATION: 10101 WOLFE ROAD CUPERTINO, CA		REV.	DES. PM		DET. PJWH
		DATE: 12/16/94	FIGURE: 2		

TABLE 1
Former Dispenser Island Soil Sample Analytical Results

Sears Store 1468, Cupertino, California
Sampled October 19, 20, and November 3, 1994

Sample ID	Depth Feet	Date	TPH-g	B	T	E	X	Total Lead
Island A Soil Samples								
ISL A-1	2	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
ISL A-2	3	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
ISL A-3	2	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
Island A, North Trench, Soil Samples								
1ANT/3	3	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	6
AST 3/3	3	10/20/94	<1.0	0.009	<0.005	<0.005	<0.015	<5
2ANT/3	3	10/19/94	48	0.08	1.1	0.71	5.0	6
Island A, South Trench, Soil Samples								
1AST/5	5	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	6
2AST/6	6	10/19/94	3,000	2.4	16	23	150	11
ASTP-5.5	5.5	11/03/94	<1.0	<0.005	<0.005	<0.005	<0.015	6
Island B Soil Samples								
ISL B-1	2	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
ISL B-2	2	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
ISL B-3	3	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
Island B, North Trench, Soil Samples								
1BNT/6	6	10/19/94	25	0.06	1.2	0.54	3.8	<5
2BNT/2	2	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	5
Island B, South Trench, Soil Samples								
1BST/6.5	6.5	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	6
2BST/2	2	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
BST 3-3	3	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
West Trench Soil Samples								
1WT/6	6	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5
2WT/3	3	10/19/94	<1.0	<0.005	<0.005	<0.005	<0.015	6
3WT/6	6	10/19/94	<1.0	0.006	0.02	<0.005	<0.015	7

Notes:

- 1) All results expressed in milligrams per kilogram
- 2) Total lead analyzed using EPA Method 6010

TPH-g = total petroleum hydrocarbons as gasoline, B = benzene, T = toluene, E = ethylbenzene, X = total xylenes; analyzed using EPA Method 8020
 < Number = below reported detection limits

TABLE 2
Former New and Used Oil Product Line Soil Sample Analytical Results

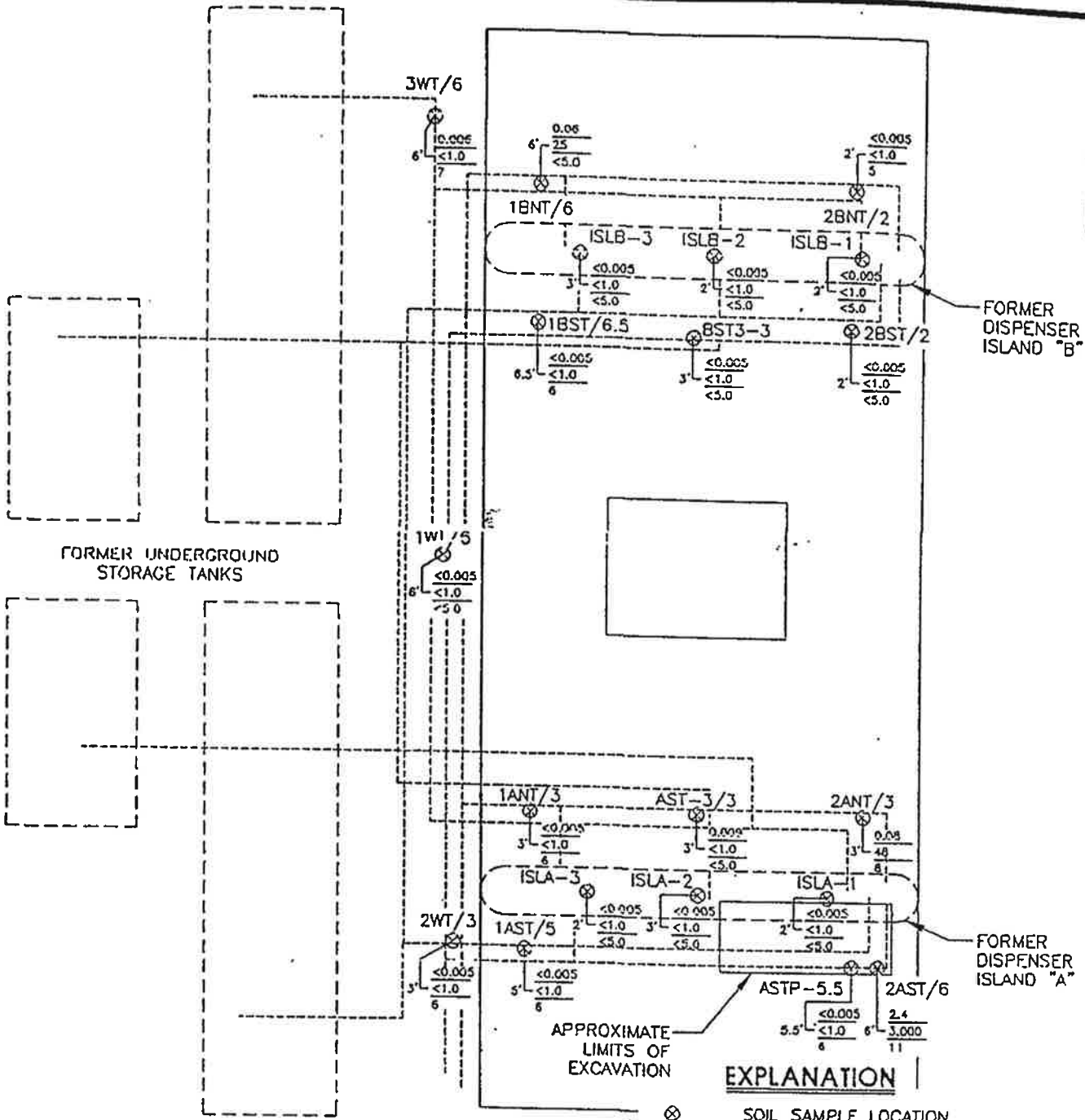
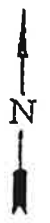
Sears Store 1468, Cupertino, California
Sampled October 20 and November 3, 1994

Sample ID	Date	TPH-g	B	T	E	X	TRPH	TPH-d
VO1	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	7	<10
VO2	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	1,300	<10
WO1	10/20/94	<1.0	<0.005	<0.005	<0.005	<0.015	80	<10
VO1-6.5	11/03/94	<1.0	<0.005	<0.005	<0.005	<0.015	<5	<10
WO1-6.0	11/03/94	<1.0	<0.005	<0.005	<0.005	<0.015	600	<10

Notes:

1) All results expressed in milligrams per kilogram

- TPH-g = total petroleum hydrocarbons as gasoline, B = benzene, T = toluene, E = ethylbenzene, X = total xylenes; analyzed using EPA Method 8020
- TRPH = total recoverable petroleum hydrocarbons; analyzed using EPA Method 3550 (Modified)/EPA 418.1
- TPH-d = total petroleum hydrocarbons as diesel; analyzed using EPA Method Modified 8015
- < Number = below reported detection limits



FORMER DISPENSER ISLAND "B"

FORMER DISPENSER ISLAND "A"

FORMER UNDERGROUND STORAGE TANKS

APPROXIMATE LIMITS OF EXCAVATION

EXPLANATION

- ⊗ SOIL SAMPLE LOCATION
- 2' $\frac{0.08}{48}$ BENZENE (mg/kg)
- 8' $\frac{1.0}{8}$ TPH AS GASOLINE (mg/kg)
- 8' $\frac{1.0}{8}$ TOTAL LEAD (mg/kg)
- 3' $\frac{<0.005}{<1.0}$ BENZENE DETECTION LIMIT (mg/kg)
- 3' $\frac{<1.0}{<5.0}$ TPH AS GASOLINE DETECTION LIMIT (mg/kg)
- 3' $\frac{<5.0}{<5.0}$ TOTAL LEAD DETECTION LIMIT (mg/kg)

SAMPLED ON: 10/19/94, 10/20/94, AND 11/03/94

NOTES:

1. EXCAVATION AND SAMPLE LOCATIONS PER FIELD MEASUREMENTS. CTR. 10/94.

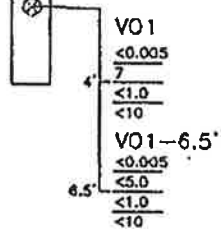
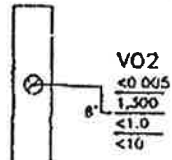
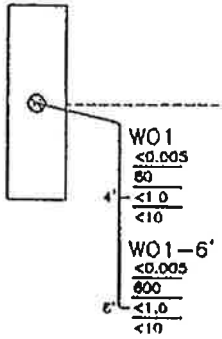
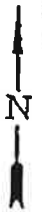


FLUOR DANIEL GTI



SOIL ANALYTICAL RESULTS AT FORMER DISPENSER ISLANDS

CLIENT: SEARS MERCHANDISE GROUP STORE No. 1468	FILE:	0023SRDI (1:120)	PROJECT NO.:	02020147	PM	PE/RG
	REV.					
LOCATION: 10101 WOLFE ROAD CUPERTINO, CA	DES.	JM	DET.	CCG	DATE:	06/04/96
					FIGURE:	3



SEARS AUTO CENTER

EXPLANATION

⊗	SOIL SAMPLE LOCATION
	<0.005 BENZENE (mg/kg)
	<5.0 TRPH (mg/kg)
	<1.0 TPH AS GASOLINE (mg/kg)
	<10 TPH AS DIESEL (mg/kg)
	<0.005 BENZENE DETECTION LIMIT (mg/kg)
	<5.0 TRPH DETECTION LIMIT (mg/kg)
	<1.0 TPH AS GASOLINE DETECTION LIMIT (mg/kg)
	<10 TPH AS DIESEL DETECTION LIMIT (mg/kg)

NOTES:

1. EXCAVATION AND SAMPLE LOCATIONS PER FIELD MEASUREMENTS, GTI, 10/94.

SAMPLED ON: 10/19/94, 10/20/94, AND 11/03/94



FLUOR DANIEL GTI



SOIL ANALYTICAL RESULTS AT FORMER NEW & USED OIL USTS

CLIENT: SEARS MERCHANDISE GROUP STORE No. 1468	FILE: 0023SRWO (1:120)	PROJECT NO.: 02020147	PM	PE/RG
	LOCATION: 10101 WOLFE ROAD CUPERTINO, CA	DES. JM	DET. CCG	DATE: 06/04/96
			FIGURE 4	

TABLE 1
Laboratory Results for Soil (mg/kg)

Sears Auto Center 1468/6951
 Cupertino, California

Sample ID	Date	Depth (ft)	Benzene		Toluene		Ethylbenzene (8020)		Xylenes		TPH-g (8015M)	MTBE/Oxygenates	Lead 6010
			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			
GP-1, S11	07/12/99	44	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—
GP-2, S6	07/12/99	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—
GP-3, S6	07/12/99	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—
GP-4, S6	07/12/99	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—
GP-5, S7	07/12/99	22	<0.005	<0.005	<0.005	<0.005	0.0061	0.55	<0.005	<0.005	<1	<0.05/ND	20
GP-6, S7	07/12/99	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—
GP-7, S8	07/12/99	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<0.05/ND	—

Note: Boring GP-1 was advanced to 44 feet below grade to determine if groundwater would be encountered.

Groundwater was not encountered; therefore, the deepest sample from each boring was submitted for analysis.

MTBE was analyzed by both EPA methods 8020 and 8260; oxygenates include MTBE, DIPE, ETBE, TAME, 1,2-DBA, 1,2-DCA (all detection limits = 0.10 mg/kg), ethanol (detection limit = 25 mg/kg) and t-butanol (detection limit = 5 mg/kg).

Lead was analyzed for the sample with the highest hydrocarbon concentrations.

ND = below detection limits

SEARS RETAIL STORE



GP-2 S6(22')

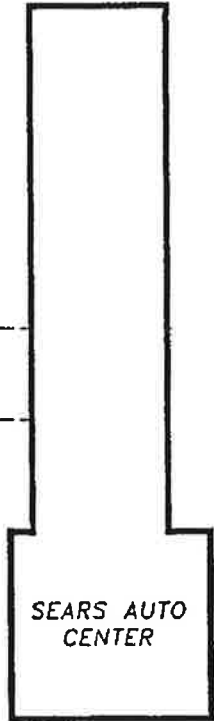
B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND

GP-2
FORMER USED OIL TANK

GP-3
FORMER MOTOR OIL TANK

GP-1 S11(44')

B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND



GP-5 S6(22')

B	ND
T	ND
E	0.0061
X	0.55
TPHg	ND
MTBE	ND
LEAD	20

FORMER UNDERGROUND STORAGE TANKS

GP-4 S6(22')

B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND

FORMER DISPENSER ISLANDS

GP-3 S6(22')

B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND

GP-7 S8(22')

B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND

GP-6 S7(22')

B	ND
T	ND
E	ND
X	ND
TPHg	ND
MTBE	ND

LEGEND

- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X XYLENES
- TPHg TOTAL PETROLEUM HYDROCARBONS IN GASOLINE
- MTBE METHYL TERTIARY BUTYL ETHER

NO BELOW DETECTION LIMITS

NOTES:

DETECTIONS LIMITS FOR BTEX = 0.005 mg/ly;
TPHg=1.0 mg/ly; LEAD = 1.0 mg/ly; MTBE = 0.05 mg/ly.

◆ BORING LOCATION

STEVENS CREEK BOULEVARD



IT CORPORATION



**HYDROCARBON CONCENTRATIONS
IN SOIL
(JULY 12, 1999)**

CLIENT: SEARS
STORE NO. 1468

FILE: HCS-799

PROJECT NO:
781469

PM *MS* RG/PE *EW*

LOCATION: 10101 WOLFE ROAD
CUPERTINO, CALIFORNIA

REV: X
DES: MG DET: TRS DATE: 8/11/99

FIGURE: 3

APPENDIX

B

J.C. PENNEY

CLOSURE REPORT

September 1, 1994

Mr. Bob Arneson
J.C.Penney
6131 Orangethorpe Avenue
Buena Park, CA 90620

Dear Mr. Arneson:

Subject: Underground Storage Tank (UST) Case Closure—J.C.Penney Store No. 47, 10150 North Wolfe Road, Cupertino, CA; Case No. 27H

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e).

The information in our files indicate that there are four groundwater monitoring wells at the site. A copy of the Santa Clara Valley Water District Ordinance No. 90-1, regulating the classification, construction, and destruction of wells and deep excavations in Santa Clara County, is enclosed. This ordinance explains that well owners are responsible for the maintenance and destruction of their wells. This ordinance requires that wells installed for the purpose of investigation and remediation of the underground tank release be properly destroyed when they are no longer used.

Please contact Ms. Belinda Allen at the Camden Office, (408) 927-0710, extension 2644, if you have any questions in this matter.

Sincerely,

ORIGINAL SIGNED BY

David J. Chesterman
Principal Engineer
Groundwater Quality Branch

Enclosure(s)

cc: (w/enc—if LOP case)
Ms. Lola Barba-Arroyo
State Water Resources Control Board
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. John West
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. David Ghilarducci
Central Fire Protection District
14700 Winchester Boulevard
Los Gatos, CA 95030-1818

D. Chesterman, B. Allen, T. Hemmeter (w/enc), C. Tulloch (w/original enc), Database (w/enc),
Read

CT:cdh:FL9482ad

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM**

I. AGENCY INFORMATION

Date: January 19, 1994

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Christine A. Tulloch	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: J.C. Penney Store No. 427				
Site Facility Address: 10150 North Wolfe Road, Cupertino, CA 95014				
RB LUSTIS Case No.:		Local Case No.: 0751W18B01f		LOP Case No.: 27H
URF Filing Date:		SWEEPS No.:		
Responsible Parties		Addresses		Phone Numbers
J.C. Penney		6131 Orangethorpe Avenue Buena Vista, CA 90620		(714) 523-6853
Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
2	350	Diesel	Removed	11/15/89
1	350	Waste oil	Removed	11/15/89
1	750 sump	Waste oil/water	Closed In-Place	01/21/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Holes were observed in the diesel tanks.		
Site characterization complete? Yes		Date Approved By Oversight Agency: 12/16/92
Monitoring wells installed? Yes		Number: 4 Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 122		Lowest Depth: 137 Flow Direction: West
Most Sensitive Current Use: Potential drinking water		
Are drinking water wells affected? None reported		Aquifer Name: Santa Clara Valley Groundwater Basin
Is surface water affected? No		Nearest/Affected SW Name: Calabazas Creek
Off-Site Beneficial Use Impacts (Addresses/Locations): None reported.		
Report(s) on file? Yes		Where is report(s) filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	2 - 350 gallons 1 - 500 gallons	Transported offsite by H&H Shipping Service	11/15/89
Piping	Not reported.	Not reported.	Not reported.
Free Product	None	NA	NA
Soil	303 tons	Disposal at Chemical Waste Management	Not reported.
Groundwater	200 gallons	Petroleum Recycling Corp.	12/17/93
Barrels	None	NA	NA

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP									
Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	4	4	ND	ND	Xylene	0.75	ND	ND	ND
TPH (Diesel)	6,600	14	1,700	ND	Ethylbenzene	ND	ND	0.0038	ND
Benzene	ND	ND	0.0039	ND	Oil & Grease	1,400	3,800	ND	ND
Toluene	0.12	0.12	ND	ND	Heavy Metals	87.6(Ni)	87.6(Ni)	3.6 ³ 0.73 ⁴	NA
Chlorinated Hydrocarbons	ND	ND	0.5 ¹ 1.6 ²	ND	Other	NA	NA	NA	NA

¹ Bromodichloromethane

² Chlorform

³ Chromium

⁴ Lead

Comments (Depth of Remediation, etc.): Overexcavation of contaminated soil at the diesel tank was performed to 12 feet and soil at the waste oil tank was excavated to 14 feet. Remediation of groundwater was not performed. "After" concentrations represent verification monitoring results.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: -0-	Number Retained: 4
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: David J. Chesterman	Title: Principal Engineer
Signature: <i>[Handwritten Signature]</i>	Date: 8/2/94

VI. REGIONAL BOARD NOTIFICATION

Date Submitted to RB: August 17, 1994	RB Response: CONCUR -	<i>BASED SOLELY UPON INFORMATION PROVIDED IN THIS SUMMARY & THE ATTACHED RECOMMENDATION MEMORANDUM.</i>
Regional Board Staff Name: JOHN R. WEST <i>[Signature]</i>	Title: E.S. II	Date: August 17, 1994

VII. ADDITIONAL COMMENTS, DATA, ETC.

See attached closure recommendation for additional data and discussions.
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This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

APPENDIX

C GEOSPHERE REPORT





Geosphere Consultants, Inc.

AN ETS COMPANY

Geotechnical Engineering • Engineering Geology
Environmental Management • Water Resources

October 25, 2016

Mr. Nandy Kumar
Sand Hill Property Company
2282 Sand Hill Road, Suite 241
Menlo Park, California 94025

Subject: Analytical Soil Sampling and Testing Study
The Hills at Vallco
Wolfe Road and Stevens Creek Boulevard
Cupertino, California 94025
Geosphere Project No. 91-03790-B

Dear Mr. Kumar:

As authorized, **Geosphere Consultants, Inc.** (Geosphere) has performed a Limited Analytical Soil Sampling and Testing Study for the proposed construction located at the subject site in Cupertino, California.

PURPOSE AND SCOPE

The purpose of this study was to provide a preliminary screening of potential chemicals of concern at the site. It is our understanding that the subject project will generate over 1.3 million yards of excess soil, and that this soil is planned to be imported to Treasure Island. The scope of work for this study is a screening tool for preliminary assessment of the site and has been prepared in accordance with our proposal dated August 5, 2016.

We were provided with a technical memorandum prepared by Terraphase dated June 3, 2016, and titled *Treasure Island Soil Import Criteria* prior to the start of our investigation. This memorandum details the criteria for chemicals of concern for imported soils at Treasure Island. We relied on this report to develop a testing program that would comply with the Treasure Island soil import criteria.

We were not provided with a Phase 1 Environmental Site Assessment of the site. However, we reviewed the State of California Geo-Tracker Website database for known environmental sites of concern. Based on a review of this database we understand that two Leaking Underground Storage Tank (LUST) sites are located within the project property; a former Sears and Roebuck Auto Center is located in the southwest corner of the site, and a JC Penny related LUST is located at the existing parking garage at the southwest corner of Vallco Parkway and Wolfe Road.

The scope of this study included the review of pertinent published and unpublished documents related to the site, drilling eight borings using direct push samplers, laboratory testing of discrete soil samples, engineering analysis

of the accumulated data, and preparation of this report. The conclusions and recommendations presented in this report are based on the data acquired and analyzed during this study, and on prudent engineering judgment and experience.

SITE AND PROJECT DESCRIPTION

We understand that *The Hills at Vallco* will be a multi-structured mixed-use commercial and residential development with an entertainment district and recreational facilities throughout.

The site is currently occupied by the Vallco Shopping Center and associated parking and site development over a 50-acre site, as shown in *Figure 1 – Site Vicinity Map* and *Figure 2- Environmental Boring Plan*. The site is bounded by Highway 280 to the north and Stevens Creek Boulevard to the south, with residential developments to the west and commercial developments to the east. Wolfe Road runs north-south through the site. The existing structures include commercial shopping structures, a theater, restaurants, and both on-grade and multi-storied parking structures. The new project will include approximately eight million square feet of mixed use development, including one and two-story below grade parking levels with 16 separate mid-rise buildings above, of varying height. The project includes a 30-acre green roof over all of the buildings and also at links between the green roof structure and structures below.

FIELD EXPLORATION

Test Borings

A limited subsurface field exploration program was undertaken on September 6, 2016 to collect various discrete soil samples at the field site. A total of eight borings were drilled using a mobile direct push Geoprobe DT-22 as shown on Figure 2. Boring E-1 went to a maximum depth of 50 feet, E-2 to a depth of 45 feet, E-3 to a depth of 35 feet, and E-4 through E-8 to a depth of 20 feet. The soil was continuously sampled in five foot intervals, with discrete samples being collected at depths of 1', 5', 10', 15', 20', 30', 40', and 50', where applicable. Following the completion of drilling, the boreholes were backfilled using grout and excess auger cuttings.

The location and depths of the borings for the field exploration plan were chosen to cover the extent of the project, with the deeper borings correlating to areas where the proposed excavation will be deeper. Additional borings were placed adjacent to identified LUST sites where possible. A total of 48 samples were taken across all borings, and 32 of these were sent to the lab for testing.

A Geosphere staff engineer visually classified the materials encountered in the borings in general accordance with the Unified Soil Classification System.

Boring logs with descriptions of the various materials encountered in each boring are presented in Appendix A. The ground surface elevations indicated on the soil boring logs were estimated based on elevations shown on Google Earth.

LABORATORY TESTING

Laboratory tests were performed on 32 selected discrete samples to determine the presence of chemicals of concern in accordance with the Treasure Island import soil criteria. The soil samples were transported on ice to a California State-Certified laboratory for testing. Proper chain-of-custody procedures were followed. The soil samples were tested for Volatile Organic Compounds including MTBE4 and TPH gas (EPA 8260B), Semi-Volatile Organic Compounds (EPA 8270C), Pesticides (EPA 8081), PCBs (EPA 8082), TPH diesel and motor oil (EPA 8015M), Naturally Occurring Asbestos (California Air Resource Board Test Method 435), Dioxins and Furans (EPA 8290A), and CAM 17 metals (EPA 6010B/7471A). The soil was also tested for STLC of Chromium (Title 22) in thirty of the samples, due to the relatively high levels discovered through the CAM 17 results. The STLC results will be provided in a supplemental letter.

The attached tables compare all (detected) results to the Treasure Island Soil Import Criteria, which itself is based upon the San Francisco Regional Water Quality Control Board (SFRWQCB) Region 2 Environmental Screening Levels (ESLs) for soils less than three meters in depth in residential areas where water is not a current or potential source of drinking water and the U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for residential land use. We note that other waste facilities provide their own criteria for acceptance of off-haul material and these results should be provided and screened by them for acceptance or further testing requirements. We recommend that the results be reviewed immediately for any additional testing or extraction requirements. Other testing may require additional sampling depending on the quantity of sample remaining in the labs custody.

LABORATORY FINDINGS

A summary table (Table 9) has been included which lists only those constituents that have exceeded the Import Criteria. Vanadium and Cobalt appear to be the main contaminants on-site, as they express levels higher than the Import Criteria for most samples. A couple of SVOCs exhibit high levels near the surface in E1-1, E3-2 has a high amount of the pesticide Dieldrin, and E5-1 shows a high level of the PCB Aroclor 1254.

CONCLUSIONS AND RECOMMENDATIONS

We recommend that you have the receivers of the soil review these results as soon as possible. We provided the preliminary results to Terraphase and they indicated that a submission of the geotechnical results would be needed for their complete review of the results. Additional consulting and testing may be required by the receiving body including an EPA Phase 1 performed. In addition, we anticipate that a Soils Management Handling Plan may be necessary during construction. This could potentially involve quarantining the surficial soils where contamination is more prevalent, and the monitoring/sampling of soil is being prepped for off haul.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report is issued with the understanding that it is the responsibility of the owner or his representatives to see that the information and recommendations contained herein are called to the attention of the other members of the design team and incorporated into the plans and specifications, and that the necessary steps are taken to see that the recommendations are implemented during construction.

We note that no geotechnical data has been gathered from our activities on site thus far, in accordance with our prior proposal to you. The findings and recommendations presented in this report are valid as of the present time for the development as currently proposed. However, changes in the conditions of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Accordingly the findings and recommendations presented in this report may be invalidated, wholly or in part, by changes outside our control.

Should you or members of the design team have questions or need additional information, please contact either of the undersigned at eswenson@geosphereinc.net. We greatly appreciate the opportunity to be of service to you.

Sincerely,

GEOSPHERE CONSULTANTS INC.



Nick Anastasio, EIT
Staff Geotechnical Engineer



Eric J. Swenson, G.E., C.E.G.
President



Attachments: Tables 1 thru 9
Figure 1 – Site Vicinity Map
Figure 2 – Boring Location Plan
Appendix A – Boring Logs
Accutest Analytical Results (Sent under separate cover)

Distribution: 2 plus PDF to Addressee, NKumar@shcmllc.com
PDF to Paul Hanson, phansen@shcmllc.com

CF/CTD/EJS:pmf



Table 1. Summary of Detected Results, Vallco Mall Soil Sampling, September 6, 2016

Constituent	E1-1	E1-2	E1-3	E1-4	Import Criteria*
Inorganics/CAM 17 metals					
Arsenic	2.5	3.5	ND	3.0	10
Barium	344	174	76.4	96.7	1500
Chromium	32.9	84.9	54.7	89.6	2500
Cobalt	ND	19.7	ND	19.6	16
Copper	25.4	38.1	23.3	30.2	310
Lead	7.4	9.1	ND	7.3	80
Mercury (elemental)	0.087	0.045	0.063	0.043	1.0
Nickel	36.7	105	48.7	87.6	490
Vanadium	37.2	64.1	59.5	69.0	39
Zinc	44.7	58.3	35.2	48.5	2,300
Pesticides/PCBs					
None Detected					N/A
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Benzo(a)pyrene	0.0297 J	ND	ND	ND	0.016
Benzo(b)fluoranthene	0.0416 J	ND	ND	ND	0.16
Benzo(g,h,i)perylene	0.0316 J	ND	ND	ND	2.5
Benzo(k)fluoranthene	0.0203 J	ND	ND	ND	1.6
Chrysene	0.0553	ND	ND	ND	3.8
Dibenz(a,h)anthracene	0.0176 J	ND	ND	ND	0.016
1-Methylnaphthalene	0.168 J	ND	ND	ND	N/A
2-Methylnaphthalene	0.178 J	ND	ND	ND	0.25
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	120 J	ND	ND	ND	230
TPH (motor oil)	841	ND	ND	2.78 J	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.



Table 2. Summary of Detected Results, Vallco Mall Soil Sampling, September 6, 2016

Constituent	E1-8	E2-1	E2-2	E2-3	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.6	3.3	3.1	3.1	10
Barium	90.9	111	218	198	1500
Chromium	27.8	50.9	74.4	79.8	2500
Cobalt	ND	13	16.1	18.8	16
Copper	19.3	4.1	35.0	36.4	310
Lead	7.4	3.2	9.3	9.3	80
Mercury (elemental)	0.45	0.038	ND	ND	1.0
Nickel	36.2	6.5	94.4	100	490
Vanadium	31.2	8.1	47.2	49.2	39
Zinc	47.5	3.2	52.6	54.8	2,300
Pesticides/PCBs					
None Detected					N/A
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Acetone	ND	ND	0.026 J	ND	0.50
Bis(2-Ethylhexyl)phthalate	ND	0.0388 J	ND	ND	39
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	2.86 J	ND	ND	230
TPH (motor oil)	ND	11.4	ND	ND	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.



Table 3. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E2-5	E2-7	E3-1	E3-2	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.7	3.0	3.2	2.7	10
Barium	164	128	152	143	1500
Chromium	72.6	67.7	62.0	65.1	2500
Cobalt	17.7	16.1	14.2	15.2	16
Copper	37.0	35.0	29.6	30.9	310
Lead	8.5	7.6	8.1	9.1	80
Mercury (elemental)	0.10	0.093	0.042	0.042	1.0
Nickel	95.6	90.8	70.9	77.5	490
Vanadium	53.4	44.5	47.2	50.0	39
Zinc	53.8	56.5	55.2	52.0	2,300
Pesticides/PCBs					
4, 4' – DDD	ND	ND	ND	0.0017 J	1.0
4, 4' – DDE	ND	ND	ND	0.0208	1.0
Dieldrin	ND	ND	ND	0.0025 J	0.00017
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Acetone	ND	ND	ND	0.0951	0.50
2-Butanone (MEK)	ND	ND	ND	0.0151	5.1
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	ND	ND	4.60 J	230
TPH (motor oil)	ND	ND	6.52	6.48	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.



Table 4. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E3-4	E3-6	E4-1	E4-2	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.2	3.1	3.9	4.5	10
Barium	147	120	172	167	1500
Chromium	66.1	78.1	82.5	65.3	2500
Cobalt	15.5	12.6	17.9	16.7	16
Copper	30.6	27.7	39.0	32.0	310
Lead	7.4	6.9	9.6	10.5	80
Mercury (elemental)	0.10	0.062	0.098	0.044	1.0
Nickel	78.2	65.5	101	82.4	490
Vanadium	54.7	66.7	61.4	52.5	39
Zinc	47.0	47.7	59.7	56.6	2,300
Pesticides/PCBs					
None Detected					N/A
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Acetone	0.104	ND	ND	ND	0.50
2-Butanone (MEK)	0.0163 J	ND	ND	ND	5.1
Methylene Chloride	ND	0.0113	0.0104 J	0.0099	0.077
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	ND	ND	ND	230
TPH (motor oil)	2.40 J	ND	3.60 J	ND	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.

Table 5. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E4-3	E5-1	E5-2	E5-3	ESL*
Inorganics/CAM 17 metals					
Arsenic	4.7	3.8	4.1	2.9	10
Barium	140	364	158	136	1500
Chromium	58.7	66.6	74.1	73.2	2500
Cobalt	15.8	14.7	16.5	16.9	16
Copper	34.1	33.1	33.5	33.3	310
Lead	9.7	15.7	14.4	8.1	80
Mercury (elemental)	0.12	0.090	0.048	0.045	1.0
Nickel	93.7	72.5	86.1	86.9	490
Vanadium	49.2	60.9	59.6	52.2	39
Zinc	58.0	61.9	64.6	52.9	2,300
Pesticides/PCBs					
4, 4' – DDD	ND	0.0226 J	ND	ND	1.0
4, 4' – DDE	ND	ND	0.0247	ND	1.0
4, 4' – DDT	ND	0.0336 J	0.0084 J	ND	1.0
Aroclor 1254	ND	0.523	ND	ND	0.12
Dieldrin	ND	ND	0.0055 J	ND	0.00017
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Benzo(a)anthracene	ND	0.0246	ND	ND	0.16
Benzo(a)pyrene	ND	0.0233	ND	ND	0.016
Benzo(b)fluoranthene	ND	0.0194	ND	ND	0.16
Benzo(g,h,i)perylene	ND	0.0402	ND	ND	2.5
Benzo(k)fluoranthene	ND	0.0073 J	ND	ND	1.6
Chrysene	ND	0.0858	ND	ND	3.8
Dibenz(a,h)anthracene	ND	0.0126 J	ND	ND	0.016
Indeno(1,2,3-cd)pyrene	ND	0.0093 J	ND	ND	0.16
Methylene Chloride	0.0083 J	0.0051 J	0.0065 J	0.0086 J	0.077
Pyrene	ND	0.0309 J	ND	ND	85
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	88.3	3.02 J	ND	230
TPH (motor oil)	ND	218	10.8	3.77 J	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.

Table 6. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E6-1	E6-2	E6-4	E7-1	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.5	3.5	2.4	ND	10
Barium	135	199	135	156	1500
Chromium	77.3	78.8	82.3	69.0	2500
Cobalt	16.5	18.1	18.3	14.8	16
Copper	35.1	37.0	34.0	33.9	310
Lead	15.1	9.0	7.7	10.3	80
Mercury (elemental)	0.13	0.056	0.047	0.048	1.0
Nickel	82.6	98.4	81.8	82.5	490
Vanadium	60.3	54.0	63.9	51.2	39
Zinc	58.0	57.1	47.9	52.2	2,300
Pesticides/PCBs					
4, 4' – DDD	0.0295 J	ND	ND	ND	1.0
4, 4' – DDE	0.140	ND	ND	0.0088 J	1.0
4, 4' – DDT	0.0702	ND	ND	ND	1.0
Dieldrin	0.0322	ND	ND	0.0049 J	0.00017
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Acetone	ND	ND	ND	0.210	0.5
Benzo(b)fluoranthene	0.0040 J	ND	ND	ND	0.16
Chrysene	0.0049 J	ND	ND	ND	3.8
Methylene Chloride	0.0134	0.0124	0.0068 J	0.0136	0.077
2-Butanone (MEK)	ND	ND	ND	0.0459	5.1
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	6.24	ND	ND	10.1	230
TPH (motor oil)	23.9	7.59	3.42 J	29.7	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.



Table 7. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E7-2	E7-3	E7-5	E8-1	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.0	2.7	4.2	3.7	10
Barium	164	139	115	142	1500
Chromium	71.4	69.0	56.7	70.4	2500
Cobalt	19.3	17.2	11.4	14.6	16
Copper	34.9	33.4	31.1	33.8	310
Lead	9.2	7.6	8.5	37.5	80
Mercury (elemental)	ND	ND	0.12	0.12	1.0
Nickel	96.6	68.6	68.4	81.1	490
Vanadium	41.8	60.1	46.4	52.2	39
Zinc	53.0	51.9	52.7	54.0	2,300
Pesticides/PCBs					
4, 4' – DDE	ND	ND	ND	0.00063 J	1.0
4, 4' – DDT	ND	ND	ND	0.0012 J	1.0
Aroclor 1254	ND	ND	ND	0.0256	0.12
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
Acetone	0.0292 J	ND	ND	ND	0.5
Methylene Chloride	0.0085	0.0122	0.0116	0.0102	0.077
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	ND	ND	10.5	230
TPH (motor oil)	5.22	ND	ND	44.5	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.



Table 8. Summary of Detected Results, Vallico Mall Soil Sampling, September 6, 2016

Constituent	E8-2	E8-3	E8-4	E8-5	ESL*
Inorganics/CAM 17 metals					
Arsenic	3.0	3.1	4.4	3.6	10
Barium	177	112	86.7	115	1500
Chromium	76.3	77.5	49.5	48.9	2500
Cobalt	17.6	18.1	11.1	ND	16
Copper	35.5	33.5	25.1	27.3	310
Lead	9.1	8.2	8.2	7.4	80
Mercury (elemental)	ND	0.055	0.065	0.086	1.0
Nickel	93.4	83.1	61.8	62.6	490
Vanadium	52.7	53.9	44.9	43.0	39
Zinc	52.7	49.0	49.6	50.0	2,300
Pesticides/PCBs					
None Detected					N/A
Volatile and Semi-volatile organic chemicals (VOCs/SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs)					
2-Butanone (MEK)	0.0120 J	ND	ND	ND	5.1
Acetone	0.0730	ND	ND	ND	0.5
Methylene Chloride	0.0091	0.0055 J	0.0129	0.0078 J	0.077
Total Petroleum Hydrocarbons (TPH)					
TPH (diesel)	ND	ND	ND	ND	230
TPH (motor oil)	7.88	ND	ND	ND	5100

All results in milligram per kilogram (mg/kg).

ND Not detected above method detection limit (MDL)

J Estimated value

*Import Criteria: Based on "Treasure Island Soil Import Criteria" (2016)

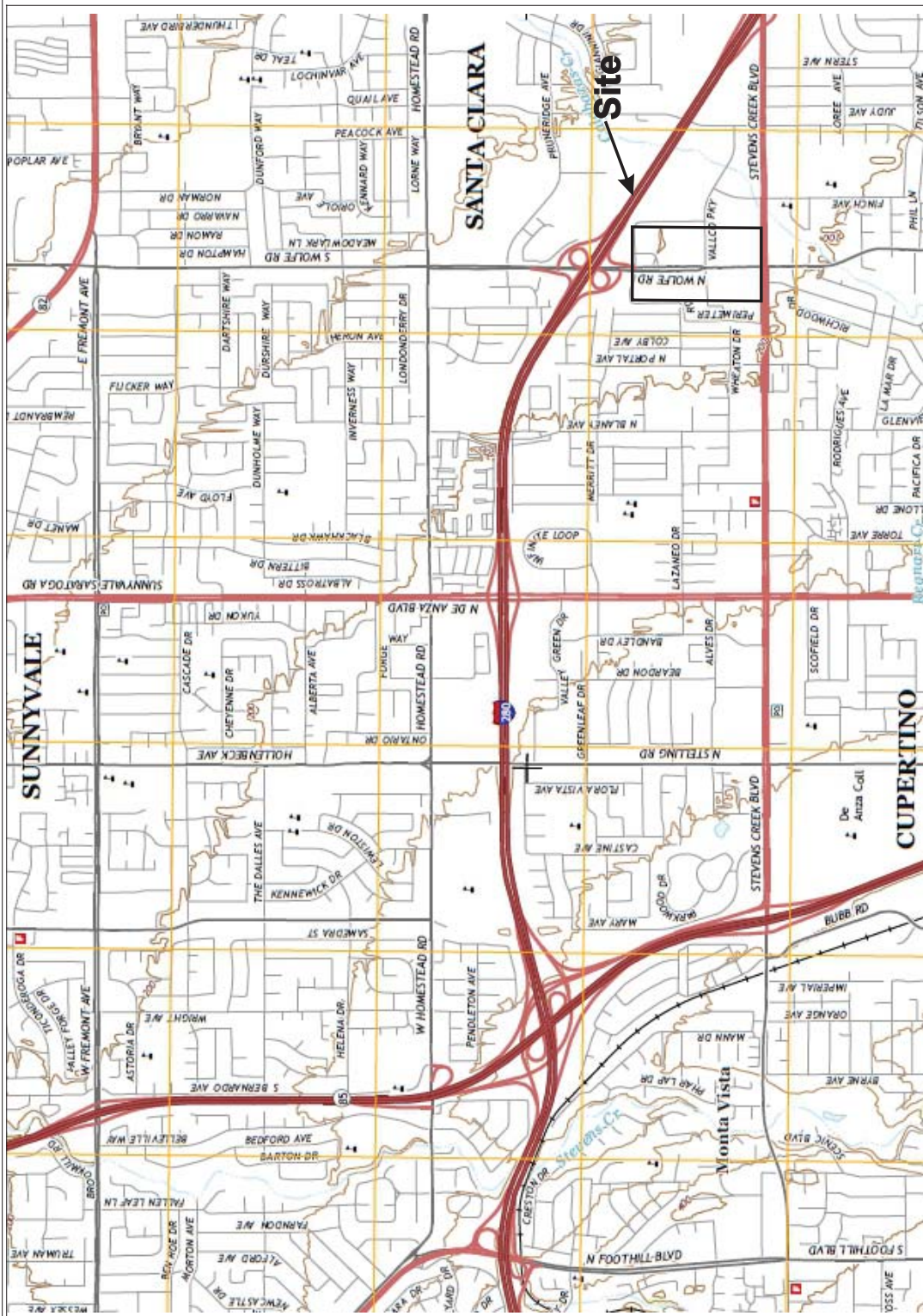
Reported Concentrations in bold exceed the corresponding screening value, or other typical disposal/re-use criteria.

Table 9. Summary of Detected Results that Surpass Import Criteria, Vallco Mall Soil Sampling, September 6, 2016

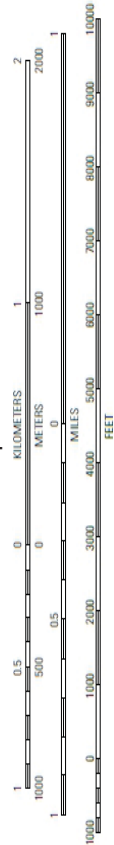
Sample #	Constituent 1	Detected Amount (mg/kg)	TI Import Criteria (mg/kg)	Constituent 2	Detected Amount (mg/kg)	TI Import Criteria (mg/kg)
E1-1	Benzo(a)pyrene	0.0297	0.016	Dibenz(a,h)anthracene	0.0176	0.016
E1-2	Cobalt	19.7	16	Vanadium	64.1	39
E1-3	Vanadium	59.5	39	N/A	-	-
E1-4	Cobalt	19.6	16	Vanadium	69.0	39
E1-8	<i>No Test Results Exceeded Import Criteria</i>					
E2-1	<i>No Test Results Exceeded Import Criteria</i>					
E2-2	Vanadium	47.2	39	N/A	-	-
E2-3	Cobalt	18.8	16	Vanadium	49.2	39
E2-5	Cobalt	17.7	16	Vanadium	53.4	39
E2-7	Cobalt	16.1	16	Vanadium	44.5	39
E3-1	Vanadium	47.2	39	N/A	-	-
E3-2	Vanadium	50.0	39	Dieldrin	0.0025	0.00017
E3-4	Vanadium	54.7	39	N/A	-	-
E3-6	Vanadium	66.7	39	N/A	-	-
E4-1	Cobalt	17.9	16	Vanadium	61.4	39
E4-2	Cobalt	16.7	16	Vanadium	52.5	39
E4-3	Vanadium	49.2	39	N/A	-	-
E5-1	Vanadium	60.9	39	Aroclor 1254	0.523	0.12
E5-2	Cobalt	16.5	16	Vanadium	59.6	39
E5-3	Cobalt	16.9	16	Vanadium	52.2	39
E6-1	Cobalt	16.5	16	Vanadium	60.3	39
E6-2	Cobalt	18.1	16	Vanadium	54.0	39
E6-4	Cobalt	18.3	16	Vanadium	63.9	39
E7-1	Vanadium	51.2	39	N/A	-	-
E7-2	Vanadium	41.8	39	N/A	-	-
E7-3	Cobalt	17.2	16	Vanadium	60.1	39
E7-5	Vanadium	46.4	39	N/A	-	-
E8-1	Vanadium	52.2	39	N/A	-	-
E8-2	Cobalt	17.6	16	Vanadium	52.7	39
E8-3	Cobalt	18.1	16	Vanadium	53.9	39
E8-4	Vanadium	44.9	39	N/A	-	-
E8-5	Vanadium	43.0	39	N/A	-	-

FIGURES

Figure 1 – Site Vicinity Map
Figure 2 –Boring Location Plan



Map Scale



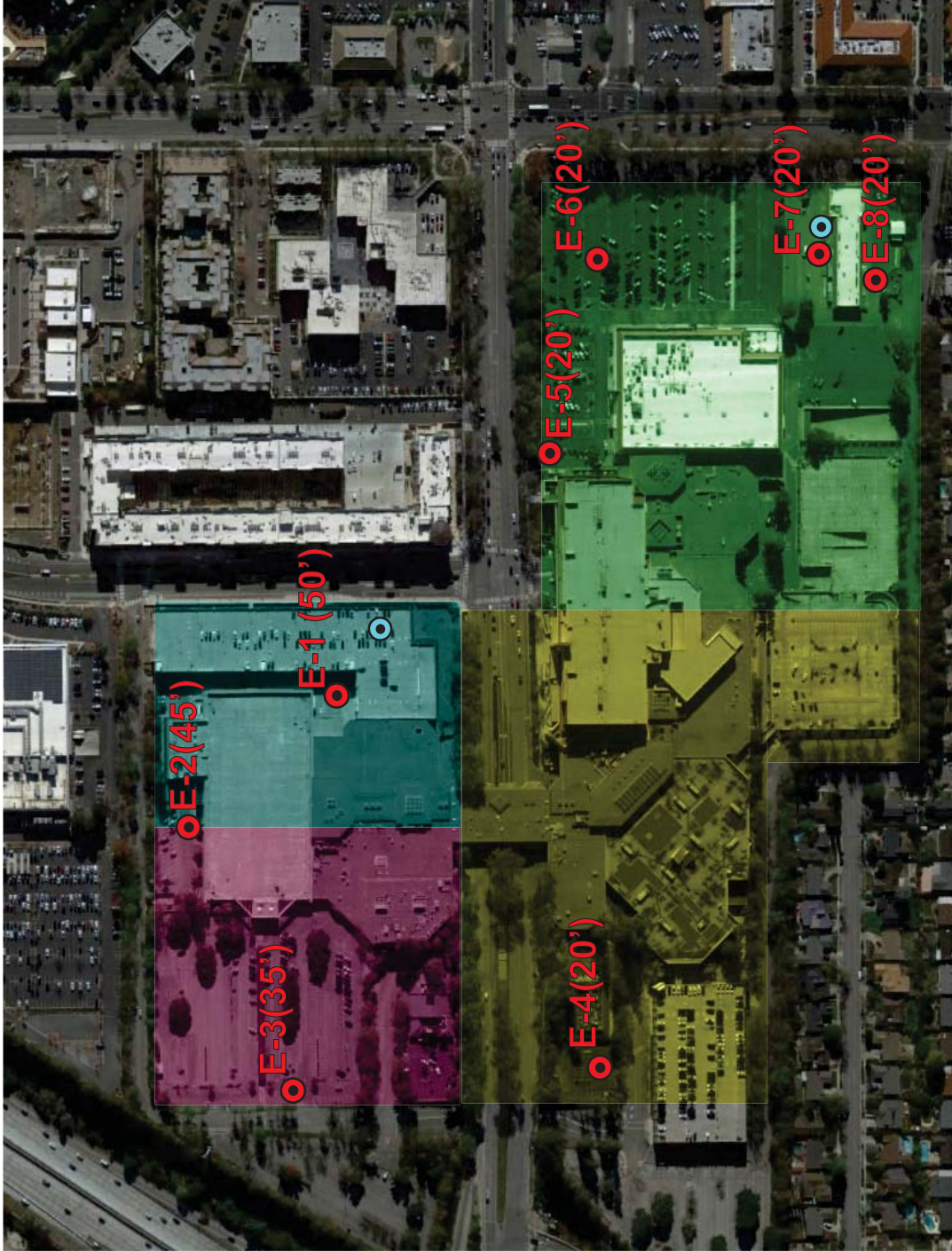
Source: Cupertino, California-Alameda Co., US Topographic Map 7.5-Minute Series, United States Geological Survey (2015)

The Hills at Valico Wolfe Road and Valico Parkway Cupertino, California	91-03790-B	September 2016
 <small>Geopointers Corporation, Inc. 10000 E. 15th Avenue, Suite 100 Aurora, Colorado 80012 Phone: 303.733.8888 Fax: 303.733.8889 Email: info@geopointers.com</small>	Site Vicinity Map	Figure 1



- Surface Elev: 181'
Bottom of Excavation Elev: 128'
Elev Difference: 53'
- Surface Elev: 181'
Bottom of Excavation Elev: 139'
Elev Difference: 42'
- Surface Elev: 180'
Bottom of Excavation Elev: 160'
Elev Difference: 20'
- Surface Elev: 193' to 180', S to N
Bottom of Excavation Elev: 166' to 160', S to N
Elev Difference: 27' to 20'

All elevations approximate



- Approximate Environmental Boring Location
- Approximate LUST Location, from GeoTracker

Note: Borings E-3 & E-2 were stopped due to refusal at the indicated depth

The Hills at Valico Wolfe Road and Valico Parkway Cupertino, California 	91-03790-B Environmental Boring Plan	September 2016 Figure 2
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APPENDIX A

Boring Logs



CLIENT Sand Hill Property Company
PROJECT NUMBER 91-03790-B
DATE STARTED 9/6/16 COMPLETED 9/6/16
DRILLING CONTRACTOR Penecore Drilling
DRILLING METHOD Geoprobe - DT22
LOGGED BY CF CHECKED BY EJS
NOTES _____

PROJECT NAME The Hills at Vallco - Analytical Soil Sampling and Testing
PROJECT LOCATION Wolfe Road and Vallco Parkway, Cupertino, CA
GROUND ELEVATION 179 ft HOLE SIZE 2 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT CONCRETE : BASEROCK : (CL) LEAN CLAY : Brown, moist, with sand and gravel.	GB E1-1									
5		Occasional pockets of gravelly material throughout depth.	GB E1-2									
10			GB E1-3									
15		(CL) SANDY CLAY : Brown, moist.	GB E1-4									
20		Sand content fluctuating with depth.	GB E1-5									
25												

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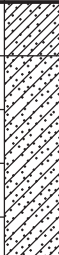

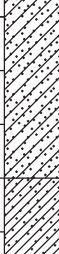


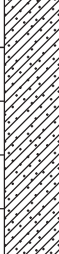




CLIENT Sand Hill Property Company

PROJECT NAME The Hills at Vallco - Analytical Soil Sampling and Testing

PROJECT NUMBER 91-03790-B

PROJECT LOCATION Wolfe Road and Vallco Parkway, Cupertino, CA

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
25		(CL) <u>SANDY CLAY</u> : Brown, moist. <i>(continued)</i>										
		(SC) <u>CLAYEY SAND</u> : Brown, moist.										
30			 GB E1-6									
		(CL) <u>SANDY CLAY</u> : Brown, moist.										
35												
40			 GB E1-7									
45												
50			 GB E1-8									
		Bottom of borehole at 50.0 feet.										



CLIENT Sand Hill Property Company
PROJECT NUMBER 91-03790-B
DATE STARTED 9/6/16 COMPLETED 9/6/16
DRILLING CONTRACTOR Penecore Drilling
DRILLING METHOD Geoprobe - DT22
LOGGED BY CF CHECKED BY EJS
NOTES _____

PROJECT NAME The Hills at Vallco - Analytical Soil Sampling and Testing
PROJECT LOCATION Wolfe Road and Vallco Parkway, Cupertino, CA
GROUND ELEVATION 179 ft HOLE SIZE 2 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		<u>ASPHALT CONCRETE</u> :										
		<u>BASEROCK</u> :	GB E2-1									
		(CL) <u>LEAN CLAY</u> : Brown, moist, with fine sand.										
5			GB E2-2									
10			GB E2-3									
		(SC) <u>CLAYEY SAND</u> : Brown, moist.										
15			GB E2-4									
20			GB E2-5									
		(CL) <u>SANDY CLAY</u> : Brown, moist.										
25												

(Continued Next Page)



CLIENT Sand Hill Property Company
 PROJECT NUMBER 91-03790-B
 DATE STARTED 9/6/16 COMPLETED 9/6/16
 DRILLING CONTRACTOR Penecore Drilling
 DRILLING METHOD Geoprobe - DT22
 LOGGED BY CF CHECKED BY EJS
 NOTES _____

PROJECT NAME The Hills at Vallco - Analytical Soil Sampling and Testing
 PROJECT LOCATION Wolfe Road and Vallco Parkway, Cupertino, CA
 GROUND ELEVATION 182 ft HOLE SIZE 2 inches
 GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 AT END OF DRILLING ---
 AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		<u>ASPHALT CONCRETE</u> :										
		<u>BASEROCK</u> :										
		(CL) <u>LEAN CLAY</u> : Brown to black, moist, with gravel and rock fragments.	GB E3-1									
5		Less gravel with depth.	GB E3-2									
10		(CL) <u>SANDY CLAY</u> : Brown, moist.	GB E3-3									
15		(CL) <u>LEAN CLAY</u> : Brown, moist.	GB E3-4									
20		(CL) <u>SANDY CLAY</u> : Brown, moist.	GB E3-5									
25												

(Continued Next Page)

APPENDIX

D

ENTHALPY

ANALYTICAL REPORT



ENTHALPY

ANALYTICAL



Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 304731 ANALYTICAL REPORT

WSP
2025 Gateway Place
San Jose, CA 95110

Project : VALLCO
Location : Vallco Cupertino, CA
Level : II

<u>Sample ID</u>	<u>Lab ID</u>	<u>Sample ID</u>	<u>Lab ID</u>
S-1-(1)	304731-001	S-8-(1)	304731-038
S-1-(5)	304731-002	S-8-(5)	304731-039
S-1-(10)	304731-003	S-8-(10)	304731-040
S-1-(15)	304731-004	S-8-(15)	304731-041
S-1-(20)	304731-005	S-8-(20)	304731-042
S-2-(1)	304731-006	W-5-(1)	304731-043
S-2-(5)	304731-007	W-5-(5)	304731-044
S-2-(10)	304731-008	W-5-(10)	304731-045
S-2-(15)	304731-009	W-5-(15)	304731-046
S-2-(20)	304731-010	W-5-(20)	304731-047
S-3-(1)	304731-011	EB-1	304731-048
S-3-(5)	304731-012	W-1-(1)	304731-049
S-3-(10)	304731-013	W-1-(5)	304731-050
S-3-(15)	304731-014	W-1-(10)	304731-051
S-3-(20)	304731-015	W-1-(15)	304731-052
S-4-(1)	304731-016	W-1-(20)	304731-053
S-4-(5)	304731-017	E-2-(1)	304731-054
S-4-(10)	304731-018	E-2-(5)	304731-055
S-4-(15)	304731-019	E-2-(10)	304731-056
S-4-(20)	304731-020	E-2-(15)	304731-057
S-5-(1)	304731-021	E-2-(20)	304731-058
S-5-(5)	304731-022	W-2-(2)	304731-059
S-5-(10)	304731-023	W-2-(5)	304731-060
S-5-(15)	304731-024	W-2-(10)	304731-061
S-5-(20)	304731-025	W-2-(15)	304731-062
S-6-(1)	304731-026	W-2-(20)	304731-063
S-6-(5)	304731-027	W-3-(1)	304731-064
S-6-(10)	304731-028	W-3-(5)	304731-065
S-6-(15)	304731-029	W-3-(10)	304731-066
S-6-(20)	304731-030	W-3-(15)	304731-067
S-6-(1)-R'	304731-031	W-3-(20)	304731-068
S-6-(5)-R'	304731-032	W-4-(1)	304731-069
S-7-(2)	304731-033	W-4-(5)	304731-070
S-7-(5)	304731-034	W-4-(10)	304731-071
S-7-(10)	304731-035	W-4-(15)	304731-072
S-7-(15)	304731-036	W-4-(20)	304731-073
S-7-(20)	304731-037		



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Laboratory Job Number 304731
ANALYTICAL REPORT

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Patrick McCarthy
Project Manager
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(510) 204-2236 ext 13115

Date: 11/20/2018

CASE NARRATIVE

Laboratory number: 304731
Client: WSP
Project: VALLCO
Location: Vallco Cupertino, CA
Request Date: 11/03/18
Samples Received: 11/01/18

This data package contains sample and QC results for seventy soil samples and one water sample, requested for the above referenced project on 11/03/18. The samples were received cold and intact.

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

No analytical problems were encountered.

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

High response was observed for gasoline C7-C12 in the CCV analyzed 11/08/18 02:10; affected data was qualified with "b". High response was observed for gasoline C7-C12 in the CCV analyzed 11/08/18 09:41; affected data was qualified with "b". Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 265183; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 265225; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Low response was observed for motor oil C24-C36 in the CCV analyzed 11/10/18 02:38; affected data was qualified with "b". High response was observed for diesel C10-C24 in the CCV analyzed 11/13/18 12:21; affected data was qualified with "b". Matrix spikes QC954776, QC954777 (batch 265273) were not analyzed because the parent sample required a dilution that would have diluted out the spikes. High recoveries were observed for diesel C10-C24 in the MS/MSD of S-7-(2) (lab # 304731-033); the LCS was within limits, and the associated RPD was within limits. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C) Water:

No analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C) Soil:

Matrix spikes QC954797, QC954798 (batch 265278) were not reported because the parent sample required a dilution that would have diluted out the spikes. Matrix spikes QC954859, QC954860 (batch 265293) were not reported because the parent sample required a dilution that would have diluted out the spikes. Low

CASE NARRATIVE

Laboratory number: 304731
Client: WSP
Project: VALLCO
Location: Vallco Cupertino, CA
Request Date: 11/03/18
Samples Received: 11/01/18

Semivolatile Organics by GC/MS (EPA 8270C) Soil:

recoveries were observed for a number of analytes in the MS/MSD of S-1-(5) (lab # 304731-002); the LCS was within limits, and the associated RPDs were within limits. Low surrogate recovery was observed for 2-fluorobiphenyl in S-7-(5) (lab # 304731-034). Many samples were diluted due to the dark and viscous nature of the sample extracts. S-7-(2) (lab # 304731-033) was diluted due to high non-target analytes. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Matrix spikes QC954618, QC954619 (batch 265233) were not analyzed because the parent sample required a dilution that would have diluted out the spikes. Low surrogate recoveries were observed for decachlorobiphenyl in a number of samples. Low surrogate recovery was observed for TCMX in E-2-(1) (lab # 304731-054). Gamma-chlordane was detected between the MDL and the RL in the method blank for batch 265233; this analyte was not detected in samples at or above the RL. Gamma-chlordane was detected between the MDL and the RL in the method blank for batch 265246; this analyte was not detected in samples at or above the RL. Gamma-chlordane was detected between the MDL and the RL in the method blank for batch 265307; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. Gamma-chlordane was detected between the MDL and the RL in the method blank for batch 265331; this analyte was not detected in samples at or above the RL. Many samples were diluted due to the color of the sample extracts. S-3-(1) (lab # 304731-011) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for many analytes in the MS/MSD of S-3-(10) (lab # 304731-013); the BS/BSD were within limits, and the associated RPDs were within limits. Low recoveries were observed for antimony in the MS/MSD of S-7-(20) (lab # 304731-037); the BS/BSD were within limits, and the associated RPD was within limits. Low recoveries were observed for a number of analytes in the MS/MSD of S-8-(1) (lab # 304731-038); the BS/BSD were within limits. High RPD was observed for barium; the RPD was acceptable in the BS/BSD. Low recoveries were observed for antimony in the MS/MSD for batch 265238; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. Low recoveries were observed for barium and antimony in the MS/MSD of W-1-(20) (lab #

CASE NARRATIVE

Laboratory number: 304731
Client: WSP
Project: VALLCO
Location: Vallco Cupertino, CA
Request Date: 11/03/18
Samples Received: 11/01/18

Metals (EPA 6010B and EPA 7471A):

304731-053); the BS/BSD were within limits. High recoveries were observed for chromium and vanadium; the BS/BSD were within limits, and the associated RPDs were within limits. High RPD was observed for barium; the RPD was acceptable in the BS/BSD. High recovery was observed for mercury in the MS of S-4-(20) (lab # 304731-020); the BS/BSD were within limits, and the associated RPD was within limits. High recovery was observed for mercury in the MSD of W-5-(20) (lab # 304731-047); the BS/BSD were within limits, and the associated RPD was within limits. Arsenic and molybdenum were detected between the MDL and the RL in the method blank for batch 265201. Arsenic and zinc were detected between the MDL and the RL in the method blank for batch 265237; these analytes were detected in samples at a level at least 10 times that of the blank. Antimony, thallium, and zinc were detected between the MDL and the RL in the method blank for batch 265253; these analytes were either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. No other analytical problems were encountered.

Chlorophenoxy Herbicides (EPA 8151):

Eurofins (CalScience) in Garden Grove, CA performed the analysis (NELAP certified). Please see the Eurofins (CalScience) case narrative.

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CHAIN-OF-CUSTODY RECORD

Sample Identification	Matrix	Collection Start*		Collection Stop*		Number of Containers	Requested Analyses & Preservatives						Sample Comments
		Date	Time	Date	Time		Metals THe22 (6010B)	Herbicides ** (8151)	Pesticides ** (8081)	SVOCs ** (8276)	TPH-g (8015)	TPH-dmo (8015)	
S-1-(1)	S	10/31/18	1015			2	X	X	X	X	X	X	* Sample nomenclature is location - (depth) please hold all
S-1-(5)	S	10/31/18	1025			2	X	X	X	X	X	X	Samples for herbicide, pesticide, and OVA analysis depths 10, 15, and 20.
S-1-(10)	S	10/31/18	1035			2	X	X	X	X	X	X	- include flags
S-1-(15)	S	10/31/18	1050			2	X	X	X	X	X	X	- include EDT
S-1-(20)	S	10/31/18	1100			2	X	X	X	X	X	X	
S-2-(1)	S	10/30/18	1040			2	X	X	X	X	X	X	
S-2-(5)	S	10/30/18	1045			2	X	X	X	X	X	X	
S-2-(10)	S	10/30/18	1055			2	X	X	X	X	X	X	
S-2-(15)	S	10/30/18	1110			2	X	X	X	X	X	X	
S-2-(20)	S	10/30/18	1120			2	X	X	X	X	X	X	
S-3-(1)	S	10/30/18	0845			2	X	X	X	X	X	X	
S-3-(5)	S	10/30/18	0850			2	X	X	X	X	X	X	
S-3-(10)	S	10/30/18	0905			2	X	X	X	X	X	X	
S-3-(15)	S	10/30/18	0915			2	X	X	X	X	X	X	
S-3-(20)	S	10/30/18	0920			2	X	X	X	X	X	X	
Relinquished By (Signature)		Date	Time	Receiver By (Signature)	Time	Date	Time	Date	Time	Shipment Method	Tracking Number(s)	Custody Seal Number(s)	
		11-1	1410		1410	11-1	1410		1410				
		11-1	1728		1728	11-1	1728		1728				

*US stop time/date for composite and/or air samples; use only start time/date for all other samples. Matrix: AQ = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

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CHAIN-OF-CUSTODY RECORD

Sample Identification	Matrix	Collection Start		Collection Stop		Number of Containers	Requested Analyses & Preservatives						Sample Comments
		Date	Time	Date	Time		Herbicides** (8151)	Rodenticides** (8081)	SVOCs** (8270)	TPH-g (8015)	TPH-dims (8015)		
		Date	Time	Date	Time		Herbicides** (8151)	Rodenticides** (8081)	SVOCs** (8270)	TPH-g (8015)	TPH-dims (8015)		
16 S-4-(11)	S	10/20/18	0915			2	X	X	X	X	X	** Sample nomenclature is location - depth please hold all	
17 S-4-(15)	S	10/20/18	0730			2	X	X	X	X	X	Samples for herbicide, pesticide, and SVOC analysis @ depths 10, 15, 20	
18 S-4-(10)	S	10/20/18	0940			2	X	X	X	X	X	- please include j-flags	
19 S-4-(15)	S	10/20/18	0955			2	X	X	X	X	X	- please include excel EDD	
20 S-4-(20)	S	10/20/18	1005			2	X	X	X	X	X		
21 S-5-(11)	S	10/20/18	1230			2	X	X	X	X	X		
22 S-5-(5)	S	10/20/18	1240			2	X	X	X	X	X		
23 S-5-(10)	S	10/20/18	1300			2	X	X	X	X	X		
24 S-5-(15)	S	10/20/18	1305			2	X	X	X	X	X		
25 S-5-(20)	S	10/20/18	1310			2	X	X	X	X	X		
26 S-6-(11)	S	10/20/18	1400			2	X	X	X	X	X		
27 S-6-(5)	S	10/20/18	1405			2	X	X	X	X	X		
28 S-6-(10)	S	10/20/18	1415			2	X	X	X	X	X		
29 S-6-(15)	S	10/20/18	1455			2	X	X	X	X	X		
30 S-6-(20)	S	10/20/18	1530			2	X	X	X	X	X		
Relinquished By (Signature)		Date	Time	Received By (Signature)	Date	Time	Date		Time		Shipment Method		Tracking Number(s)
		11-1	1410		11-1	1410							
Relinquished By (Signature)		Date	Time	Received By (Signature)	Date	Time	Date		Time		Number of Packages		Custody Seal Number(s)
		11-1	1728		11/1/18	1728							

No. 008000 WSP
 Laboratory Name & Location: Enthralpy
 Laboratory Project Manager: Patrick
 Requested Turn-Around-Time: Standard 24 HR 48 HR 72 HR HR

Project Name: 2025 Gateway Pl. # 348 San Jose, CA 95110
 Project Location: Vallco
 Project Number & Task: Cupert1010
 WSP USA Office Address: 2025 Gateway Pl. # 348 San Jose, CA 95110
 WSP USA Contact Name: Elena Robertson
 WSP USA Contact E-mail: elena.robertson@wsp.com
 WSP USA Contact Phone: 408-453-6100
 Sampler(s) Name(s): Elena Robertson
 Sampler(s) Signature(s):

*Use stop time/date for composite and/or air samples; use only start time/date for all other samples. Matrix: AQ = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

304731

CHAIN-OF-CUSTODY RECORD

Sample Identification	Matrix	Collection Start*		Collection Stop*		Number of Containers	Requested Analyses & Preservatives						Sample Comments	
		Date	Time	Date	Time		Herbicides** (8151)	Pesticides** (8270)	SVOCs** (8015)	PH-A-g (8015)	PH-d-ams (8015)	Shipment Method		Tracking Number(s)
31 S-6-(11)-R1	S	10/30/18	1240			2	X	X	X	X	X	X	** Sample nomenclature is location - (depth)	
32 S-6-(5)-R1	S	10/30/18	1305			2	X	X	X	X	X	X	Please hold all	
33 S-7-(2)	S	10/30/18	1415			2	X	X	X	X	X	X	Samples for herbicide, pesticide, and SVOC	
34 S-7-(5)	S	10/30/18	1440			2	X	X	X	X	X	X	analysis @ depths 10, 15, and 20	
35 S-7-(10)	S	10/30/18	1450			2	X	X	X	X	X	X	1.) Do not analyze	
36 S-7-(15)	S	10/30/18	1530			2	X	X	X	X	X	X	Samples S-6-(1)-R and S-6-(5)-R	
37 S-7-(20)	S	10/30/18	1535			2	X	X	X	X	X	X	-include J-Flags	
38 S-8-(11)	S	10/30/18	1705			2	X	X	X	X	X	X	-include excel	
39 S-8-(5)	S	10/30/18	1715			2	X	X	X	X	X	X	EDP	
40 S-8-(10)	S	10/30/18	1725			2	X	X	X	X	X	X		
41 S-8-(15)	S	10/30/18	1730			2	X	X	X	X	X	X		
42 S-8-(20)	S	10/30/18	1750			2	X	X	X	X	X	X		
43 W-5-(1)	S	10/30/18	1720			2	X	X	X	X	X	X		
44 W-5-(5)	S	10/30/18	1725			2	X	X	X	X	X	X		
45 W-5-(10)	S	10/30/18	1735			2	X	X	X	X	X	X		
Relinquished By (Signature)		Date	Time	Received By (Signature)		Date	Time	Date		Time	Date		Time	Tracking Number(s)
		11-1	1410			11-1	1410	11-1		1410	11-1		1410	
Relinquished By (Signature)		Date	Time	Received By (Signature)		Date	Time	Date		Time	Date		Time	Custody Seal Number(s)
		11-1	1738			11-1	1738	11-1		1738	11-1		1738	

*Use stop time/date for composite and/or air samples; use only start time/date for all other samples. Matrix: AO = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

30473

CHAIN-OF-CUSTODY RECORD

Sample Identification	Matrix	Collection Start*		Collection Stop*		Number of Containers	Requested Analyses & Preservatives						Sample Comments
		Date	Time	Date	Time		Metals Lite 22 (810B)	Herbicides* (8151)	Pesticides* (8081)	SWCS** (8270)	TPH-g (8015)	TPH-d (8015)	
W-5-(15)	S	10/19/18	1745			2	X	X	X	X	X	X	
W-5-(20)	S	10/30/18	1750			2	X	X	X	X	X	X	
EB-1	AQ	10/13/18	1020			3							
W-1-(11)	S	10/15/18	0805			2	X	X	X	X	X	X	
W-1-(5)	S	10/16/18	0810			2	X	X	X	X	X	X	
W-1-(10)	S	10/16/18	0815			2	X	X	X	X	X	X	
W-1-(15)	S	10/16/18	0820			2	X	X	X	X	X	X	
W-1-(20)	S	10/16/18	0830			2	X	X	X	X	X	X	
E-2-(1)	S	10/17/18	0930			2	X	X	X	X	X	X	
E-2-(5)	S	10/17/18	0935			2	X	X	X	X	X	X	
E-2-(10)	S	10/17/18	0940			2	X	X	X	X	X	X	
E-2-(15)	S	10/17/18	0945			2	X	X	X	X	X	X	
E-2-(20)	S	10/17/18	1000			2	X	X	X	X	X	X	
W-2-(2)	S	10/18/18	1105			2	X	X	X	X	X	X	
W-2-(5)	S	10/18/18	1115			2	X	X	X	X	X	X	
Relinquished By (Signature)		Date	Time	Received By (Signature)		Date	Time	Date	Time	Shipment Method	Tracking Number(s)		
<i>[Signature]</i>		11-1	1410	<i>[Signature]</i>		11-1	1410		1410				
Relinquished By (Signature)		Date	Time	Received By (Signature)		Date	Time	Date	Time	Number of Packages	Custody Seal Number(s)		
<i>[Signature]</i>		11-1	1721	<i>[Signature]</i>		11/16	1726		1726				

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*Use stop time/date for composite and/or air samples, use only start time/date for all other samples.
Matrix: AQ = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

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CHAIN-OF-CUSTODY RECORD

WSP USA Office Address		WSP USA Contact Name		Collection Start*		Collection Stop*		Matrix	Sample Identification	Number of Containers	Requested Analyses & Preservatives						Sample Comments
Project Name	Project Location	Project Number & Task	Sampler(s) Name(s)	Date	Time	Date	Time				Metals Title 22 (60103)	Herbicides** (851)	Pesticides** (8081)	SVOCs** (8270)	TPH-g (8015)	TPH-d (8015)	
2025 Gateway Pl. #348 San Jose, CA	Vallejo		Elena Robertson	10/11/18	11:30			S	W-2-(10)	2	X	X	X	X	X	** Sample nomenclature is location - depth	
				10/13/18	11:40			S	W-2-(15)	2	X	X	X	X	X	Please hold all samples for	
				10/13/18	11:45			S	W-2-(20)	2	X	X	X	X	X	herbicide, pesticide, and SVOC analysis	
				10/11/18	12:50			S	W-3-(1)	2	X	X	X	X	X		
				10/11/18	13:00			S	W-3-(5)	2	X	X	X	X	X		
				10/13/18	13:05			S	W-3-(10)	2	X	X	X	X	X		
				10/13/18	13:05			S	W-3-(15)	2	X	X	X	X	X		
				10/11/18	13:20			S	W-3-(20)	2	X	X	X	X	X		
				10/11/18	13:45			S	W-4-(1)	2	X	X	X	X	X	- Please include j-fags	
				10/11/18	13:55			S	W-4-(5)	2	X	X	X	X	X	- Please include	
				10/11/18	14:05			S	W-4-(10)	2	X	X	X	X	X	EXCEL EPD	
				10/11/18	14:10			S	W-4-(15)	2	X	X	X	X	X		
				10/13/18	14:15			S	W-4-(20)	2	X	X	X	X	X		
									S-								

*Use stop time/date for composite and/or air samples; use only start time/date for all other samples. Matrix: AQ = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 304731
 Date Received: 11/11/18

Client: WSP
 Project: _____

Section 2: Samples received in a cooler? Yes, how many? 6 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 11/11/18 By (print) AL (sign) [Signature]
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important : Notify PM if temperature exceeds 6°C or arrive frozen.**
 Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____ or IR Gun # A B
 Cooler Temp (°C): #1: 2.8, #2: 5.5, #3: 4.1, #4: 3.5, #5: 1.9, #6: 2.0, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?		/	
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracoresh?			/
Are bubbles > 6mm absent in VOA samples?	/		
Was the client contacted concerning this sample delivery?	/	/	
If YES, who was called? _____ By _____ Date: _____			

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			/
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check?			
pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____	added to samples _____	on/at _____	
<input type="checkbox"/> HCL lot# _____	added to samples _____	on/at _____	
<input type="checkbox"/> HNO3 lot# _____	added to samples _____	on/at _____	
<input type="checkbox"/> NaOH lot# _____	added to samples _____	on/at _____	

Section 6:
 Explanations/Comments: _____

Date Logged in 11/3/18 By (print) AL (sign) [Signature]
 Date Labeled 11/3/18 By (print) AL (sign) [Signature]

Detections Summary for 304731

Results for any subcontracted analyses are not included in this summary.

Client : WSP
 Project : VALLCO
 Location : Vallco Cupertino, CA

Client Sample ID : S-1-(1)

Laboratory Sample ID :

304731-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	12	Y	3.0	0.91	mg/Kg	As Recd	3.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	270		15	4.5	mg/Kg	As Recd	3.000	EPA 8015B	EPA 3550C
Dieldrin	3.8	J	22	0.80	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3546
4,4'-DDE	19	J	22	0.80	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3546
4,4'-DDT	11	J	22	3.3	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.2	C,J	11	1.1	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3546
Antimony	0.54	J	2.0	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.7		1.5	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	160		0.27	0.032	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.45		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	65		0.27	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	15		0.27	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	31		0.27	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.1		1.0	0.060	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.052		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.39		0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	87		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	51		0.27	0.056	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	49		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-1-(5)

Laboratory Sample ID :

304731-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.3	Y	1.0	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	3.3	J	5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Dieldrin	0.79	J	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDE	9.1	#	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDT	3.4		2.2	0.33	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.33	J	1.1	0.14	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Antimony	0.49	J	2.0	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.1		1.5	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	140		0.26	0.032	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.52		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.26	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	87		0.26	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	16		0.26	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	29		0.26	0.060	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.4		1.0	0.059	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.050		0.018	0.0031	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.26	J	0.26	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	74		0.26	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	69		0.26	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	47		1.1	0.22	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-1-(10)

Laboratory Sample ID :

304731-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.48	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.33	J	2.0	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	200		0.27	0.033	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.64		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	94		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	21		0.27	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	46		0.27	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	8.1		1.0	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.049		0.016	0.0029	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.25	J	0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	110		0.27	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	64		0.27	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	65		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-1-(15)

Laboratory Sample ID :

304731-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.99	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.23	J	2.0	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.0		1.5	0.065	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	130		0.25	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.57		0.098	0.0098	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	93		0.25	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	18		0.25	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	37		0.25	0.056	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.7		0.98	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.088		0.016	0.0028	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.24	J	0.25	0.026	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	85		0.25	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	81		0.25	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	52		0.98	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-1-(20)

Laboratory Sample ID :

304731-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.55	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	1.8	J	5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.45	J	1.9	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.0		1.4	0.064	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	100		0.24	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.47		0.096	0.0096	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.24	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.24	0.047	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.24	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	28		0.24	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.4		0.96	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.099		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.58		0.24	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	57		0.24	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	43		0.24	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	46		0.96	0.20	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-2-(1)

Laboratory Sample ID :

304731-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.82	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	5.3		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Dieldrin	0.99	J	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDE	3.5	#	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDD	0.57	J	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDT	1.3	J	2.2	0.33	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.24	C,J	1.1	0.11	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Antimony	0.46	J	1.9	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.6		1.5	0.064	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	190		0.24	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.54		0.097	0.0097	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.24	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	76		0.24	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	18		0.24	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	41		0.24	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.6		0.97	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.062		0.016	0.0028	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.19	J	0.24	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	86		0.24	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	52		0.24	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	58		0.97	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-2-(5)

Laboratory Sample ID :

304731-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	11	Y	3.0	0.92	mg/Kg	As Recd	3.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	260		15	4.5	mg/Kg	As Recd	3.000	EPA 8015B	EPA 3550C
Antimony	0.45	J	2.0	0.069	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.1		1.5	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	180		0.25	0.030	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.42		0.10	0.010	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	74		0.25	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	13		0.25	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.058	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.1		1.0	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.032		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.76		0.25	0.026	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	67		0.25	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	60		0.25	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	43		1.0	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-2-(10)

Laboratory Sample ID :

304731-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	22	Y	5.0	1.5	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	500		25	7.5	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550C
Antimony	0.38	J	2.0	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.0		1.5	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	250		0.27	0.033	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.47		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	80		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	14		0.27	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	27		0.27	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.1		1.0	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.045		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	1.5		0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	68		0.27	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	66		0.27	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	42		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-2-(15)

Laboratory Sample ID :

304731-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.40	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.29	J	1.9	0.065	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.9		1.4	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	110		0.24	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.46		0.094	0.0095	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.13	J	0.24	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	52		0.24	0.046	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	10		0.24	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	30		0.24	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.0		0.94	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.12		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.41		0.24	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	61		0.24	0.047	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	43		0.24	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	44		0.94	0.20	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-2-(20)

Laboratory Sample ID :

304731-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.42	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.55	J	2.0	0.071	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	110		0.26	0.031	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.50		0.10	0.010	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.26	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.26	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.26	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	27		0.26	0.059	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.4		1.0	0.058	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.13		0.016	0.0028	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.53		0.26	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	58		0.26	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	41		0.26	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	46		1.0	0.22	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-3-(1)

Laboratory Sample ID :

304731-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	68	Y	10	3.1	mg/Kg	As Recd	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	1,600		50	15	mg/Kg	As Recd	10.00	EPA 8015B	EPA 3550C
Antimony	0.53	J	2.0	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.0		1.5	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	230		0.26	0.032	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.43		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.24	J	0.26	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.26	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	12		0.26	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	29		0.26	0.060	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.9		1.0	0.059	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.060		0.018	0.0031	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.58		0.26	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	55		0.26	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	46		0.26	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	47		1.1	0.22	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-3-(5)

Laboratory Sample ID :

304731-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.87	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	2.1	J	5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Dieldrin	0.17	J	2.2	0.080	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDE	3.3	#	2.2	0.080	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDD	0.59	C,J	2.2	0.15	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.34	J	1.1	0.14	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Antimony	0.44	J	2.0	0.069	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.9		1.5	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	150		0.25	0.030	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.55		0.10	0.010	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	83		0.25	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	18		0.25	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	41		0.25	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.6		1.0	0.056	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.055		0.018	0.0031	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.30		0.25	0.026	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	96		0.25	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	60		0.25	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	60		1.0	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-3-(10)

Laboratory Sample ID :

304731-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	2.2	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	8.2		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.81	J	2.0	0.069	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	2.5		1.5	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	150		0.25	0.030	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.53		0.10	0.010	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	93		0.25	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	16		0.25	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.058	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.5		1.0	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.042		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.32		0.25	0.026	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	80		0.25	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	75		0.25	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	47		1.0	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-3-(15)

Laboratory Sample ID :

304731-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.93	J	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	15		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.28	J	1.9	0.064	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.9		1.4	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	98		0.23	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.56		0.093	0.0093	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.23	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.23	0.045	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	10		0.23	0.013	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	29		0.23	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.5		0.93	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.081		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.70		0.23	0.024	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	64		0.23	0.046	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	45		0.23	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	52		0.93	0.20	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-3-(20)

Laboratory Sample ID :

304731-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.2	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	11		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.64	J	1.9	0.065	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.9		1.4	0.063	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	120		0.24	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.47		0.095	0.0095	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.17	J	0.24	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.24	0.047	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	10		0.24	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	26		0.24	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.2		0.95	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.095		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.55		0.24	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	50		0.24	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.24	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	42		0.95	0.20	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-4-(1)

Laboratory Sample ID :

304731-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	14	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	34		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
alpha-BHC	0.23	J	1.1	0.088	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
beta-BHC	0.087	C,J	1.1	0.064	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
delta-BHC	0.094	C,J	1.1	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Aldrin	0.14	C,J	1.1	0.092	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Dieldrin	15	#	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDE	65	#	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDD	6.3	#	2.2	0.079	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
4,4'-DDT	1.2	C,J	2.2	0.33	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3546
Antimony	0.45	J	1.9	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.5		1.5	0.064	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	160		0.24	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.51		0.097	0.0097	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.26		0.24	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	78		0.24	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	17		0.24	0.014	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	39		0.24	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	15		0.97	0.055	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.053		0.016	0.0029	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.36		0.24	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	84		0.24	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	60		0.24	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	64		0.97	0.21	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-4-(5)

Laboratory Sample ID :

304731-017

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	6.4	Y	2.0	0.62	mg/Kg	As Recd	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	100		10	3.0	mg/Kg	As Recd	2.000	EPA 8015B	EPA 3550C
Antimony	0.37	J	2.0	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.1		1.5	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	190		0.27	0.033	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.50		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	79		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	19		0.27	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	34		0.27	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.9		1.0	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.087		0.017	0.0029	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.29		0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	90		0.27	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	59		0.27	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	51		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-4-(10)

Laboratory Sample ID :

304731-018

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.0	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	9.1		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.40	J	2.0	0.071	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.3		1.5	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	140		0.26	0.031	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.53		0.10	0.010	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.26	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	80		0.26	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	18		0.26	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	37		0.26	0.059	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.2		1.0	0.058	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.039		0.016	0.0029	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.33		0.26	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	82		0.26	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	54		0.26	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	54		1.0	0.22	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-4-(15)

Laboratory Sample ID :

304731-019

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	3.8	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	68		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.51	J	1.8	0.063	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	6.2		1.4	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	150		0.23	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.69		0.092	0.0092	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.25		0.23	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	54		0.23	0.045	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	14		0.23	0.013	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	42		0.23	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	10		0.92	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.093		0.017	0.0030	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.91		0.23	0.024	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	67		0.23	0.046	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	53		0.23	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	73		0.92	0.20	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-4-(20)

Laboratory Sample ID :

304731-020

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.1	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	13		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Antimony	0.61	J	2.0	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	5.0		1.5	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	110		0.27	0.033	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.55		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.23	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	13		0.27	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	32		0.27	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.6		1.0	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.12		0.018	0.0032	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.67		0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	63		0.27	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	46		0.27	0.057	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	56		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : S-5-(1)

Laboratory Sample ID :

304731-021

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	13	Y	0.99	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	34		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
bis(2-Ethylhexyl)phthalate	9.0	J	330	8.5	ug/Kg	As Recd	1.000	EPA 8270C	EPA 3550C
4,4'-DDE	0.18	C,J	4.3	0.16	ug/Kg	As Recd	2.000	EPA 8081A	EPA 3546
Endrin	0.60	C,J	4.3	0.13	ug/Kg	As Recd	2.000	EPA 8081A	EPA 3546
Endosulfan II	0.18	C,J	4.3	0.16	ug/Kg	As Recd	2.000	EPA 8081A	EPA 3546
Antimony	0.46	J	2.0	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	3.4		1.5	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	180		0.27	0.032	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.57		0.11	0.011	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.27	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	78		0.27	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	16		0.27	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	37		0.27	0.061	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.4		1.0	0.060	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.054		0.016	0.0028	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.21	J	0.27	0.028	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	92		0.27	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	50		0.27	0.056	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	55		1.1	0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

APPENDIX

E

MCCAMPBELL
ANALYTICAL
REPORTS



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1901429

Report Created for: WSP USA Corp

2025 Gateway Place, #348 (3rd Floor Back of Build
San Jose, CA 95110

Project Contact: San Jose Main

Project P.O.:

Project: 31401588.001; Vallco

Project Received: 01/10/2019

Analytical Report reviewed & approved for release on 01/16/2019 by:

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: WSP USA Corp
Project: 31401588.001; Vallco
WorkOrder: 1901429

Glossary Abbreviation

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



Glossary of Terms & Qualifier Definitions

Client: WSP USA Corp
Project: 31401588.001; Vallco
WorkOrder: 1901429

Analytical Qualifiers

B Analyte detected in the associated Method Blank and in the sample
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P Agreement between quantitative confirmation results exceed method recommended limits
a3 Sample diluted due to high organic content.

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-001-(0.5)

Lab ID: 1901429-001A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	38		0.50	1	mg/Kg		SW6020
p,p-DDE	0.020		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.020		0.0050	5	mg/kg		SW8081A

Client ID: SB-001-(1)

Lab ID: 1901429-002A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	56		0.50	1	mg/Kg		SW6020
p,p-DDD	0.0030		0.0020	2	mg/kg		SW8081A
p,p-DDE	0.072		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.057		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0029		0.0020	2	mg/kg		SW8081A

Client ID: SB-001-(2)

Lab ID: 1901429-003A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.2		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0044		0.0010	1	mg/kg		SW8081A

Client ID: SB-001-(3)

Lab ID: 1901429-004A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	4.7		0.50	1	mg/Kg		SW6020

Client ID: SB-002-(0.5)

Lab ID: 1901429-005A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	16		0.50	1	mg/Kg		SW6020

Client ID: SB-002-(1)

Lab ID: 1901429-006A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	8.5		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0043		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0018		0.0010	1	mg/kg		SW8081A

Client ID: SB-002-(2)

Lab ID: 1901429-007A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	9.6		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0091		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0031		0.0010	1	mg/kg		SW8081A

Client ID: SB-002-(3)

Lab ID: 1901429-008A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9		0.50	1	mg/Kg		SW6020



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-002-(3)

Lab ID: 1901429-008A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(0.5)

Lab ID: 1901429-009A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	11		0.50	1	mg/Kg		SW6020
a-Chlordane	0.012		0.0050	5	mg/kg		SW8081A
g-Chlordane	0.011		0.0050	5	mg/kg		SW8081A
p,p-DDE	0.018		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.014		0.0050	5	mg/kg		SW8081A
Dieldrin	0.0057		0.0050	5	mg/kg		SW8081A

Client ID: SB-003-(1)

Lab ID: 1901429-010A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	4.5		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(2)

Lab ID: 1901429-011A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	3.3		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(3)

Lab ID: 1901429-012A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.8		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0020		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.0029		0.0020	2	mg/kg		SW8081A

Client ID: SB-004-(0.5)

Lab ID: 1901429-013A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	30		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0075		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.0032	P	0.0020	2	mg/kg		SW8081A

Client ID: SB-004-(1)

Lab ID: 1901429-014A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	14		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0096		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.0095		0.0050	5	mg/kg		SW8081A



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-004-(2)

Lab ID: 1901429-015A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	30	B	0.50	1	mg/Kg		SW6020
a-Chlordane	0.0013	P	0.0010	1	mg/kg		SW8081A
p,p-DDD	0.0013		0.0010	1	mg/kg		SW8081A
p,p-DDE	0.20		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.085		0.0010	1	mg/kg		SW8081A
Dieldrin	0.0047		0.0010	1	mg/kg		SW8081A

Client ID: SB-004-(3)

Lab ID: 1901429-016A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	17	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0078		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0027		0.0010	1	mg/kg		SW8081A

Client ID: SB-005-(0.5)

Lab ID: 1901429-017A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	21	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.052		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.023		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0026		0.0020	2	mg/kg		SW8081A

Client ID: SB-005-(1)

Lab ID: 1901429-018A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	21	B	0.50	1	mg/Kg		SW6020
g-Chlordane	0.0026		0.0020	2	mg/kg		SW8081A
p,p-DDD	0.0026		0.0020	2	mg/kg		SW8081A
p,p-DDE	0.11		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.032		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0035		0.0020	2	mg/kg		SW8081A

Client ID: SB-005-(2)

Lab ID: 1901429-019A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.5	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0017		0.0010	1	mg/kg		SW8081A

Client ID: SB-005-(3)

Lab ID: 1901429-020A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.2	B	0.50	1	mg/Kg		SW6020



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-006-(0.5)

Lab ID: 1901429-021A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.7	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(1)

Lab ID: 1901429-022A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.6	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(2)

Lab ID: 1901429-023A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.5	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(3)

Lab ID: 1901429-024A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.5	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(0.5)

Lab ID: 1901429-025A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.2	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(1)

Lab ID: 1901429-026A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	7.7	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(2)

Lab ID: 1901429-027A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.7	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0017		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0013		0.0010	1	mg/kg		SW8081A

Client ID: SB-007-(3)

Lab ID: 1901429-028A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9	B	0.50	1	mg/Kg		SW6020



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(0.5)	1901429-001A	Soil	01/10/2019 08:20	GC20 01111927.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 19:08
a-BHC	ND	0.0050	5	01/11/2019 19:08
b-BHC	ND	0.0050	5	01/11/2019 19:08
d-BHC	ND	0.0050	5	01/11/2019 19:08
g-BHC	ND	0.0050	5	01/11/2019 19:08
Chlordane (Technical)	ND	0.12	5	01/11/2019 19:08
a-Chlordane	ND	0.0050	5	01/11/2019 19:08
g-Chlordane	ND	0.0050	5	01/11/2019 19:08
p,p-DDD	ND	0.0050	5	01/11/2019 19:08
p,p-DDE	0.020	0.0050	5	01/11/2019 19:08
p,p-DDT	0.020	0.0050	5	01/11/2019 19:08
Dieldrin	ND	0.0050	5	01/11/2019 19:08
Endosulfan I	ND	0.0050	5	01/11/2019 19:08
Endosulfan II	ND	0.0050	5	01/11/2019 19:08
Endosulfan sulfate	ND	0.0050	5	01/11/2019 19:08
Endrin	ND	0.0050	5	01/11/2019 19:08
Endrin aldehyde	ND	0.0050	5	01/11/2019 19:08
Endrin ketone	ND	0.0050	5	01/11/2019 19:08
Heptachlor	ND	0.0050	5	01/11/2019 19:08
Heptachlor epoxide	ND	0.0050	5	01/11/2019 19:08
Hexachlorobenzene	ND	0.050	5	01/11/2019 19:08
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 19:08
Methoxychlor	ND	0.0050	5	01/11/2019 19:08
Toxaphene	ND	0.25	5	01/11/2019 19:08

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	126	69-143	01/11/2019 19:08

Analyst(s): CK

(Cont.)



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(1)	1901429-002A	Soil	01/10/2019 08:25	GC20 01111936.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 21:30
a-BHC	ND	0.0020	2	01/11/2019 21:30
b-BHC	ND	0.0020	2	01/11/2019 21:30
d-BHC	ND	0.0020	2	01/11/2019 21:30
g-BHC	ND	0.0020	2	01/11/2019 21:30
Chlordane (Technical)	ND	0.050	2	01/11/2019 21:30
a-Chlordane	ND	0.0020	2	01/11/2019 21:30
g-Chlordane	ND	0.0020	2	01/11/2019 21:30
p,p-DDD	0.0030	0.0020	2	01/11/2019 21:30
p,p-DDE	0.072	0.0020	2	01/11/2019 21:30
p,p-DDT	0.057	0.0020	2	01/11/2019 21:30
Dieldrin	0.0029	0.0020	2	01/11/2019 21:30
Endosulfan I	ND	0.0020	2	01/11/2019 21:30
Endosulfan II	ND	0.0020	2	01/11/2019 21:30
Endosulfan sulfate	ND	0.0020	2	01/11/2019 21:30
Endrin	ND	0.0020	2	01/11/2019 21:30
Endrin aldehyde	ND	0.0020	2	01/11/2019 21:30
Endrin ketone	ND	0.0020	2	01/11/2019 21:30
Heptachlor	ND	0.0020	2	01/11/2019 21:30
Heptachlor epoxide	ND	0.0020	2	01/11/2019 21:30
Hexachlorobenzene	ND	0.020	2	01/11/2019 21:30
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 21:30
Methoxychlor	ND	0.0020	2	01/11/2019 21:30
Toxaphene	ND	0.10	2	01/11/2019 21:30

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	127	69-143	01/11/2019 21:30

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(2)	1901429-003A	Soil	01/10/2019 08:30	GC20 01111929.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 19:40
a-BHC	ND	0.0010	1	01/11/2019 19:40
b-BHC	ND	0.0010	1	01/11/2019 19:40
d-BHC	ND	0.0010	1	01/11/2019 19:40
g-BHC	ND	0.0010	1	01/11/2019 19:40
Chlordane (Technical)	ND	0.025	1	01/11/2019 19:40
a-Chlordane	ND	0.0010	1	01/11/2019 19:40
g-Chlordane	ND	0.0010	1	01/11/2019 19:40
p,p-DDD	ND	0.0010	1	01/11/2019 19:40
p,p-DDE	0.0044	0.0010	1	01/11/2019 19:40
p,p-DDT	ND	0.0010	1	01/11/2019 19:40
Dieldrin	ND	0.0010	1	01/11/2019 19:40
Endosulfan I	ND	0.0010	1	01/11/2019 19:40
Endosulfan II	ND	0.0010	1	01/11/2019 19:40
Endosulfan sulfate	ND	0.0010	1	01/11/2019 19:40
Endrin	ND	0.0010	1	01/11/2019 19:40
Endrin aldehyde	ND	0.0010	1	01/11/2019 19:40
Endrin ketone	ND	0.0010	1	01/11/2019 19:40
Heptachlor	ND	0.0010	1	01/11/2019 19:40
Heptachlor epoxide	ND	0.0010	1	01/11/2019 19:40
Hexachlorobenzene	ND	0.010	1	01/11/2019 19:40
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 19:40
Methoxychlor	ND	0.0010	1	01/11/2019 19:40
Toxaphene	ND	0.050	1	01/11/2019 19:40

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	69-143	01/11/2019 19:40

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(3)	1901429-004A	Soil	01/10/2019 08:35	GC20 01111930.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 19:56
a-BHC	ND	0.0010	1	01/11/2019 19:56
b-BHC	ND	0.0010	1	01/11/2019 19:56
d-BHC	ND	0.0010	1	01/11/2019 19:56
g-BHC	ND	0.0010	1	01/11/2019 19:56
Chlordane (Technical)	ND	0.025	1	01/11/2019 19:56
a-Chlordane	ND	0.0010	1	01/11/2019 19:56
g-Chlordane	ND	0.0010	1	01/11/2019 19:56
p,p-DDD	ND	0.0010	1	01/11/2019 19:56
p,p-DDE	ND	0.0010	1	01/11/2019 19:56
p,p-DDT	ND	0.0010	1	01/11/2019 19:56
Dieldrin	ND	0.0010	1	01/11/2019 19:56
Endosulfan I	ND	0.0010	1	01/11/2019 19:56
Endosulfan II	ND	0.0010	1	01/11/2019 19:56
Endosulfan sulfate	ND	0.0010	1	01/11/2019 19:56
Endrin	ND	0.0010	1	01/11/2019 19:56
Endrin aldehyde	ND	0.0010	1	01/11/2019 19:56
Endrin ketone	ND	0.0010	1	01/11/2019 19:56
Heptachlor	ND	0.0010	1	01/11/2019 19:56
Heptachlor epoxide	ND	0.0010	1	01/11/2019 19:56
Hexachlorobenzene	ND	0.010	1	01/11/2019 19:56
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 19:56
Methoxychlor	ND	0.0010	1	01/11/2019 19:56
Toxaphene	ND	0.050	1	01/11/2019 19:56

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	113	69-143	01/11/2019 19:56

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(0.5)	1901429-005A	Soil	01/10/2019 08:45	GC20 01111942.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 23:05
a-BHC	ND	0.0020	2	01/11/2019 23:05
b-BHC	ND	0.0020	2	01/11/2019 23:05
d-BHC	ND	0.0020	2	01/11/2019 23:05
g-BHC	ND	0.0020	2	01/11/2019 23:05
Chlordane (Technical)	ND	0.050	2	01/11/2019 23:05
a-Chlordane	ND	0.0020	2	01/11/2019 23:05
g-Chlordane	ND	0.0020	2	01/11/2019 23:05
p,p-DDD	ND	0.0020	2	01/11/2019 23:05
p,p-DDE	ND	0.0020	2	01/11/2019 23:05
p,p-DDT	ND	0.0020	2	01/11/2019 23:05
Dieldrin	ND	0.0020	2	01/11/2019 23:05
Endosulfan I	ND	0.0020	2	01/11/2019 23:05
Endosulfan II	ND	0.0020	2	01/11/2019 23:05
Endosulfan sulfate	ND	0.0020	2	01/11/2019 23:05
Endrin	ND	0.0020	2	01/11/2019 23:05
Endrin aldehyde	ND	0.0020	2	01/11/2019 23:05
Endrin ketone	ND	0.0020	2	01/11/2019 23:05
Heptachlor	ND	0.0020	2	01/11/2019 23:05
Heptachlor epoxide	ND	0.0020	2	01/11/2019 23:05
Hexachlorobenzene	ND	0.020	2	01/11/2019 23:05
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 23:05
Methoxychlor	ND	0.0020	2	01/11/2019 23:05
Toxaphene	ND	0.10	2	01/11/2019 23:05

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	121	69-143	01/11/2019 23:05

Analyst(s): CK

Analytical Comments: a3



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(1)	1901429-006A	Soil	01/10/2019 08:50	GC20 01111931.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 20:11
a-BHC	ND	0.0010	1	01/11/2019 20:11
b-BHC	ND	0.0010	1	01/11/2019 20:11
d-BHC	ND	0.0010	1	01/11/2019 20:11
g-BHC	ND	0.0010	1	01/11/2019 20:11
Chlordane (Technical)	ND	0.025	1	01/11/2019 20:11
a-Chlordane	ND	0.0010	1	01/11/2019 20:11
g-Chlordane	ND	0.0010	1	01/11/2019 20:11
p,p-DDD	ND	0.0010	1	01/11/2019 20:11
p,p-DDE	0.0043	0.0010	1	01/11/2019 20:11
p,p-DDT	0.0018	0.0010	1	01/11/2019 20:11
Dieldrin	ND	0.0010	1	01/11/2019 20:11
Endosulfan I	ND	0.0010	1	01/11/2019 20:11
Endosulfan II	ND	0.0010	1	01/11/2019 20:11
Endosulfan sulfate	ND	0.0010	1	01/11/2019 20:11
Endrin	ND	0.0010	1	01/11/2019 20:11
Endrin aldehyde	ND	0.0010	1	01/11/2019 20:11
Endrin ketone	ND	0.0010	1	01/11/2019 20:11
Heptachlor	ND	0.0010	1	01/11/2019 20:11
Heptachlor epoxide	ND	0.0010	1	01/11/2019 20:11
Hexachlorobenzene	ND	0.010	1	01/11/2019 20:11
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 20:11
Methoxychlor	ND	0.0010	1	01/11/2019 20:11
Toxaphene	ND	0.050	1	01/11/2019 20:11

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	115	69-143	01/11/2019 20:11

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(2)	1901429-007A	Soil	01/10/2019 08:55	GC22 01111928.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 01:51
a-BHC	ND	0.0010	1	01/12/2019 01:51
b-BHC	ND	0.0010	1	01/12/2019 01:51
d-BHC	ND	0.0010	1	01/12/2019 01:51
g-BHC	ND	0.0010	1	01/12/2019 01:51
Chlordane (Technical)	ND	0.025	1	01/12/2019 01:51
a-Chlordane	ND	0.0010	1	01/12/2019 01:51
g-Chlordane	ND	0.0010	1	01/12/2019 01:51
p,p-DDD	ND	0.0010	1	01/12/2019 01:51
p,p-DDE	0.0091	0.0010	1	01/12/2019 01:51
p,p-DDT	0.0031	0.0010	1	01/12/2019 01:51
Dieldrin	ND	0.0010	1	01/12/2019 01:51
Endosulfan I	ND	0.0010	1	01/12/2019 01:51
Endosulfan II	ND	0.0010	1	01/12/2019 01:51
Endosulfan sulfate	ND	0.0010	1	01/12/2019 01:51
Endrin	ND	0.0010	1	01/12/2019 01:51
Endrin aldehyde	ND	0.0010	1	01/12/2019 01:51
Endrin ketone	ND	0.0010	1	01/12/2019 01:51
Heptachlor	ND	0.0010	1	01/12/2019 01:51
Heptachlor epoxide	ND	0.0010	1	01/12/2019 01:51
Hexachlorobenzene	ND	0.010	1	01/12/2019 01:51
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 01:51
Methoxychlor	ND	0.0010	1	01/12/2019 01:51
Toxaphene	ND	0.050	1	01/12/2019 01:51

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	113	69-143	01/12/2019 01:51

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(3)	1901429-008A	Soil	01/10/2019 09:00	GC22 01111929.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 02:25
a-BHC	ND	0.0010	1	01/12/2019 02:25
b-BHC	ND	0.0010	1	01/12/2019 02:25
d-BHC	ND	0.0010	1	01/12/2019 02:25
g-BHC	ND	0.0010	1	01/12/2019 02:25
Chlordane (Technical)	ND	0.025	1	01/12/2019 02:25
a-Chlordane	ND	0.0010	1	01/12/2019 02:25
g-Chlordane	ND	0.0010	1	01/12/2019 02:25
p,p-DDD	ND	0.0010	1	01/12/2019 02:25
p,p-DDE	ND	0.0010	1	01/12/2019 02:25
p,p-DDT	ND	0.0010	1	01/12/2019 02:25
Dieldrin	ND	0.0010	1	01/12/2019 02:25
Endosulfan I	ND	0.0010	1	01/12/2019 02:25
Endosulfan II	ND	0.0010	1	01/12/2019 02:25
Endosulfan sulfate	ND	0.0010	1	01/12/2019 02:25
Endrin	ND	0.0010	1	01/12/2019 02:25
Endrin aldehyde	ND	0.0010	1	01/12/2019 02:25
Endrin ketone	ND	0.0010	1	01/12/2019 02:25
Heptachlor	ND	0.0010	1	01/12/2019 02:25
Heptachlor epoxide	ND	0.0010	1	01/12/2019 02:25
Hexachlorobenzene	ND	0.010	1	01/12/2019 02:25
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 02:25
Methoxychlor	ND	0.0010	1	01/12/2019 02:25
Toxaphene	ND	0.050	1	01/12/2019 02:25

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	113	69-143	01/12/2019 02:25

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(0.5)	1901429-009A	Soil	01/10/2019 09:05	GC20 01111944.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 23:36
a-BHC	ND	0.0050	5	01/11/2019 23:36
b-BHC	ND	0.0050	5	01/11/2019 23:36
d-BHC	ND	0.0050	5	01/11/2019 23:36
g-BHC	ND	0.0050	5	01/11/2019 23:36
Chlordane (Technical)	ND	0.12	5	01/11/2019 23:36
a-Chlordane	0.012	0.0050	5	01/11/2019 23:36
g-Chlordane	0.011	0.0050	5	01/11/2019 23:36
p,p-DDD	ND	0.0050	5	01/11/2019 23:36
p,p-DDE	0.018	0.0050	5	01/11/2019 23:36
p,p-DDT	0.014	0.0050	5	01/11/2019 23:36
Dieldrin	0.0057	0.0050	5	01/11/2019 23:36
Endosulfan I	ND	0.0050	5	01/11/2019 23:36
Endosulfan II	ND	0.0050	5	01/11/2019 23:36
Endosulfan sulfate	ND	0.0050	5	01/11/2019 23:36
Endrin	ND	0.0050	5	01/11/2019 23:36
Endrin aldehyde	ND	0.0050	5	01/11/2019 23:36
Endrin ketone	ND	0.0050	5	01/11/2019 23:36
Heptachlor	ND	0.0050	5	01/11/2019 23:36
Heptachlor epoxide	ND	0.0050	5	01/11/2019 23:36
Hexachlorobenzene	ND	0.050	5	01/11/2019 23:36
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 23:36
Methoxychlor	ND	0.0050	5	01/11/2019 23:36
Toxaphene	ND	0.25	5	01/11/2019 23:36

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	121	69-143	01/11/2019 23:36

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(1)	1901429-010A	Soil	01/10/2019 09:10	GC20 01111928.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 19:24
a-BHC	ND	0.0050	5	01/11/2019 19:24
b-BHC	ND	0.0050	5	01/11/2019 19:24
d-BHC	ND	0.0050	5	01/11/2019 19:24
g-BHC	ND	0.0050	5	01/11/2019 19:24
Chlordane (Technical)	ND	0.12	5	01/11/2019 19:24
a-Chlordane	ND	0.0050	5	01/11/2019 19:24
g-Chlordane	ND	0.0050	5	01/11/2019 19:24
p,p-DDD	ND	0.0050	5	01/11/2019 19:24
p,p-DDE	ND	0.0050	5	01/11/2019 19:24
p,p-DDT	ND	0.0050	5	01/11/2019 19:24
Dieldrin	ND	0.0050	5	01/11/2019 19:24
Endosulfan I	ND	0.0050	5	01/11/2019 19:24
Endosulfan II	ND	0.0050	5	01/11/2019 19:24
Endosulfan sulfate	ND	0.0050	5	01/11/2019 19:24
Endrin	ND	0.0050	5	01/11/2019 19:24
Endrin aldehyde	ND	0.0050	5	01/11/2019 19:24
Endrin ketone	ND	0.0050	5	01/11/2019 19:24
Heptachlor	ND	0.0050	5	01/11/2019 19:24
Heptachlor epoxide	ND	0.0050	5	01/11/2019 19:24
Hexachlorobenzene	ND	0.050	5	01/11/2019 19:24
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 19:24
Methoxychlor	ND	0.0050	5	01/11/2019 19:24
Toxaphene	ND	0.25	5	01/11/2019 19:24

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	69-143	01/11/2019 19:24

Analyst(s): CK

Analytical Comments: a3

(Cont.)



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(2)	1901429-011A	Soil	01/10/2019 09:15	GC20 01111934.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 20:59
a-BHC	ND	0.0020	2	01/11/2019 20:59
b-BHC	ND	0.0020	2	01/11/2019 20:59
d-BHC	ND	0.0020	2	01/11/2019 20:59
g-BHC	ND	0.0020	2	01/11/2019 20:59
Chlordane (Technical)	ND	0.050	2	01/11/2019 20:59
a-Chlordane	ND	0.0020	2	01/11/2019 20:59
g-Chlordane	ND	0.0020	2	01/11/2019 20:59
p,p-DDD	ND	0.0020	2	01/11/2019 20:59
p,p-DDE	ND	0.0020	2	01/11/2019 20:59
p,p-DDT	ND	0.0020	2	01/11/2019 20:59
Dieldrin	ND	0.0020	2	01/11/2019 20:59
Endosulfan I	ND	0.0020	2	01/11/2019 20:59
Endosulfan II	ND	0.0020	2	01/11/2019 20:59
Endosulfan sulfate	ND	0.0020	2	01/11/2019 20:59
Endrin	ND	0.0020	2	01/11/2019 20:59
Endrin aldehyde	ND	0.0020	2	01/11/2019 20:59
Endrin ketone	ND	0.0020	2	01/11/2019 20:59
Heptachlor	ND	0.0020	2	01/11/2019 20:59
Heptachlor epoxide	ND	0.0020	2	01/11/2019 20:59
Hexachlorobenzene	ND	0.020	2	01/11/2019 20:59
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 20:59
Methoxychlor	ND	0.0020	2	01/11/2019 20:59
Toxaphene	ND	0.10	2	01/11/2019 20:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	109	69-143	01/11/2019 20:59

Analyst(s): CK

Analytical Comments: a3



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(3)	1901429-012A	Soil	01/10/2019 09:20	GC20 01111946.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/12/2019 00:08
a-BHC	ND	0.0020	2	01/12/2019 00:08
b-BHC	ND	0.0020	2	01/12/2019 00:08
d-BHC	ND	0.0020	2	01/12/2019 00:08
g-BHC	ND	0.0020	2	01/12/2019 00:08
Chlordane (Technical)	ND	0.050	2	01/12/2019 00:08
a-Chlordane	ND	0.0020	2	01/12/2019 00:08
g-Chlordane	ND	0.0020	2	01/12/2019 00:08
p,p-DDD	ND	0.0020	2	01/12/2019 00:08
p,p-DDE	0.0020	0.0020	2	01/12/2019 00:08
p,p-DDT	0.0029	0.0020	2	01/12/2019 00:08
Dieldrin	ND	0.0020	2	01/12/2019 00:08
Endosulfan I	ND	0.0020	2	01/12/2019 00:08
Endosulfan II	ND	0.0020	2	01/12/2019 00:08
Endosulfan sulfate	ND	0.0020	2	01/12/2019 00:08
Endrin	ND	0.0020	2	01/12/2019 00:08
Endrin aldehyde	ND	0.0020	2	01/12/2019 00:08
Endrin ketone	ND	0.0020	2	01/12/2019 00:08
Heptachlor	ND	0.0020	2	01/12/2019 00:08
Heptachlor epoxide	ND	0.0020	2	01/12/2019 00:08
Hexachlorobenzene	ND	0.020	2	01/12/2019 00:08
Hexachlorocyclopentadiene	ND	0.040	2	01/12/2019 00:08
Methoxychlor	ND	0.0020	2	01/12/2019 00:08
Toxaphene	ND	0.10	2	01/12/2019 00:08

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	115	69-143	01/12/2019 00:08

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(0.5)	1901429-013A	Soil	01/10/2019 09:40	GC20 01111947.D	171270

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.0020	2	01/12/2019 00:23
a-BHC	ND		0.0020	2	01/12/2019 00:23
b-BHC	ND		0.0020	2	01/12/2019 00:23
d-BHC	ND		0.0020	2	01/12/2019 00:23
g-BHC	ND		0.0020	2	01/12/2019 00:23
Chlordane (Technical)	ND		0.050	2	01/12/2019 00:23
a-Chlordane	ND		0.0020	2	01/12/2019 00:23
g-Chlordane	ND		0.0020	2	01/12/2019 00:23
p,p-DDD	ND		0.0020	2	01/12/2019 00:23
p,p-DDE	0.0075		0.0020	2	01/12/2019 00:23
p,p-DDT	0.0032	P	0.0020	2	01/12/2019 00:23
Dieldrin	ND		0.0020	2	01/12/2019 00:23
Endosulfan I	ND		0.0020	2	01/12/2019 00:23
Endosulfan II	ND		0.0020	2	01/12/2019 00:23
Endosulfan sulfate	ND		0.0020	2	01/12/2019 00:23
Endrin	ND		0.0020	2	01/12/2019 00:23
Endrin aldehyde	ND		0.0020	2	01/12/2019 00:23
Endrin ketone	ND		0.0020	2	01/12/2019 00:23
Heptachlor	ND		0.0020	2	01/12/2019 00:23
Heptachlor epoxide	ND		0.0020	2	01/12/2019 00:23
Hexachlorobenzene	ND		0.020	2	01/12/2019 00:23
Hexachlorocyclopentadiene	ND		0.040	2	01/12/2019 00:23
Methoxychlor	ND		0.0020	2	01/12/2019 00:23
Toxaphene	ND		0.10	2	01/12/2019 00:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	118	69-143	01/12/2019 00:23

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(1)	1901429-014A	Soil	01/10/2019 09:45	GC20 01111945.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 23:52
a-BHC	ND	0.0050	5	01/11/2019 23:52
b-BHC	ND	0.0050	5	01/11/2019 23:52
d-BHC	ND	0.0050	5	01/11/2019 23:52
g-BHC	ND	0.0050	5	01/11/2019 23:52
Chlordane (Technical)	ND	0.12	5	01/11/2019 23:52
a-Chlordane	ND	0.0050	5	01/11/2019 23:52
g-Chlordane	ND	0.0050	5	01/11/2019 23:52
p,p-DDD	ND	0.0050	5	01/11/2019 23:52
p,p-DDE	0.0096	0.0050	5	01/11/2019 23:52
p,p-DDT	0.0095	0.0050	5	01/11/2019 23:52
Dieldrin	ND	0.0050	5	01/11/2019 23:52
Endosulfan I	ND	0.0050	5	01/11/2019 23:52
Endosulfan II	ND	0.0050	5	01/11/2019 23:52
Endosulfan sulfate	ND	0.0050	5	01/11/2019 23:52
Endrin	ND	0.0050	5	01/11/2019 23:52
Endrin aldehyde	ND	0.0050	5	01/11/2019 23:52
Endrin ketone	ND	0.0050	5	01/11/2019 23:52
Heptachlor	ND	0.0050	5	01/11/2019 23:52
Heptachlor epoxide	ND	0.0050	5	01/11/2019 23:52
Hexachlorobenzene	ND	0.050	5	01/11/2019 23:52
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 23:52
Methoxychlor	ND	0.0050	5	01/11/2019 23:52
Toxaphene	ND	0.25	5	01/11/2019 23:52

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	120	69-143	01/11/2019 23:52

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(2)	1901429-015A	Soil	01/10/2019 09:50	GC22 01111930.D	171270

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.0010	1	01/12/2019 02:59
a-BHC	ND		0.0010	1	01/12/2019 02:59
b-BHC	ND		0.0010	1	01/12/2019 02:59
d-BHC	ND		0.0010	1	01/12/2019 02:59
g-BHC	ND		0.0010	1	01/12/2019 02:59
Chlordane (Technical)	ND		0.025	1	01/12/2019 02:59
a-Chlordane	0.0013	P	0.0010	1	01/12/2019 02:59
g-Chlordane	ND		0.0010	1	01/12/2019 02:59
p,p-DDD	0.0013		0.0010	1	01/12/2019 02:59
p,p-DDE	0.20		0.0010	1	01/12/2019 02:59
p,p-DDT	0.085		0.0010	1	01/12/2019 02:59
Dieldrin	0.0047		0.0010	1	01/12/2019 02:59
Endosulfan I	ND		0.0010	1	01/12/2019 02:59
Endosulfan II	ND		0.0010	1	01/12/2019 02:59
Endosulfan sulfate	ND		0.0010	1	01/12/2019 02:59
Endrin	ND		0.0010	1	01/12/2019 02:59
Endrin aldehyde	ND		0.0010	1	01/12/2019 02:59
Endrin ketone	ND		0.0010	1	01/12/2019 02:59
Heptachlor	ND		0.0010	1	01/12/2019 02:59
Heptachlor epoxide	ND		0.0010	1	01/12/2019 02:59
Hexachlorobenzene	ND		0.010	1	01/12/2019 02:59
Hexachlorocyclopentadiene	ND		0.020	1	01/12/2019 02:59
Methoxychlor	ND		0.0010	1	01/12/2019 02:59
Toxaphene	ND		0.050	1	01/12/2019 02:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	105	69-143	01/12/2019 02:59

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(3)	1901429-016A	Soil	01/10/2019 09:55	GC22 01111931.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 03:33
a-BHC	ND	0.0010	1	01/12/2019 03:33
b-BHC	ND	0.0010	1	01/12/2019 03:33
d-BHC	ND	0.0010	1	01/12/2019 03:33
g-BHC	ND	0.0010	1	01/12/2019 03:33
Chlordane (Technical)	ND	0.025	1	01/12/2019 03:33
a-Chlordane	ND	0.0010	1	01/12/2019 03:33
g-Chlordane	ND	0.0010	1	01/12/2019 03:33
p,p-DDD	ND	0.0010	1	01/12/2019 03:33
p,p-DDE	0.0078	0.0010	1	01/12/2019 03:33
p,p-DDT	0.0027	0.0010	1	01/12/2019 03:33
Dieldrin	ND	0.0010	1	01/12/2019 03:33
Endosulfan I	ND	0.0010	1	01/12/2019 03:33
Endosulfan II	ND	0.0010	1	01/12/2019 03:33
Endosulfan sulfate	ND	0.0010	1	01/12/2019 03:33
Endrin	ND	0.0010	1	01/12/2019 03:33
Endrin aldehyde	ND	0.0010	1	01/12/2019 03:33
Endrin ketone	ND	0.0010	1	01/12/2019 03:33
Heptachlor	ND	0.0010	1	01/12/2019 03:33
Heptachlor epoxide	ND	0.0010	1	01/12/2019 03:33
Hexachlorobenzene	ND	0.010	1	01/12/2019 03:33
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 03:33
Methoxychlor	ND	0.0010	1	01/12/2019 03:33
Toxaphene	ND	0.050	1	01/12/2019 03:33

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	114	69-143	01/12/2019 03:33

Analyst(s): CK

APPENDIX

F GPR SURVEY REPORT





WSP USA
2025 Gateway Place
Suite 348
San Jose, CA 95110

Tel.: +1 408 453-6100
Fax: +1 408 453-0496
wsp.com

VIA ELECTRONIC MAIL

February 11, 2019

Vallco Property Owner, LLC
965 Page Mill Road
Palo Alto, CA 94304
Attn: Reed Moulds

Subject: GPR Suvey, Former Sears Automotive Center, Former Vallco Mall, 10123 North Wolfe Road, Cupertino, California 95014

Dear Mr. Reeds,

On January 28, 2019 at approximately 8 a.m., WSP's Rick Freudenberger met with Nicholas Butler of California Utility Locators at the referenced location for the conduct of a Ground Penetrating Radar (GPR) survey of several areas within the former Sears Automotive Center. These areas included:

- 1 An area in the southeastern portion of the Sears location that formerly contained four underground storage tanks (USTs).
- 2 An area west of the central portion of the Sears building that formerly contained two USTS containing oil and where it has been alleged a third UST may still remain.

The areas were initially scanned with a Fisher TW-6 M-Scope (magnetic detector) that detected some metal piping on the west side of the Sears building. There was no indication of the existence of USTs in either area.

Mr. Butler than scanned both areas with MALA Easy Locator GPR equipment. The presence of concrete re-bar was noted in the concrete apron area west of the Sears building. There was no indication of the existence of USTs in either area.

The report of California Utility Locators is attached.

Sincerely,

Rick Freudenberger
Executive Vice President

ENCLOSURES

Enclosure 1 – California Utility Locators Report



ENCLOSURE 1 – CALIFORNIA UTILITY LOCATORS REPORT

Job Invoice

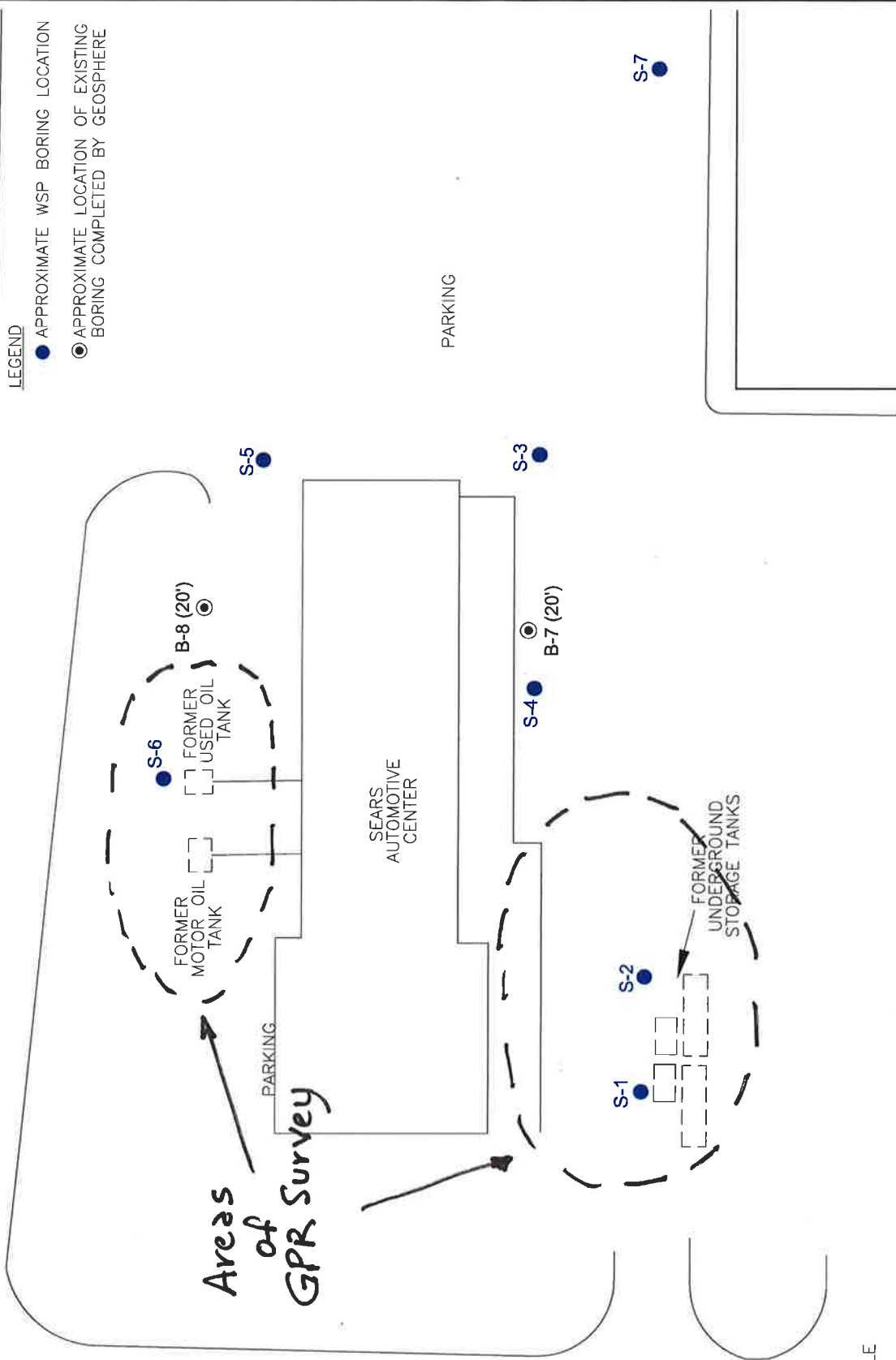
SOLD TO		DATE ORDERED	ORDER TAKEN BY
Sand Hill Property Company		1-23-2019	am
965 Page Mill Rd.		PHONE NO.	CUSTOMER ORDER #
Palo Alto, CA 94304			496
Rick Freudenberger-408-878-0657		JOB LOCATION	STARTING DATE
		Wolfe & Stevens Creek Blvd San Jose	1-28-2019
		JOB PHONE	TERMS
			8:00-10:00

QTY.	MATERIAL	UNIT	AMOUNT	DESCRIPTION OF WORK
	- Scanned areas indicated on map provided by client for suspected UST's in area			Scan for UST's w/GPR
	- Metal Sweep performed with Fisher TW-6 M-Scope and marked results with white paint. Marked out metal pipes found in area. No indication of UST's in areas scanned.			
	- GPR Scan performed with MALA Easy Locator GPR. No indication of UST's in areas scanned.			
	- Results gone over onsite.			
				MISCELLANEOUS CHARGES
				TOTAL MISCELLANEOUS
		LABOR	HRS.	RATE
		AMOUNT		
		Locating w/GPR	2	165 ⁰⁰
				330 00
Tech on site: Nicholas Buller-831-226-9052				
TOTAL MATERIALS				TOTAL LABOR
				330 00

WORK ORDERED	TOTAL LABOR	330 00
DATE ORDERED	TOTAL MATERIALS	
DATE COMPLETED	TOTAL MISCELLANEOUS	
CUSTOMER APPROVAL SIGNATURE _____	SUBTOTAL	
AUTHORIZED SIGNATURE <i>Ni Buller</i>	TAX	
	GRAND TOTAL	330 00

LEGEND

- APPROXIMATE WSP BORING LOCATION
- ⊙ APPROXIMATE LOCATION OF EXISTING BORING COMPLETED BY GEOSPHERE



NOT TO SCALE

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

DRAFT

A

Drawn By: LS 12/3/2018
Checked:
Approved:
DWG Name: 314MN1588-002

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 SAND HILL PROPERTY COMPANY
 PALO ALTO, CALIFORNIA

Figure 2

APPROXIMATE BORING LOCATION -
 SEARS AUTOMOTIVE CENTER

WSP USA Inc.
 2025 GATEWAY PLACE
 SUITE 348
 SAN JOSE, CA 95110
 TEL: +1 408.453.6100





McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1901429

Report Created for: WSP USA Corp

2025 Gateway Place, #348 (3rd Floor Back of Build
San Jose, CA 95110

Project Contact: San Jose Main

Project P.O.:

Project: 31401588.001; Vallco

Project Received: 01/10/2019

Analytical Report reviewed & approved for release on 01/16/2019 by:

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: WSP USA Corp
Project: 31401588.001; Vallco
WorkOrder: 1901429

Glossary Abbreviation

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



Glossary of Terms & Qualifier Definitions

Client: WSP USA Corp
Project: 31401588.001; Vallco
WorkOrder: 1901429

Analytical Qualifiers

B Analyte detected in the associated Method Blank and in the sample
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P Agreement between quantitative confirmation results exceed method recommended limits
a3 Sample diluted due to high organic content.

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-001-(0.5)

Lab ID: 1901429-001A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	38		0.50	1	mg/Kg		SW6020
p,p-DDE	0.020		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.020		0.0050	5	mg/kg		SW8081A

Client ID: SB-001-(1)

Lab ID: 1901429-002A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	56		0.50	1	mg/Kg		SW6020
p,p-DDD	0.0030		0.0020	2	mg/kg		SW8081A
p,p-DDE	0.072		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.057		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0029		0.0020	2	mg/kg		SW8081A

Client ID: SB-001-(2)

Lab ID: 1901429-003A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.2		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0044		0.0010	1	mg/kg		SW8081A

Client ID: SB-001-(3)

Lab ID: 1901429-004A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	4.7		0.50	1	mg/Kg		SW6020

Client ID: SB-002-(0.5)

Lab ID: 1901429-005A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	16		0.50	1	mg/Kg		SW6020

Client ID: SB-002-(1)

Lab ID: 1901429-006A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	8.5		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0043		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0018		0.0010	1	mg/kg		SW8081A

Client ID: SB-002-(2)

Lab ID: 1901429-007A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	9.6		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0091		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0031		0.0010	1	mg/kg		SW8081A

Client ID: SB-002-(3)

Lab ID: 1901429-008A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9		0.50	1	mg/Kg		SW6020



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-002-(3)

Lab ID: 1901429-008A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(0.5)

Lab ID: 1901429-009A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	11		0.50	1	mg/Kg		SW6020
a-Chlordane	0.012		0.0050	5	mg/kg		SW8081A
g-Chlordane	0.011		0.0050	5	mg/kg		SW8081A
p,p-DDE	0.018		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.014		0.0050	5	mg/kg		SW8081A
Dieldrin	0.0057		0.0050	5	mg/kg		SW8081A

Client ID: SB-003-(1)

Lab ID: 1901429-010A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	4.5		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(2)

Lab ID: 1901429-011A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	3.3		0.50	1	mg/Kg		SW6020

Client ID: SB-003-(3)

Lab ID: 1901429-012A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.8		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0020		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.0029		0.0020	2	mg/kg		SW8081A

Client ID: SB-004-(0.5)

Lab ID: 1901429-013A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	30		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0075		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.0032	P	0.0020	2	mg/kg		SW8081A

Client ID: SB-004-(1)

Lab ID: 1901429-014A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	14		0.50	1	mg/Kg		SW6020
p,p-DDE	0.0096		0.0050	5	mg/kg		SW8081A
p,p-DDT	0.0095		0.0050	5	mg/kg		SW8081A



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-004-(2)

Lab ID: 1901429-015A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	30	B	0.50	1	mg/Kg		SW6020
a-Chlordane	0.0013	P	0.0010	1	mg/kg		SW8081A
p,p-DDD	0.0013		0.0010	1	mg/kg		SW8081A
p,p-DDE	0.20		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.085		0.0010	1	mg/kg		SW8081A
Dieldrin	0.0047		0.0010	1	mg/kg		SW8081A

Client ID: SB-004-(3)

Lab ID: 1901429-016A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	17	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0078		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0027		0.0010	1	mg/kg		SW8081A

Client ID: SB-005-(0.5)

Lab ID: 1901429-017A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	21	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.052		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.023		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0026		0.0020	2	mg/kg		SW8081A

Client ID: SB-005-(1)

Lab ID: 1901429-018A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	21	B	0.50	1	mg/Kg		SW6020
g-Chlordane	0.0026		0.0020	2	mg/kg		SW8081A
p,p-DDD	0.0026		0.0020	2	mg/kg		SW8081A
p,p-DDE	0.11		0.0020	2	mg/kg		SW8081A
p,p-DDT	0.032		0.0020	2	mg/kg		SW8081A
Dieldrin	0.0035		0.0020	2	mg/kg		SW8081A

Client ID: SB-005-(2)

Lab ID: 1901429-019A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.5	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0017		0.0010	1	mg/kg		SW8081A

Client ID: SB-005-(3)

Lab ID: 1901429-020A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.2	B	0.50	1	mg/Kg		SW6020



Detection Summary

Client: WSP USA Corp
Project: 31401588.001; Vallco

WorkOrder: 1901429

Client ID: SB-006-(0.5)

Lab ID: 1901429-021A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.7	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(1)

Lab ID: 1901429-022A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.6	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(2)

Lab ID: 1901429-023A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.5	B	0.50	1	mg/Kg		SW6020

Client ID: SB-006-(3)

Lab ID: 1901429-024A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.5	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(0.5)

Lab ID: 1901429-025A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.2	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(1)

Lab ID: 1901429-026A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	7.7	B	0.50	1	mg/Kg		SW6020

Client ID: SB-007-(2)

Lab ID: 1901429-027A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	6.7	B	0.50	1	mg/Kg		SW6020
p,p-DDE	0.0017		0.0010	1	mg/kg		SW8081A
p,p-DDT	0.0013		0.0010	1	mg/kg		SW8081A

Client ID: SB-007-(3)

Lab ID: 1901429-028A

Analyte	Result	Qual	RL	DF	Unit	ExtType/ CleanUp	Method
Lead	5.9	B	0.50	1	mg/Kg		SW6020



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(0.5)	1901429-001A	Soil	01/10/2019 08:20	GC20 01111927.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 19:08
a-BHC	ND	0.0050	5	01/11/2019 19:08
b-BHC	ND	0.0050	5	01/11/2019 19:08
d-BHC	ND	0.0050	5	01/11/2019 19:08
g-BHC	ND	0.0050	5	01/11/2019 19:08
Chlordane (Technical)	ND	0.12	5	01/11/2019 19:08
a-Chlordane	ND	0.0050	5	01/11/2019 19:08
g-Chlordane	ND	0.0050	5	01/11/2019 19:08
p,p-DDD	ND	0.0050	5	01/11/2019 19:08
p,p-DDE	0.020	0.0050	5	01/11/2019 19:08
p,p-DDT	0.020	0.0050	5	01/11/2019 19:08
Dieldrin	ND	0.0050	5	01/11/2019 19:08
Endosulfan I	ND	0.0050	5	01/11/2019 19:08
Endosulfan II	ND	0.0050	5	01/11/2019 19:08
Endosulfan sulfate	ND	0.0050	5	01/11/2019 19:08
Endrin	ND	0.0050	5	01/11/2019 19:08
Endrin aldehyde	ND	0.0050	5	01/11/2019 19:08
Endrin ketone	ND	0.0050	5	01/11/2019 19:08
Heptachlor	ND	0.0050	5	01/11/2019 19:08
Heptachlor epoxide	ND	0.0050	5	01/11/2019 19:08
Hexachlorobenzene	ND	0.050	5	01/11/2019 19:08
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 19:08
Methoxychlor	ND	0.0050	5	01/11/2019 19:08
Toxaphene	ND	0.25	5	01/11/2019 19:08

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	126	69-143	01/11/2019 19:08

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(1)	1901429-002A	Soil	01/10/2019 08:25	GC20 01111936.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 21:30
a-BHC	ND	0.0020	2	01/11/2019 21:30
b-BHC	ND	0.0020	2	01/11/2019 21:30
d-BHC	ND	0.0020	2	01/11/2019 21:30
g-BHC	ND	0.0020	2	01/11/2019 21:30
Chlordane (Technical)	ND	0.050	2	01/11/2019 21:30
a-Chlordane	ND	0.0020	2	01/11/2019 21:30
g-Chlordane	ND	0.0020	2	01/11/2019 21:30
p,p-DDD	0.0030	0.0020	2	01/11/2019 21:30
p,p-DDE	0.072	0.0020	2	01/11/2019 21:30
p,p-DDT	0.057	0.0020	2	01/11/2019 21:30
Dieldrin	0.0029	0.0020	2	01/11/2019 21:30
Endosulfan I	ND	0.0020	2	01/11/2019 21:30
Endosulfan II	ND	0.0020	2	01/11/2019 21:30
Endosulfan sulfate	ND	0.0020	2	01/11/2019 21:30
Endrin	ND	0.0020	2	01/11/2019 21:30
Endrin aldehyde	ND	0.0020	2	01/11/2019 21:30
Endrin ketone	ND	0.0020	2	01/11/2019 21:30
Heptachlor	ND	0.0020	2	01/11/2019 21:30
Heptachlor epoxide	ND	0.0020	2	01/11/2019 21:30
Hexachlorobenzene	ND	0.020	2	01/11/2019 21:30
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 21:30
Methoxychlor	ND	0.0020	2	01/11/2019 21:30
Toxaphene	ND	0.10	2	01/11/2019 21:30

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	127	69-143	01/11/2019 21:30

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(2)	1901429-003A	Soil	01/10/2019 08:30	GC20 01111929.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 19:40
a-BHC	ND	0.0010	1	01/11/2019 19:40
b-BHC	ND	0.0010	1	01/11/2019 19:40
d-BHC	ND	0.0010	1	01/11/2019 19:40
g-BHC	ND	0.0010	1	01/11/2019 19:40
Chlordane (Technical)	ND	0.025	1	01/11/2019 19:40
a-Chlordane	ND	0.0010	1	01/11/2019 19:40
g-Chlordane	ND	0.0010	1	01/11/2019 19:40
p,p-DDD	ND	0.0010	1	01/11/2019 19:40
p,p-DDE	0.0044	0.0010	1	01/11/2019 19:40
p,p-DDT	ND	0.0010	1	01/11/2019 19:40
Dieldrin	ND	0.0010	1	01/11/2019 19:40
Endosulfan I	ND	0.0010	1	01/11/2019 19:40
Endosulfan II	ND	0.0010	1	01/11/2019 19:40
Endosulfan sulfate	ND	0.0010	1	01/11/2019 19:40
Endrin	ND	0.0010	1	01/11/2019 19:40
Endrin aldehyde	ND	0.0010	1	01/11/2019 19:40
Endrin ketone	ND	0.0010	1	01/11/2019 19:40
Heptachlor	ND	0.0010	1	01/11/2019 19:40
Heptachlor epoxide	ND	0.0010	1	01/11/2019 19:40
Hexachlorobenzene	ND	0.010	1	01/11/2019 19:40
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 19:40
Methoxychlor	ND	0.0010	1	01/11/2019 19:40
Toxaphene	ND	0.050	1	01/11/2019 19:40

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	69-143	01/11/2019 19:40

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-001-(3)	1901429-004A	Soil	01/10/2019 08:35	GC20 01111930.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 19:56
a-BHC	ND	0.0010	1	01/11/2019 19:56
b-BHC	ND	0.0010	1	01/11/2019 19:56
d-BHC	ND	0.0010	1	01/11/2019 19:56
g-BHC	ND	0.0010	1	01/11/2019 19:56
Chlordane (Technical)	ND	0.025	1	01/11/2019 19:56
a-Chlordane	ND	0.0010	1	01/11/2019 19:56
g-Chlordane	ND	0.0010	1	01/11/2019 19:56
p,p-DDD	ND	0.0010	1	01/11/2019 19:56
p,p-DDE	ND	0.0010	1	01/11/2019 19:56
p,p-DDT	ND	0.0010	1	01/11/2019 19:56
Dieldrin	ND	0.0010	1	01/11/2019 19:56
Endosulfan I	ND	0.0010	1	01/11/2019 19:56
Endosulfan II	ND	0.0010	1	01/11/2019 19:56
Endosulfan sulfate	ND	0.0010	1	01/11/2019 19:56
Endrin	ND	0.0010	1	01/11/2019 19:56
Endrin aldehyde	ND	0.0010	1	01/11/2019 19:56
Endrin ketone	ND	0.0010	1	01/11/2019 19:56
Heptachlor	ND	0.0010	1	01/11/2019 19:56
Heptachlor epoxide	ND	0.0010	1	01/11/2019 19:56
Hexachlorobenzene	ND	0.010	1	01/11/2019 19:56
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 19:56
Methoxychlor	ND	0.0010	1	01/11/2019 19:56
Toxaphene	ND	0.050	1	01/11/2019 19:56

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	113	69-143	01/11/2019 19:56

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(0.5)	1901429-005A	Soil	01/10/2019 08:45	GC20 01111942.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 23:05
a-BHC	ND	0.0020	2	01/11/2019 23:05
b-BHC	ND	0.0020	2	01/11/2019 23:05
d-BHC	ND	0.0020	2	01/11/2019 23:05
g-BHC	ND	0.0020	2	01/11/2019 23:05
Chlordane (Technical)	ND	0.050	2	01/11/2019 23:05
a-Chlordane	ND	0.0020	2	01/11/2019 23:05
g-Chlordane	ND	0.0020	2	01/11/2019 23:05
p,p-DDD	ND	0.0020	2	01/11/2019 23:05
p,p-DDE	ND	0.0020	2	01/11/2019 23:05
p,p-DDT	ND	0.0020	2	01/11/2019 23:05
Dieldrin	ND	0.0020	2	01/11/2019 23:05
Endosulfan I	ND	0.0020	2	01/11/2019 23:05
Endosulfan II	ND	0.0020	2	01/11/2019 23:05
Endosulfan sulfate	ND	0.0020	2	01/11/2019 23:05
Endrin	ND	0.0020	2	01/11/2019 23:05
Endrin aldehyde	ND	0.0020	2	01/11/2019 23:05
Endrin ketone	ND	0.0020	2	01/11/2019 23:05
Heptachlor	ND	0.0020	2	01/11/2019 23:05
Heptachlor epoxide	ND	0.0020	2	01/11/2019 23:05
Hexachlorobenzene	ND	0.020	2	01/11/2019 23:05
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 23:05
Methoxychlor	ND	0.0020	2	01/11/2019 23:05
Toxaphene	ND	0.10	2	01/11/2019 23:05

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	121	69-143	01/11/2019 23:05

Analyst(s): CK

Analytical Comments: a3

(Cont.)



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(1)	1901429-006A	Soil	01/10/2019 08:50	GC20 01111931.D	171267

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/11/2019 20:11
a-BHC	ND	0.0010	1	01/11/2019 20:11
b-BHC	ND	0.0010	1	01/11/2019 20:11
d-BHC	ND	0.0010	1	01/11/2019 20:11
g-BHC	ND	0.0010	1	01/11/2019 20:11
Chlordane (Technical)	ND	0.025	1	01/11/2019 20:11
a-Chlordane	ND	0.0010	1	01/11/2019 20:11
g-Chlordane	ND	0.0010	1	01/11/2019 20:11
p,p-DDD	ND	0.0010	1	01/11/2019 20:11
p,p-DDE	0.0043	0.0010	1	01/11/2019 20:11
p,p-DDT	0.0018	0.0010	1	01/11/2019 20:11
Dieldrin	ND	0.0010	1	01/11/2019 20:11
Endosulfan I	ND	0.0010	1	01/11/2019 20:11
Endosulfan II	ND	0.0010	1	01/11/2019 20:11
Endosulfan sulfate	ND	0.0010	1	01/11/2019 20:11
Endrin	ND	0.0010	1	01/11/2019 20:11
Endrin aldehyde	ND	0.0010	1	01/11/2019 20:11
Endrin ketone	ND	0.0010	1	01/11/2019 20:11
Heptachlor	ND	0.0010	1	01/11/2019 20:11
Heptachlor epoxide	ND	0.0010	1	01/11/2019 20:11
Hexachlorobenzene	ND	0.010	1	01/11/2019 20:11
Hexachlorocyclopentadiene	ND	0.020	1	01/11/2019 20:11
Methoxychlor	ND	0.0010	1	01/11/2019 20:11
Toxaphene	ND	0.050	1	01/11/2019 20:11

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	115	69-143	01/11/2019 20:11

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(2)	1901429-007A	Soil	01/10/2019 08:55	GC22 01111928.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 01:51
a-BHC	ND	0.0010	1	01/12/2019 01:51
b-BHC	ND	0.0010	1	01/12/2019 01:51
d-BHC	ND	0.0010	1	01/12/2019 01:51
g-BHC	ND	0.0010	1	01/12/2019 01:51
Chlordane (Technical)	ND	0.025	1	01/12/2019 01:51
a-Chlordane	ND	0.0010	1	01/12/2019 01:51
g-Chlordane	ND	0.0010	1	01/12/2019 01:51
p,p-DDD	ND	0.0010	1	01/12/2019 01:51
p,p-DDE	0.0091	0.0010	1	01/12/2019 01:51
p,p-DDT	0.0031	0.0010	1	01/12/2019 01:51
Dieldrin	ND	0.0010	1	01/12/2019 01:51
Endosulfan I	ND	0.0010	1	01/12/2019 01:51
Endosulfan II	ND	0.0010	1	01/12/2019 01:51
Endosulfan sulfate	ND	0.0010	1	01/12/2019 01:51
Endrin	ND	0.0010	1	01/12/2019 01:51
Endrin aldehyde	ND	0.0010	1	01/12/2019 01:51
Endrin ketone	ND	0.0010	1	01/12/2019 01:51
Heptachlor	ND	0.0010	1	01/12/2019 01:51
Heptachlor epoxide	ND	0.0010	1	01/12/2019 01:51
Hexachlorobenzene	ND	0.010	1	01/12/2019 01:51
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 01:51
Methoxychlor	ND	0.0010	1	01/12/2019 01:51
Toxaphene	ND	0.050	1	01/12/2019 01:51

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	113	69-143	01/12/2019 01:51

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-002-(3)	1901429-008A	Soil	01/10/2019 09:00	GC22 01111929.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 02:25
a-BHC	ND	0.0010	1	01/12/2019 02:25
b-BHC	ND	0.0010	1	01/12/2019 02:25
d-BHC	ND	0.0010	1	01/12/2019 02:25
g-BHC	ND	0.0010	1	01/12/2019 02:25
Chlordane (Technical)	ND	0.025	1	01/12/2019 02:25
a-Chlordane	ND	0.0010	1	01/12/2019 02:25
g-Chlordane	ND	0.0010	1	01/12/2019 02:25
p,p-DDD	ND	0.0010	1	01/12/2019 02:25
p,p-DDE	ND	0.0010	1	01/12/2019 02:25
p,p-DDT	ND	0.0010	1	01/12/2019 02:25
Dieldrin	ND	0.0010	1	01/12/2019 02:25
Endosulfan I	ND	0.0010	1	01/12/2019 02:25
Endosulfan II	ND	0.0010	1	01/12/2019 02:25
Endosulfan sulfate	ND	0.0010	1	01/12/2019 02:25
Endrin	ND	0.0010	1	01/12/2019 02:25
Endrin aldehyde	ND	0.0010	1	01/12/2019 02:25
Endrin ketone	ND	0.0010	1	01/12/2019 02:25
Heptachlor	ND	0.0010	1	01/12/2019 02:25
Heptachlor epoxide	ND	0.0010	1	01/12/2019 02:25
Hexachlorobenzene	ND	0.010	1	01/12/2019 02:25
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 02:25
Methoxychlor	ND	0.0010	1	01/12/2019 02:25
Toxaphene	ND	0.050	1	01/12/2019 02:25

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	113	69-143	01/12/2019 02:25

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(0.5)	1901429-009A	Soil	01/10/2019 09:05	GC20 01111944.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 23:36
a-BHC	ND	0.0050	5	01/11/2019 23:36
b-BHC	ND	0.0050	5	01/11/2019 23:36
d-BHC	ND	0.0050	5	01/11/2019 23:36
g-BHC	ND	0.0050	5	01/11/2019 23:36
Chlordane (Technical)	ND	0.12	5	01/11/2019 23:36
a-Chlordane	0.012	0.0050	5	01/11/2019 23:36
g-Chlordane	0.011	0.0050	5	01/11/2019 23:36
p,p-DDD	ND	0.0050	5	01/11/2019 23:36
p,p-DDE	0.018	0.0050	5	01/11/2019 23:36
p,p-DDT	0.014	0.0050	5	01/11/2019 23:36
Dieldrin	0.0057	0.0050	5	01/11/2019 23:36
Endosulfan I	ND	0.0050	5	01/11/2019 23:36
Endosulfan II	ND	0.0050	5	01/11/2019 23:36
Endosulfan sulfate	ND	0.0050	5	01/11/2019 23:36
Endrin	ND	0.0050	5	01/11/2019 23:36
Endrin aldehyde	ND	0.0050	5	01/11/2019 23:36
Endrin ketone	ND	0.0050	5	01/11/2019 23:36
Heptachlor	ND	0.0050	5	01/11/2019 23:36
Heptachlor epoxide	ND	0.0050	5	01/11/2019 23:36
Hexachlorobenzene	ND	0.050	5	01/11/2019 23:36
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 23:36
Methoxychlor	ND	0.0050	5	01/11/2019 23:36
Toxaphene	ND	0.25	5	01/11/2019 23:36

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	121	69-143	01/11/2019 23:36

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(1)	1901429-010A	Soil	01/10/2019 09:10	GC20 01111928.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 19:24
a-BHC	ND	0.0050	5	01/11/2019 19:24
b-BHC	ND	0.0050	5	01/11/2019 19:24
d-BHC	ND	0.0050	5	01/11/2019 19:24
g-BHC	ND	0.0050	5	01/11/2019 19:24
Chlordane (Technical)	ND	0.12	5	01/11/2019 19:24
a-Chlordane	ND	0.0050	5	01/11/2019 19:24
g-Chlordane	ND	0.0050	5	01/11/2019 19:24
p,p-DDD	ND	0.0050	5	01/11/2019 19:24
p,p-DDE	ND	0.0050	5	01/11/2019 19:24
p,p-DDT	ND	0.0050	5	01/11/2019 19:24
Dieldrin	ND	0.0050	5	01/11/2019 19:24
Endosulfan I	ND	0.0050	5	01/11/2019 19:24
Endosulfan II	ND	0.0050	5	01/11/2019 19:24
Endosulfan sulfate	ND	0.0050	5	01/11/2019 19:24
Endrin	ND	0.0050	5	01/11/2019 19:24
Endrin aldehyde	ND	0.0050	5	01/11/2019 19:24
Endrin ketone	ND	0.0050	5	01/11/2019 19:24
Heptachlor	ND	0.0050	5	01/11/2019 19:24
Heptachlor epoxide	ND	0.0050	5	01/11/2019 19:24
Hexachlorobenzene	ND	0.050	5	01/11/2019 19:24
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 19:24
Methoxychlor	ND	0.0050	5	01/11/2019 19:24
Toxaphene	ND	0.25	5	01/11/2019 19:24

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	69-143	01/11/2019 19:24

Analyst(s): CK

Analytical Comments: a3



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(2)	1901429-011A	Soil	01/10/2019 09:15	GC20 01111934.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/11/2019 20:59
a-BHC	ND	0.0020	2	01/11/2019 20:59
b-BHC	ND	0.0020	2	01/11/2019 20:59
d-BHC	ND	0.0020	2	01/11/2019 20:59
g-BHC	ND	0.0020	2	01/11/2019 20:59
Chlordane (Technical)	ND	0.050	2	01/11/2019 20:59
a-Chlordane	ND	0.0020	2	01/11/2019 20:59
g-Chlordane	ND	0.0020	2	01/11/2019 20:59
p,p-DDD	ND	0.0020	2	01/11/2019 20:59
p,p-DDE	ND	0.0020	2	01/11/2019 20:59
p,p-DDT	ND	0.0020	2	01/11/2019 20:59
Dieldrin	ND	0.0020	2	01/11/2019 20:59
Endosulfan I	ND	0.0020	2	01/11/2019 20:59
Endosulfan II	ND	0.0020	2	01/11/2019 20:59
Endosulfan sulfate	ND	0.0020	2	01/11/2019 20:59
Endrin	ND	0.0020	2	01/11/2019 20:59
Endrin aldehyde	ND	0.0020	2	01/11/2019 20:59
Endrin ketone	ND	0.0020	2	01/11/2019 20:59
Heptachlor	ND	0.0020	2	01/11/2019 20:59
Heptachlor epoxide	ND	0.0020	2	01/11/2019 20:59
Hexachlorobenzene	ND	0.020	2	01/11/2019 20:59
Hexachlorocyclopentadiene	ND	0.040	2	01/11/2019 20:59
Methoxychlor	ND	0.0020	2	01/11/2019 20:59
Toxaphene	ND	0.10	2	01/11/2019 20:59

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	109	69-143	01/11/2019 20:59

Analyst(s): CK

Analytical Comments: a3



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-003-(3)	1901429-012A	Soil	01/10/2019 09:20	GC20 01111946.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	01/12/2019 00:08
a-BHC	ND	0.0020	2	01/12/2019 00:08
b-BHC	ND	0.0020	2	01/12/2019 00:08
d-BHC	ND	0.0020	2	01/12/2019 00:08
g-BHC	ND	0.0020	2	01/12/2019 00:08
Chlordane (Technical)	ND	0.050	2	01/12/2019 00:08
a-Chlordane	ND	0.0020	2	01/12/2019 00:08
g-Chlordane	ND	0.0020	2	01/12/2019 00:08
p,p-DDD	ND	0.0020	2	01/12/2019 00:08
p,p-DDE	0.0020	0.0020	2	01/12/2019 00:08
p,p-DDT	0.0029	0.0020	2	01/12/2019 00:08
Dieldrin	ND	0.0020	2	01/12/2019 00:08
Endosulfan I	ND	0.0020	2	01/12/2019 00:08
Endosulfan II	ND	0.0020	2	01/12/2019 00:08
Endosulfan sulfate	ND	0.0020	2	01/12/2019 00:08
Endrin	ND	0.0020	2	01/12/2019 00:08
Endrin aldehyde	ND	0.0020	2	01/12/2019 00:08
Endrin ketone	ND	0.0020	2	01/12/2019 00:08
Heptachlor	ND	0.0020	2	01/12/2019 00:08
Heptachlor epoxide	ND	0.0020	2	01/12/2019 00:08
Hexachlorobenzene	ND	0.020	2	01/12/2019 00:08
Hexachlorocyclopentadiene	ND	0.040	2	01/12/2019 00:08
Methoxychlor	ND	0.0020	2	01/12/2019 00:08
Toxaphene	ND	0.10	2	01/12/2019 00:08

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	115	69-143	01/12/2019 00:08

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(0.5)	1901429-013A	Soil	01/10/2019 09:40	GC20 01111947.D	171270

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.0020	2	01/12/2019 00:23
a-BHC	ND		0.0020	2	01/12/2019 00:23
b-BHC	ND		0.0020	2	01/12/2019 00:23
d-BHC	ND		0.0020	2	01/12/2019 00:23
g-BHC	ND		0.0020	2	01/12/2019 00:23
Chlordane (Technical)	ND		0.050	2	01/12/2019 00:23
a-Chlordane	ND		0.0020	2	01/12/2019 00:23
g-Chlordane	ND		0.0020	2	01/12/2019 00:23
p,p-DDD	ND		0.0020	2	01/12/2019 00:23
p,p-DDE	0.0075		0.0020	2	01/12/2019 00:23
p,p-DDT	0.0032	P	0.0020	2	01/12/2019 00:23
Dieldrin	ND		0.0020	2	01/12/2019 00:23
Endosulfan I	ND		0.0020	2	01/12/2019 00:23
Endosulfan II	ND		0.0020	2	01/12/2019 00:23
Endosulfan sulfate	ND		0.0020	2	01/12/2019 00:23
Endrin	ND		0.0020	2	01/12/2019 00:23
Endrin aldehyde	ND		0.0020	2	01/12/2019 00:23
Endrin ketone	ND		0.0020	2	01/12/2019 00:23
Heptachlor	ND		0.0020	2	01/12/2019 00:23
Heptachlor epoxide	ND		0.0020	2	01/12/2019 00:23
Hexachlorobenzene	ND		0.020	2	01/12/2019 00:23
Hexachlorocyclopentadiene	ND		0.040	2	01/12/2019 00:23
Methoxychlor	ND		0.0020	2	01/12/2019 00:23
Toxaphene	ND		0.10	2	01/12/2019 00:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	118	69-143	01/12/2019 00:23

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(1)	1901429-014A	Soil	01/10/2019 09:45	GC20 01111945.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	01/11/2019 23:52
a-BHC	ND	0.0050	5	01/11/2019 23:52
b-BHC	ND	0.0050	5	01/11/2019 23:52
d-BHC	ND	0.0050	5	01/11/2019 23:52
g-BHC	ND	0.0050	5	01/11/2019 23:52
Chlordane (Technical)	ND	0.12	5	01/11/2019 23:52
a-Chlordane	ND	0.0050	5	01/11/2019 23:52
g-Chlordane	ND	0.0050	5	01/11/2019 23:52
p,p-DDD	ND	0.0050	5	01/11/2019 23:52
p,p-DDE	0.0096	0.0050	5	01/11/2019 23:52
p,p-DDT	0.0095	0.0050	5	01/11/2019 23:52
Dieldrin	ND	0.0050	5	01/11/2019 23:52
Endosulfan I	ND	0.0050	5	01/11/2019 23:52
Endosulfan II	ND	0.0050	5	01/11/2019 23:52
Endosulfan sulfate	ND	0.0050	5	01/11/2019 23:52
Endrin	ND	0.0050	5	01/11/2019 23:52
Endrin aldehyde	ND	0.0050	5	01/11/2019 23:52
Endrin ketone	ND	0.0050	5	01/11/2019 23:52
Heptachlor	ND	0.0050	5	01/11/2019 23:52
Heptachlor epoxide	ND	0.0050	5	01/11/2019 23:52
Hexachlorobenzene	ND	0.050	5	01/11/2019 23:52
Hexachlorocyclopentadiene	ND	0.10	5	01/11/2019 23:52
Methoxychlor	ND	0.0050	5	01/11/2019 23:52
Toxaphene	ND	0.25	5	01/11/2019 23:52

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	120	69-143	01/11/2019 23:52

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(2)	1901429-015A	Soil	01/10/2019 09:50	GC22 01111930.D	171270

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.0010	1	01/12/2019 02:59
a-BHC	ND		0.0010	1	01/12/2019 02:59
b-BHC	ND		0.0010	1	01/12/2019 02:59
d-BHC	ND		0.0010	1	01/12/2019 02:59
g-BHC	ND		0.0010	1	01/12/2019 02:59
Chlordane (Technical)	ND		0.025	1	01/12/2019 02:59
a-Chlordane	0.0013	P	0.0010	1	01/12/2019 02:59
g-Chlordane	ND		0.0010	1	01/12/2019 02:59
p,p-DDD	0.0013		0.0010	1	01/12/2019 02:59
p,p-DDE	0.20		0.0010	1	01/12/2019 02:59
p,p-DDT	0.085		0.0010	1	01/12/2019 02:59
Dieldrin	0.0047		0.0010	1	01/12/2019 02:59
Endosulfan I	ND		0.0010	1	01/12/2019 02:59
Endosulfan II	ND		0.0010	1	01/12/2019 02:59
Endosulfan sulfate	ND		0.0010	1	01/12/2019 02:59
Endrin	ND		0.0010	1	01/12/2019 02:59
Endrin aldehyde	ND		0.0010	1	01/12/2019 02:59
Endrin ketone	ND		0.0010	1	01/12/2019 02:59
Heptachlor	ND		0.0010	1	01/12/2019 02:59
Heptachlor epoxide	ND		0.0010	1	01/12/2019 02:59
Hexachlorobenzene	ND		0.010	1	01/12/2019 02:59
Hexachlorocyclopentadiene	ND		0.020	1	01/12/2019 02:59
Methoxychlor	ND		0.0010	1	01/12/2019 02:59
Toxaphene	ND		0.050	1	01/12/2019 02:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	105	69-143	01/12/2019 02:59

Analyst(s): CK



Analytical Report

Client: WSP USA Corp
Date Received: 1/10/19 16:00
Date Prepared: 1/10/19
Project: 31401588.001; Vallco

WorkOrder: 1901429
Extraction Method: SW3550B
Analytical Method: SW8081A
Unit: mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-004-(3)	1901429-016A	Soil	01/10/2019 09:55	GC22 01111931.D	171270

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	01/12/2019 03:33
a-BHC	ND	0.0010	1	01/12/2019 03:33
b-BHC	ND	0.0010	1	01/12/2019 03:33
d-BHC	ND	0.0010	1	01/12/2019 03:33
g-BHC	ND	0.0010	1	01/12/2019 03:33
Chlordane (Technical)	ND	0.025	1	01/12/2019 03:33
a-Chlordane	ND	0.0010	1	01/12/2019 03:33
g-Chlordane	ND	0.0010	1	01/12/2019 03:33
p,p-DDD	ND	0.0010	1	01/12/2019 03:33
p,p-DDE	0.0078	0.0010	1	01/12/2019 03:33
p,p-DDT	0.0027	0.0010	1	01/12/2019 03:33
Dieldrin	ND	0.0010	1	01/12/2019 03:33
Endosulfan I	ND	0.0010	1	01/12/2019 03:33
Endosulfan II	ND	0.0010	1	01/12/2019 03:33
Endosulfan sulfate	ND	0.0010	1	01/12/2019 03:33
Endrin	ND	0.0010	1	01/12/2019 03:33
Endrin aldehyde	ND	0.0010	1	01/12/2019 03:33
Endrin ketone	ND	0.0010	1	01/12/2019 03:33
Heptachlor	ND	0.0010	1	01/12/2019 03:33
Heptachlor epoxide	ND	0.0010	1	01/12/2019 03:33
Hexachlorobenzene	ND	0.010	1	01/12/2019 03:33
Hexachlorocyclopentadiene	ND	0.020	1	01/12/2019 03:33
Methoxychlor	ND	0.0010	1	01/12/2019 03:33
Toxaphene	ND	0.050	1	01/12/2019 03:33

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	114	69-143	01/12/2019 03:33

Analyst(s): CK

APPENDIX

G

ENTHALPY

ANALYTICAL REPORT-
PIPE SAMPLES





ENTHALPY

ANALYTICAL



Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 308481
ANALYTICAL REPORT

WSP
2025 Gateway Place
San Jose, CA 95110

Project : 31401588.001
Location : Vallco Sears
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
PIPE-EAST	308481-001
PIPE-CAP	308481-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Patrick McCarthy
Project Manager
patrick.mccarthy@enthalpy.com
(510) 204-2236 ext 13115

Date: 04/04/2019

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 308481
Client: WSP
Project: 31401588.001
Location: Vallco Sears
Request Date: 03/27/19
Samples Received: 03/27/19

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 03/27/19. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

PIPE-CAP (lab # 308481-002) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 308481
 Date Received: 3-27-19

Client: Vallejo-Seats
 Project: _____

Section 2: Samples received in a cooler? Yes, how many? _____ No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B

Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened 3-27-19 By (print) af (sign) af

Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package

Date: _____ How many _____ Signature, Initials, None

Were custody seals intact upon arrival? Yes No N/A

Section 3:

Important: Notify PM if temperature exceeds 6°C or arrive frozen.

Packing in cooler: (if other, describe) _____

Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

Samples received on ice directly from the field. Cooling process had begun

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Temperature measured using Thermometer ID: _____ or IR Gun # A B

Cooler Temp (°C): #1: 3.9, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?		/	
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm absent in VOA samples?			/
Was the client contacted concerning this sample delivery?		/	
If YES, who was called? _____ By _____ Date: _____			

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			/
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:

Explanations/Comments: _____

Date Logged in 3/27/19 By (print) AR (sign) [Signature]
 Date Labeled 3/28/19 By (print) RV (sign) [Signature]

Detections Summary for 308481

Results for any subcontracted analyses are not included in this summary.

Client : WSP
 Project : 31401588.001
 Location : Vallco Sears

Client Sample ID : PIPE-EAST Laboratory Sample ID : 308481-001

No Detections

Client Sample ID : PIPE-CAP Laboratory Sample ID : 308481-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	74		25	7.5	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550C

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/27/19
Units:	mg/Kg	Received:	03/27/19
Basis:	as received	Prepared:	04/02/19
Batch#:	269155	Analyzed:	04/03/19

Field ID: PIPE-EAST Lab ID: 308481-001
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	MDL
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

Field ID: PIPE-CAP Lab ID: 308481-002
 Type: SAMPLE Diln Fac: 5.000

Analyte	Result	RL	MDL
Motor Oil C24-C36	74	25	7.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type: BLANK Diln Fac: 1.000
 Lab ID: QC970423

Analyte	Result	RL	MDL
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	116	61-130

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC970424	Batch#:	269155
Matrix:	Soil	Prepared:	04/02/19
Units:	mg/Kg	Analyzed:	04/03/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	52.32	105	55-133

Surrogate	%REC	Limits
o-Terphenyl	123	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	269155
MSS Lab ID:	308596-004	Sampled:	04/01/19
Matrix:	Soil	Received:	04/01/19
Units:	mg/Kg	Prepared:	04/02/19
Basis:	as received	Analyzed:	04/03/19
Diln Fac:	1.000		

Type: MS Lab ID: QC970425

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2.641	49.96	50.86	97	56-125

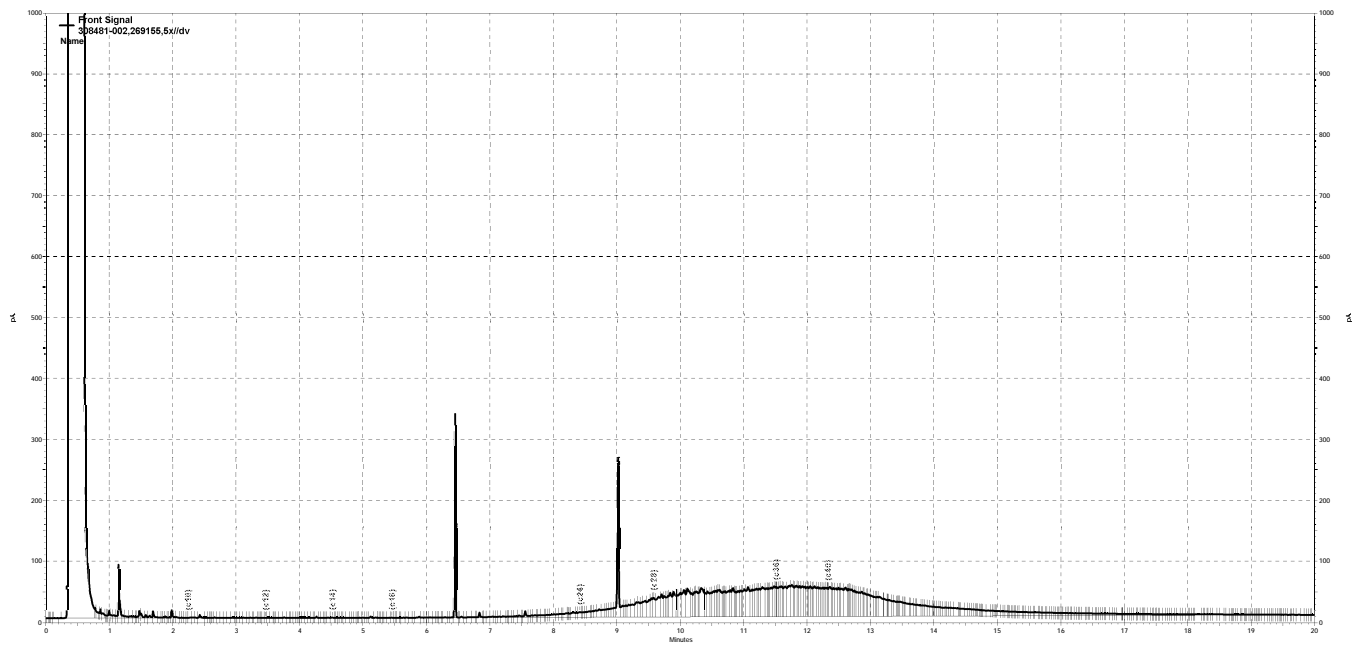
Surrogate	%REC	Limits
o-Terphenyl	113	61-130

Type: MSD Lab ID: QC970426

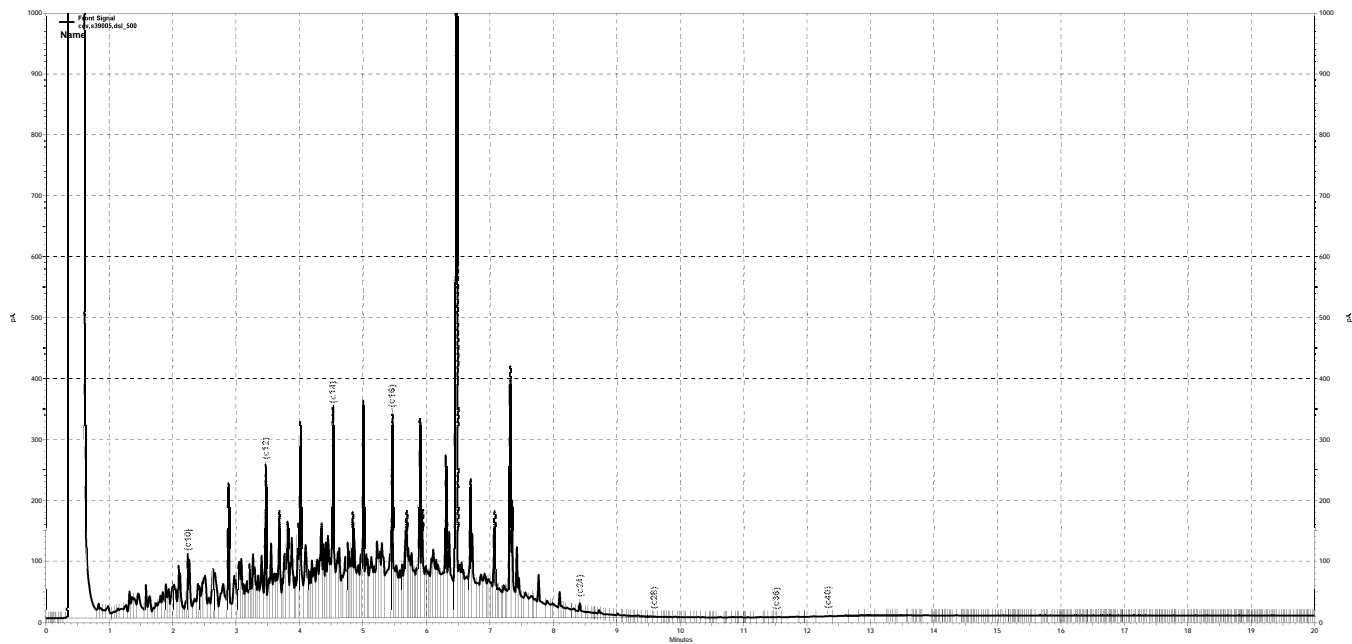
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.68	50.01	95	56-125	1	33

Surrogate	%REC	Limits
o-Terphenyl	110	61-130

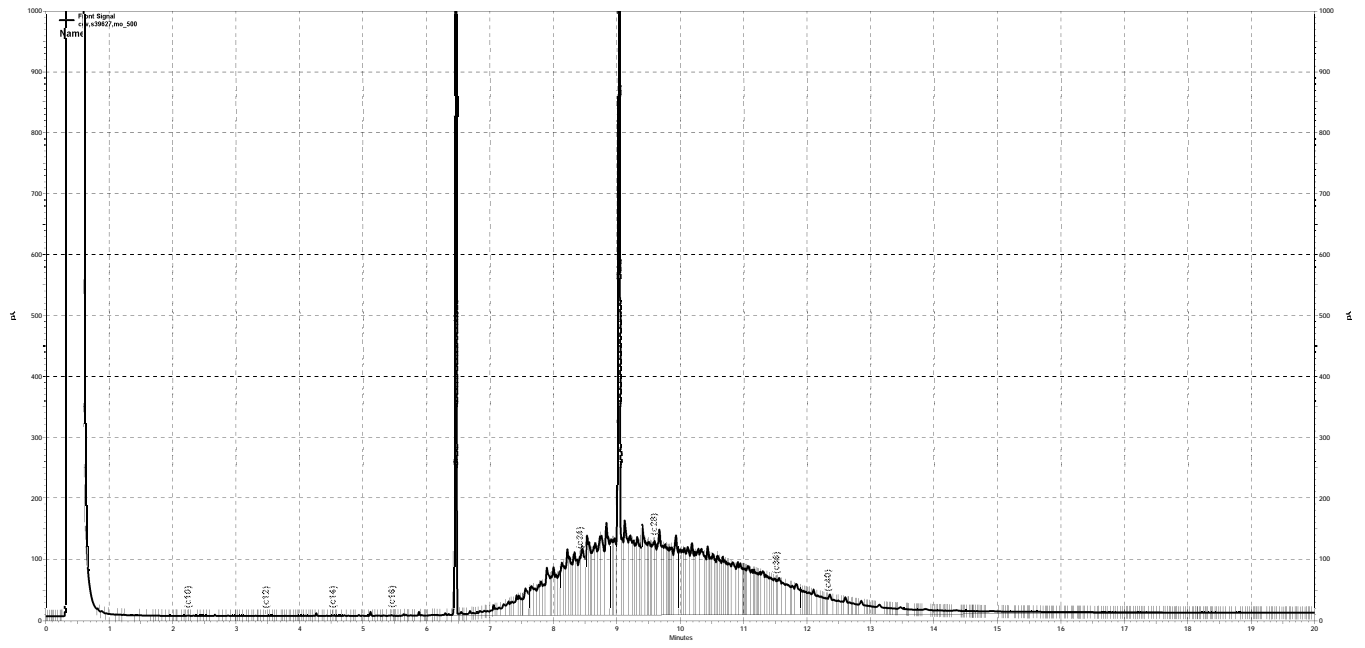
RPD= Relative Percent Difference



— G:\ezchrom\Projects\GC27\Data\2019\093a014.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\093a003.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\093a004.dat, Front Signal

APPENDIX

H SEARS AUTOMOTIVE CENTER CLOSURE PLAN





**FIRE DEPARTMENT
SANTA CLARA COUNTY**



14700 Winchester Blvd., Los Gatos, CA 95032-1818
(408) 378-4010 • (408) 378-9342 (fax) • www.sccfd.org

Location	10123 N. Wolfe Rd	Cupertino
Name of Business	VALLCO FASHION MALL - SEARS	

THE BUSINESS LISTED ABOVE, HAVING APPLIED PURSUANT TO THE PROVISIONS OF **Cupertino Municipal Code, Chapter 9.12** IS AUTHORIZED TO COMMENCE WITH THE FOLLOWING PROJECT:

Facility Closure **AG HazMat Closure**

SUBJECT TO COMPLIANCE WITH APPLICABLE CODES AND ORDINANCES AND THE FOLLOWING CONDITIONS:

NOTICE

This permit does not take the place of any license required by law and is not transferable. Any change in the use, or occupancy of premises shall require a new permit.

ANY VIOLATION OF THESE PROVISIONS MAY BE GROUNDS FOR REVOCATION OF PERMIT

PERMIT 19 1122	POST ON PREMISES	Fire Prevention Division PEREZ, LORENZO	Initials <i>L.P.</i>
-----------------------	-------------------------	--	-------------------------

Form #91

Mailing Address

WSP USA
2025 Gateway Place Suite 348
San Jose, CA 95110
Attention Richard Freudenberger

PERMIT ISSUED: 4/11/19

PERMIT EXPIRES: 10/11/19

FEE PAID: \$90.00

DATE PAID: 3/28/19

FIRE PREVENTION COPY CUT OFF ABOVE AND PLACE IN ADDRESS FILE

Location	10123 WOLFE RD	Cupertino	ISSUED: <u>11 April 2019</u>
Name of Business	VALLCO FASHION MALL -	Type of Activity	EXPIRES: <u>11 October 2019</u>
		AG HazMat Closure	FEE: <u>\$90.00</u>
PERMIT 19 1122	Issued By	PEREZ, LORENZO	PAID: <u>28 March 2019</u>

Conditions



**FIRE DEPARTMENT
SANTA CLARA COUNTY**



14700 Winchester Blvd., Los Gatos, CA 95032-1818
(408) 378-4010 • (408) 378-9342 (fax) • www.sccfd.org

PLAN REVIEW No. **19 1122**

BLDG PERMIT No.

PLAN REVIEW COMMENTS

This closure shall comply with the following:

1. 2016 California Fire Code (CFC), as adopted by the City of Cupertino,
2. Chapter 9.12 of the Cupertino Municipal Code (CMC)

The scope of this plan review includes the following:

- Former Sears Automotive Center Facility Closure-Please notify this office **immediately** if the above description is incorrect so that necessary changes to the plan review may be incorporated.

Inspections:

Comment #1: Visual inspections of the areas to verify that the facility and environment are free of hazardous materials as a result of previous use is required. Please call to schedule inspections to witness conditions and possible sampling of the elevator, piping, and hydraulic lifts including their respective areas. I must observe the sampling of the lead, oil-water separator, acid chamber, and tank potholing. Call 408-341-4443 to set times for facility appointments. [CFC 106.2]

Post Closure Report:

Comment #2: The post closure report containing the final disposition of hazardous materials and analytical results from sampling at Vallco Shopping Mall is required. [CFC 5001.6.3]

APPROVED subject to conditions noted above. Please call to arrange for an inspection at least 48 hours in advance. Applicant is also required to maintain copy of permit application and approval with conditions on site. [CFC 105.3.5]

The applicant and applicant's agents shall carry out the proposed activity in compliance with all laws and regulations applicable thereto, whether specified or not, and in complete accordance with approved plans and specifications. [CFC 105.3.6 and 105.4.4]

This approval shall not be construed to be an approval of a violation of the provisions of the California Fire Code or of other laws or regulations of the jurisdiction. Any inspections presuming to give authority to violate or waive provisions of such laws or regulations shall not be

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
CUP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Richard Freudenberger	04-11-2019	1 OF 1
SEC/FLOOR	AREA	LOAD	PROJECT DESCRIPTION				PROJECT TYPE OR SYSTEM			
			AG HazMat Closure				Facility Closure			
NAME OF PROJECT						LOCATION				
VALLCO FASHION MALL - SEARS						10123 N. Wolfe Rd Cupertino				
TABULAR FIRE FLOW						REDUCTION FOR FIRE SPRINKLERS	REQUIRED FIRE FLOW @ 20 PSI		BY	
						<input type="text"/>			Perez, Lorenzo	

Organized as the Santa Clara County Central Fire Protection District

Serving Santa Clara County and the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga



March 26, 2019

Mr. Lorenzo Perez
Hazardous Materials Specialist
Santa Clara County Fire Department
14700 Winchester Blvd.
Los Gatos, CA 95032

Subject: Closure Plan for Former Sears Automotive Center, Former Vallco Shopping Mall

Dear Mr. Perez,

This Closure Plan documents and presents a specific plan to address each of the items identified and discussed during your October 9, 2018 inspection of the former Sears Automotive Center located in the southwestern corner parking area of the former Vallco Shopping Mall (Site). It also includes items noted in your e-mail to Rick Freudenberger of WSP on March 12, 2019. The purpose of the inspection and the e-mail was to identify the items to be addressed in connection with final closure of the former service center. Present during the inspection were you, on behalf of the Santa Clara County Fire Department (SCCFD); and Rick Freudenberger; Mike Rohde of Sand Hill Property Company; and Paul Hansen of Sand Hill Construction Management.

PRE-DEMOLITION ACTIVITIES

Prior to demolition of the building, WSP will conduct the following activities to assure the proper identification and management of any potentially hazardous building materials during demolition activities:

- 1 **Elevator**: The elevator within the building has been decommissioned and the hydraulic oil removed for proper disposal. Documentation regarding this disposal will be provided to the SCCFD.
- 2 **Battery Storage Areas**: Wipe samples from the floors and lower portions of the walls in the battery storage areas in the basement and first floor will be collected and analyzed for lead. Locations of wipe samples are shown in the attached photo log. A total of approximately 52 wipe samples for analysis of lead are proposed. Results will be reported to the SCCFD and include comparisons to the applicable lead wipe standard of two hundred and fifty micrograms per square foot ($250\mu\text{g}/\text{ft}^2$) for interior horizontal surfaces;. The results of the Report will provide the demolition contractor with the necessary information to ensure that any lead containing materials have been properly identified and will be safely removed and properly disposed of during demolition activities.
- 3 **Polychlorinated Biphenyls (PCBs)**: Samples will be taken of any caulk/building materials suspected of containing PCBs. Locations of material samples will be determined based on field observations. Results will be reported to the SCCFD and include comparisons to applicable PCB standards.
- 4 **Piping**: Piping that formerly distributed grease, oil, and other petroleum fluids remains along interior building walls, ceilings and the basement. In some areas, concrete floor and walls show staining from residual petroleum liquids, most notably in the basement. Oil stains on the floor were also observed in the area of two former air compressors. Major stained areas will be cleaned prior to demolition and the



pipings and oil stained concrete will be segregated and disposed of properly. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.

- 5 Hydraulic Lifts: There are a number of former hydraulic lifts within the service bay. The lift cylinders have been removed and the steel casings filled with concrete. The lifts in the northern portion of the building do not extend into the basement and hydraulic fluid piping and reservoirs may remain in these lifts. The steel casings for all of the former hydraulic lifts will be removed and the area around/within the casings will be inspected to ensure that any residual piping/reservoirs are cleaned/removed and any residual oil is removed for proper disposal. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.
- 6 Alleged Underground Storage Tank (UST) Location: Two exploratory trenches that are approximately 10 feet long will be excavated to about five feet below ground surface in the area of the alleged UST; the trenches will be perpendicular to each other to create an 'X' with the center of the 'X' located at a concrete square located west of the former Sears automotive building (Figure 1). This concrete square location has been presumed to be a possible access point for an alleged UST that would have been located east of and between two former oil USTs removed in 1994.

For your information, to address the possibility that any USTs remain onsite, WSP performed a geophysical GPR survey on January 25, 2019 around the former Sears Automotive Center. The survey consisted of a metal sweep performed with a Fisher TW-6 MiScope to determine the presence of any metal pipes leading to or from the suspected area of the former tanks removed in 1994 and a ground penetrating radar (GPR) scan performed with a MALA easy locator to determine if there were any indications of any underground storage tank present beneath the ground surface. The survey extended across the area proposed above for the exploratory trenches and showed no evidence of any existing underground tanks there or on the west or east sides of the Sears automotive building. The geophysical survey report is attached.

DURING DEMOLITION ACTIVITIES

WSP will conduct the following additional activities during demolition:

- 1 Stained Equipment: Any equipment/tanks/surfaces stained with petroleum products (not identified above) will be segregated and disposed of properly. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.
- 2 Oil-Water Separator and Acid Neutralization Chamber: A below-ground oil/water separator exists outside the northeast corner of the building and a former acid neutralization chamber (previously emptied and closed by and filling with gravel) is located near the southeastern corner of the building (Figure 1). The oil/water separator and the acid neutralization chamber will be cleaned, as necessary, and the units removed for proper disposal. Following removal of the oil-water separator and acid neutralization chamber and any associated piping, soil samples will be collected from beneath the units and along the underground piping paths to determine if there were any significant releases. Preliminary proposed sample locations are shown on Figure 1 (attached). The soil samples will be analyzed for the following constituents per Santa Clara County guidelines :
 - TPHG and TPHD by EPA method 8015 (fuel scan)
 - Hexane Extractable Materials by EPA 9071B



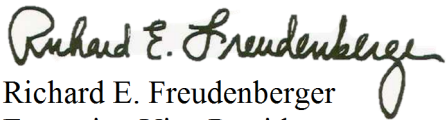
- Volatile Organic Compounds, w/chlorinated hydrocarbons (full scan) by EPA method 8260B
 - PCB's by EPA method 8082A
 - Cd, Cr, Pb, Ni, and Zn by EPA 6010B
 - Semi Volatile Organic Compounds (SVOCs) including Polycyclic Aromatic Hydrocarbons (PAHs) by EPA method 8270
- 3 Unknown UST : If any previously undetected UST and/or associated piping is discovered during the exploratory trenches proposed above, appropriate measures will be taken and regulatory permits will be obtained to arrange for removal and appropriate sampling of surrounding soils (beneath any piping and the UST) to obtain tank closure.

Documentation for the disposal of any hazardous materials removed during demolition activities will be provided to the SCCFD.

Following your review and approval of this Closure Plan, we will provide information concerning scheduling of the noted activities.

Please don't hesitate to contact us if you have any questions, comments, or require additional information.

Kind regards,



Richard E. Freudenberger
Executive Vice President

Encl.

cc: Mike Rohde, Sand Hill Property Company
Paul Hansen, Sand Hill Construction Management



PHOTOGRAPHIC LOG

Sand Hill Properties	Former Valico Mall Cupertino, California	31401588.001
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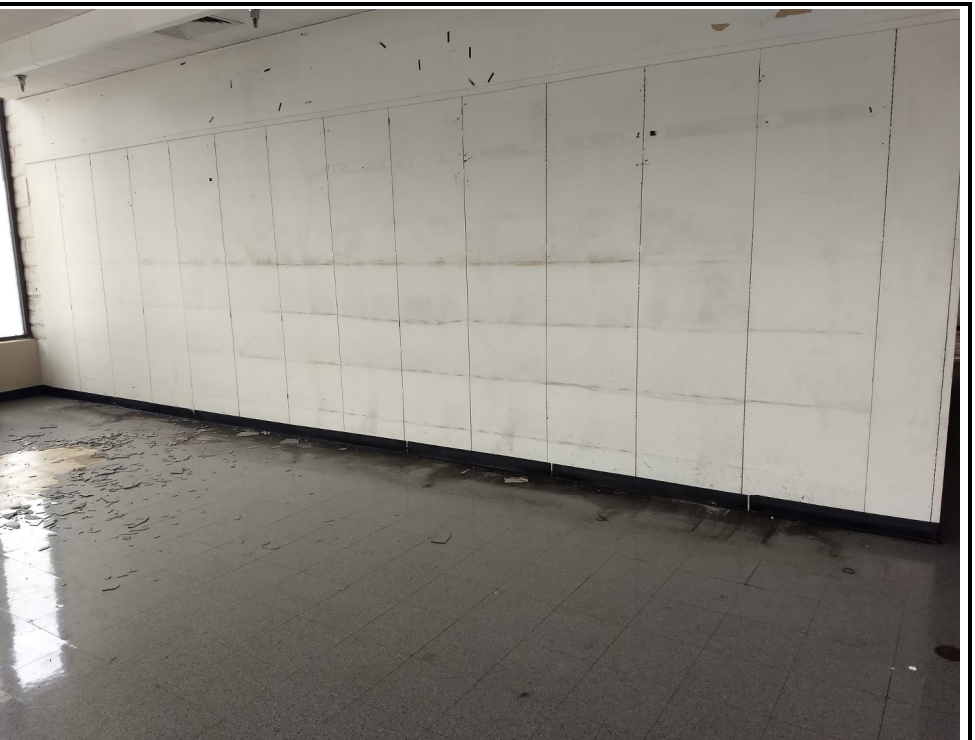
Photo No.	Date
1	March 25, 2019

Northeast corner of former Sears Automotive Building, first floor.
Three wipe samples will be collected along the floor and three along the wall.



Photo No.	Date
2	March 25, 2019

South portion of former Sears Automotive Building, first floor.
Former battery storage area. Three wipe samples will be collected along the floor and three along the wall.






PHOTOGRAPHIC LOG

Sand Hill Properties	Former Vallico Mall Cupertino, California	31401588.001
-----------------------------	--	---------------------

Photo No.	Date	
3	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall.</p>		

Photo No.	Date	
4	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected along the floor, adjacent to each side of the side walls and one in the corner. Three wipe samples will be taken on the wall above where each floor sample is collected.</p>		

PHOTOGRAPHIC LOG

Sand Hill Properties	Former Valico Mall Cupertino, California	31401588.001
-----------------------------	---	---------------------

Photo No.	Date
5	March 25, 2019

Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall, above the areas of staining.





PHOTOGRAPHIC LOG

Sand Hill Properties	Former Vallico Mall Cupertino, California	31401588.001
-----------------------------	--	---------------------






Photo No.	Date	
6	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall, above the areas of staining.</p>		

Photo No.	Date	
7	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall.</p>		

PHOTOGRAPHIC LOG

<p>Sand Hill Properties</p>	<p>Former Valico Mall Cupertino, California</p>	<p>31401588.001</p>
------------------------------------	--	----------------------------

<p>Photo No.</p>	<p>Date</p>	
<p>8</p>	<p>March 25, 2019</p>	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall, above the areas of staining.</p>		

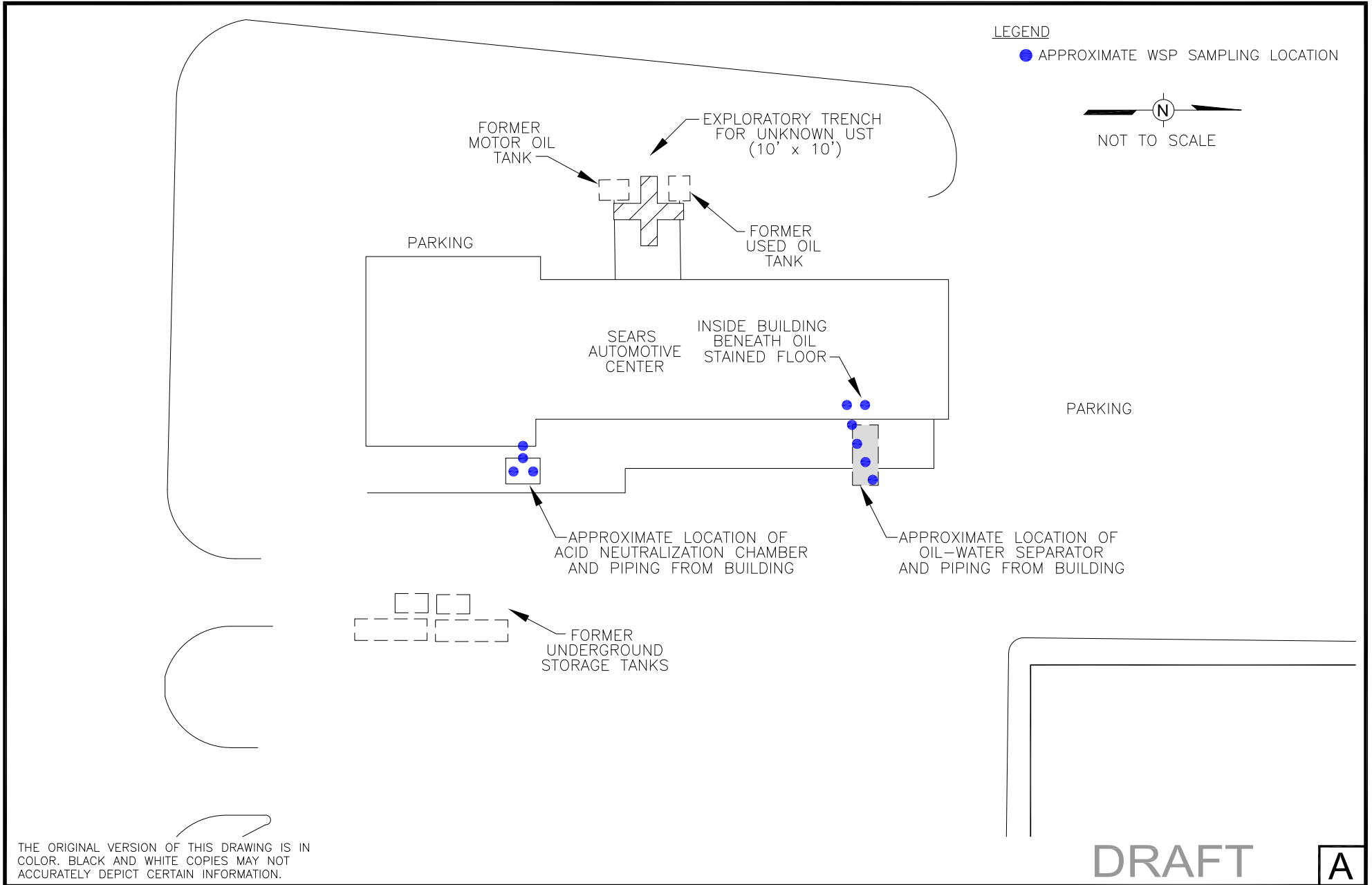
<p>Photo No.</p>	<p>Date</p>	
<p>9</p>	<p>March 25, 2019</p>	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall, above the areas of staining.</p>		



PHOTOGRAPHIC LOG

Sand Hill Properties	Former Valico Mall Cupertino, California	31401588.001
-----------------------------	---	---------------------


Photo No.	Date	
10	March 25, 2019	
Basement level of the former Sears Automotive Center. Two wipe samples to be collected on the floor and two along the walls.		



THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

DRAFT

A

 <p>WSP USA Inc. 2025 GATEWAY PLACE SUITE 348 SAN JOSE, CA 95110 TEL: +1 408.453.6100</p>	<p>Figure 1</p>	<p>VALLCO FASHION MALL 10123 NORTH WOLFE ROAD CUPERTINO, CALIFORNIA PREPARED FOR SAND HILL PROPERTY COMPANY PALO ALTO, CALIFORNIA</p>	<p>Drawn By: LS 3/21/2019</p>
	<p>APPROXIMATE SAMPLING LOCATIONS – SEARS AUTOMOTIVE CENTER</p>		<p>Checked:</p> <p>Approved:</p> <p>DWG Name: 314MN1588-009</p>

California Utility Locators
 PO Box 67066
 Scotts Valley, CA 95067
 831-239-6057

Job Invoice

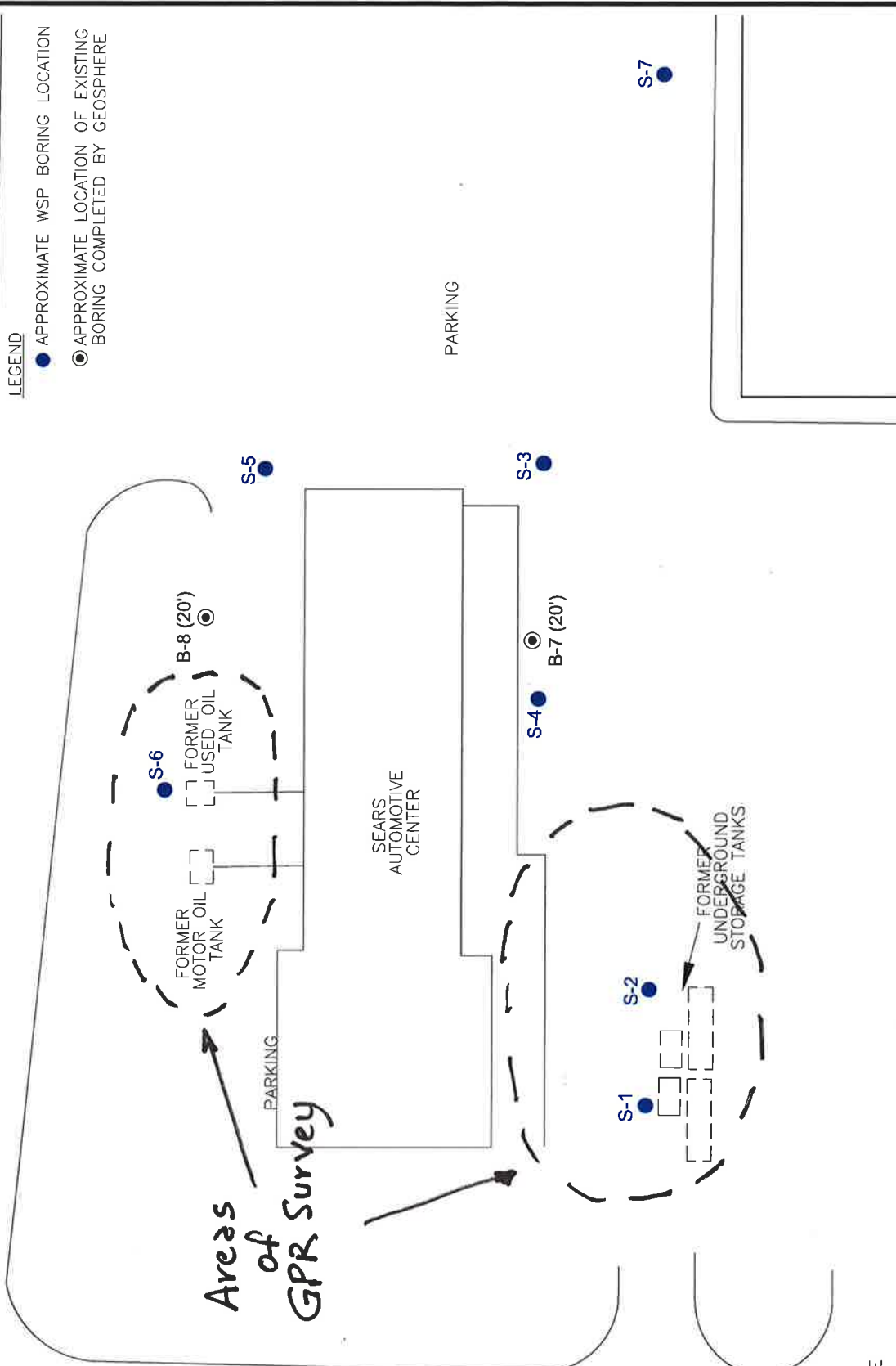
SOLD TO		DATE ORDERED	ORDER TAKEN BY
Sand Hill Property Company		1-23-2019	am
965 Page Mill Rd.		PHONE NO.	CUSTOMER ORDER #
Palo Alto, CA 94304			496
Rick Freudenberger-408-878-0657		JOB LOCATION	STARTING DATE
		Wolfe & Stevens Creek Blvd San Jose	1-28-2019
		JOB PHONE	TERMS
			8:00-10:00

QTY.	MATERIAL	UNIT	AMOUNT	DESCRIPTION OF WORK
	- Scanned areas indicated on map provided by client for suspected UST's in area			Scan for UST's w/GPR
	- Metal Sweep performed with Fisher TW-6 M-Scope and marked results with white paint. Marked out metal pipes found in area. No indication of UST's in areas scanned.			
	- GPR Scan performed with MALA Easy Locator GPR. No indication of UST's in areas scanned.			
	- Results gone over onsite.			
				MISCELLANEOUS CHARGES
				TOTAL MISCELLANEOUS
		LABOR	HRS.	RATE
		AMOUNT		
		Locating w/GPR	2	165 ⁰⁰
				330 00
Tech on site:				
Nicholas Buller-831-226-9052				
TOTAL MATERIALS		TOTAL LABOR		330 00

WORK ORDERED	TOTAL LABOR	330 00
DATE ORDERED	TOTAL MATERIALS	
DATE COMPLETED	TOTAL MISCELLANEOUS	
CUSTOMER APPROVAL SIGNATURE _____	SUBTOTAL	
AUTHORIZED SIGNATURE <u>Ni Buller</u>	TAX	
	GRAND TOTAL	330 00

LEGEND

- APPROXIMATE WSP BORING LOCATION
- ⊙ APPROXIMATE LOCATION OF EXISTING BORING COMPLETED BY GEOSPHERE



NOT TO SCALE

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

DRAFT **A**

Drawn By: LS 12/3/2018
 Checked:
 Approved:
 DWG Name: 314MN1588-002

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 SAND HILL PROPERTY COMPANY
 PALO ALTO, CALIFORNIA

Figure 2
 APPROXIMATE BORING LOCATION -
 SEARS AUTOMOTIVE CENTER

WSP USA Inc.
 2025 GATEWAY PLACE
 SUITE 348
 SAN JOSE, CA 95110
 TEL: +1 408.453.6100





ENTHALPY

ANALYTICAL



Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 308481
ANALYTICAL REPORT

WSP
2025 Gateway Place
San Jose, CA 95110

Project : 31401588.001
Location : Vallco Sears
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
PIPE-EAST	308481-001
PIPE-CAP	308481-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Patrick McCarthy
Project Manager
patrick.mccarthy@enthalpy.com
(510) 204-2236 ext 13115

Date: 04/04/2019

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 308481
Client: WSP
Project: 31401588.001
Location: Vallco Sears
Request Date: 03/27/19
Samples Received: 03/27/19

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 03/27/19. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

PIPE-CAP (lab # 308481-002) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 308481
 Date Received: 3-27-19

Client: Vallejo-Seats
 Project: _____

Section 2: Samples received in a cooler? Yes, how many? _____ No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened 3-27-19 By (print) af (sign) af
 Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____ or IR Gun # A B
 Cooler Temp (°C): #1: 3.9, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?		/	
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?			/
Are bubbles > 6mm absent in VOA samples?			/
Was the client contacted concerning this sample delivery?		/	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			/
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged in 3/27/19 By (print) AR (sign) [Signature]
 Date Labeled 3/28/19 By (print) RV (sign) [Signature]

Detections Summary for 308481

Results for any subcontracted analyses are not included in this summary.

Client : WSP
 Project : 31401588.001
 Location : Vallco Sears

Client Sample ID : PIPE-EAST Laboratory Sample ID : 308481-001

No Detections

Client Sample ID : PIPE-CAP Laboratory Sample ID : 308481-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	74		25	7.5	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550C

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/27/19
Units:	mg/Kg	Received:	03/27/19
Basis:	as received	Prepared:	04/02/19
Batch#:	269155	Analyzed:	04/03/19

Field ID: PIPE-EAST Lab ID: 308481-001
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	MDL
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

Field ID: PIPE-CAP Lab ID: 308481-002
 Type: SAMPLE Diln Fac: 5.000

Analyte	Result	RL	MDL
Motor Oil C24-C36	74	25	7.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type: BLANK Diln Fac: 1.000
 Lab ID: QC970423

Analyte	Result	RL	MDL
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	116	61-130

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC970424	Batch#:	269155
Matrix:	Soil	Prepared:	04/02/19
Units:	mg/Kg	Analyzed:	04/03/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	52.32	105	55-133

Surrogate	%REC	Limits
o-Terphenyl	123	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	308481	Location:	Vallco Sears
Client:	WSP	Prep:	EPA 3550C
Project#:	31401588.001	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	269155
MSS Lab ID:	308596-004	Sampled:	04/01/19
Matrix:	Soil	Received:	04/01/19
Units:	mg/Kg	Prepared:	04/02/19
Basis:	as received	Analyzed:	04/03/19
Diln Fac:	1.000		

Type: MS Lab ID: QC970425

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2.641	49.96	50.86	97	56-125

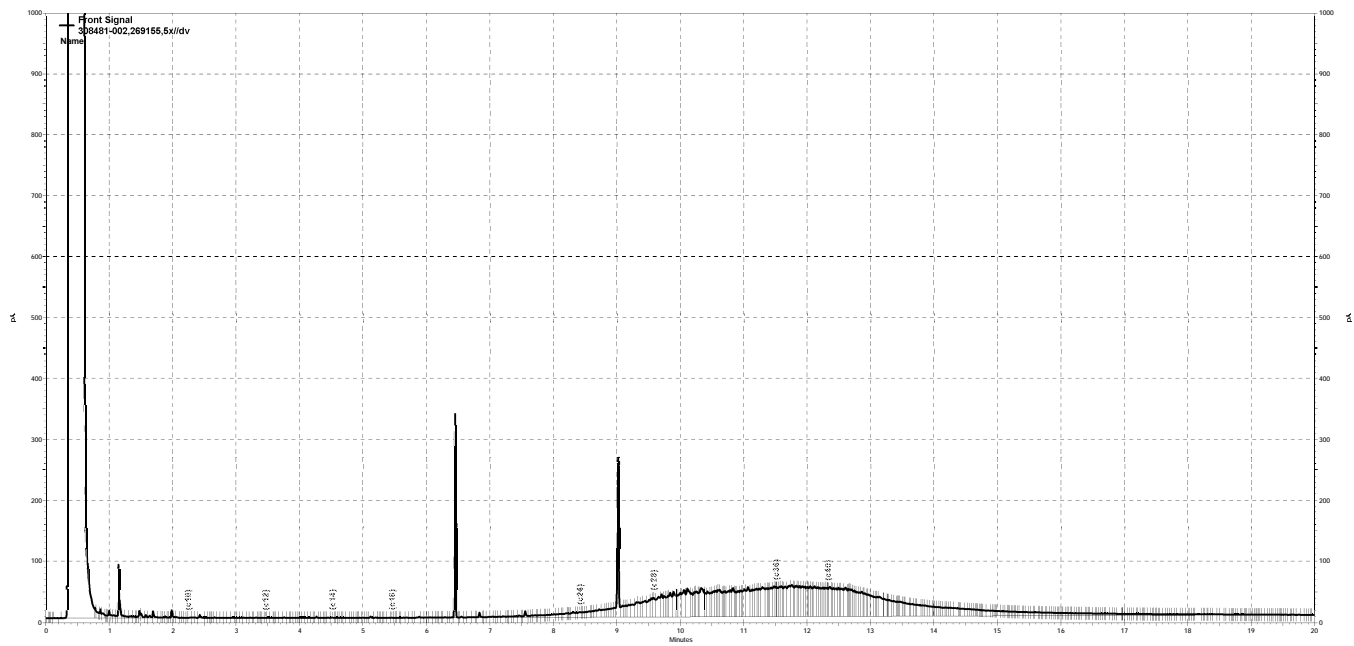
Surrogate	%REC	Limits
o-Terphenyl	113	61-130

Type: MSD Lab ID: QC970426

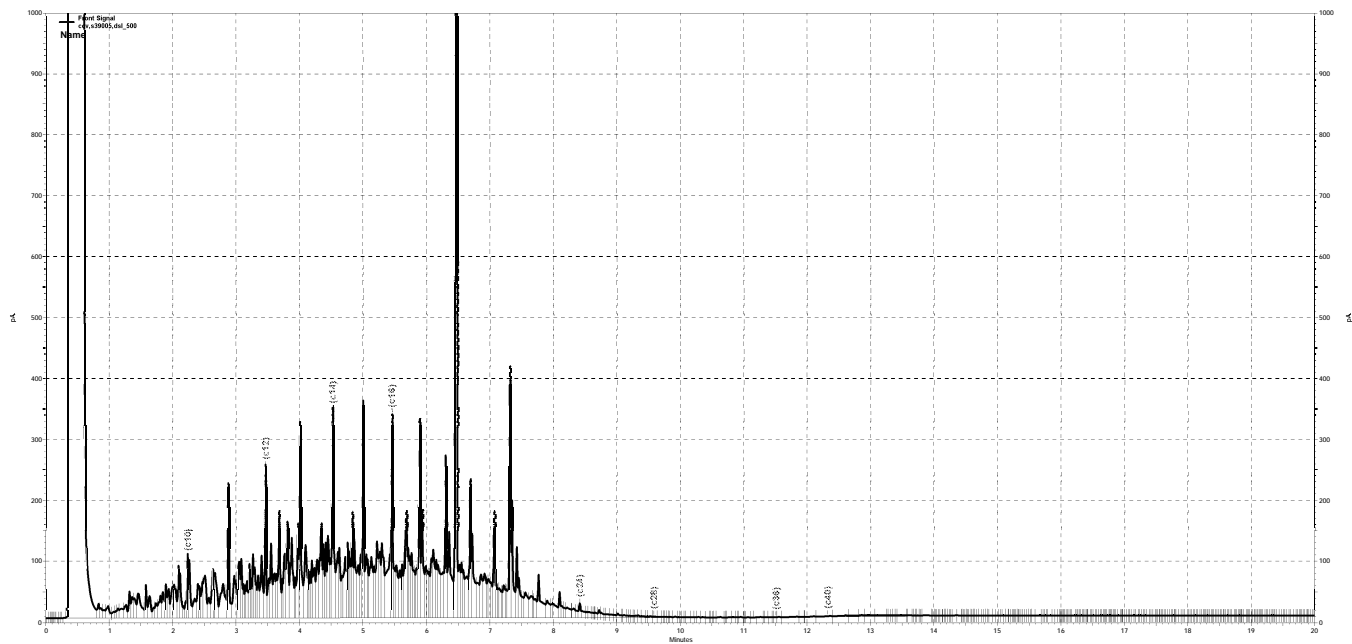
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.68	50.01	95	56-125	1	33

Surrogate	%REC	Limits
o-Terphenyl	110	61-130

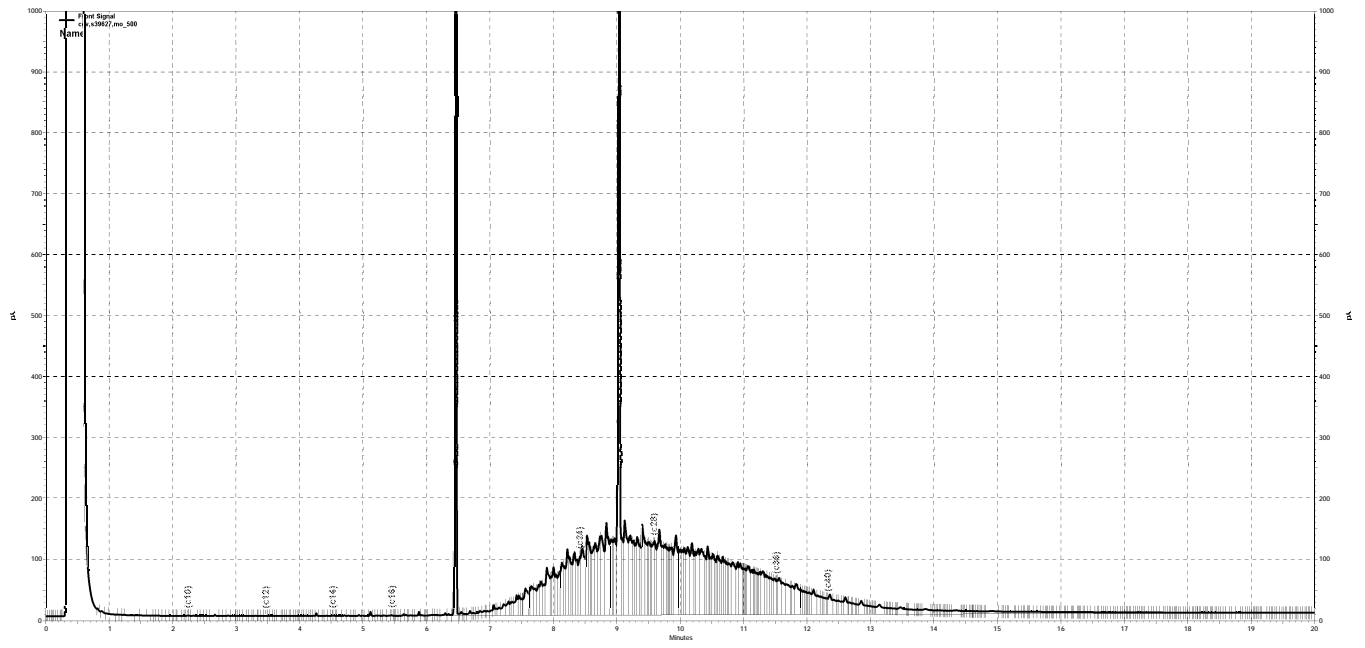
RPD= Relative Percent Difference



— G:\ezchrom\Projects\GC27\Data\2019\093a014.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\093a003.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\093a004.dat, Front Signal

APPENDIX



CLOSURE LETTER REPORT – WEST SIDE OF MALL





FIRE DEPARTMENT SANTA CLARA COUNTY



14700 Winchester Blvd., Los Gatos, CA 95032-1818
(408) 378-4010 • (408) 378-9342 (fax) • www.sccfd.org

12 December, 2018

Vallco Shopping Mall
Mr. Mike Rohde
10123 North Wolfe Road, Suite 1095
Cupertino, CA 95014

Re: Facility Closure and Post Closure Report
Demolition Area A at 10123 North Wolfe Road– Facility Closure

Dear Mr. Rohde:

Thank you for the Hazardous Materials Facility Closure and Post Closure Reports prepared by WSP USA, dated December 11, 2018. The reports include hazardous material activities performed under Permit 18-4463. The reports include disposal of hazardous materials and sampling results at Demolition Area A at 10123 North Wolfe Road. Based on the Facility Post Closure Report, it appears that no further action is required and that there is no threat to public health or the environment. Therefore, Fire Department closure requirements have been met and the Post Closure Report is approved as submitted. If you have any questions please feel free to contact me at (408) 378-4010.

Sincerely,

Lorenzo Perez
Hazardous Materials Specialist

Mid Pacific District
District Management



06/20/19

KONE Inc.
2121 N. California Blvd
Walnut Creek, CA 94596
Ph: 510-719-6717
www.us.kone.com

Subject: Vallco Shopping Mall, Cupertino, CA

Dear Mr. Kumar,

As you are aware, KONE was recently asked to drain the hydraulic fluid from the elevators at the above subject location. The product installed at that location uses steel piping that is sealed from end to end through valves and proper fittings. There would be no ability for hydraulic fluid to leak from that piping. Further, the waterproofing in the pits would act as containment if for some reason there was any sort fluid to enter the said area.

Within KONE we have not used hydraulic oils that contain VOC or PCB, so this should not be of concern.

Please feel free to reach out to me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Harmeyer", written in a cursive style.

Joe Harmeyer
District Vice President
KONE Inc



WSP USA
2025 Gateway Place
Suite 348
San Jose, CA 95110

Tel.: +1 408 453-6100
Fax: +1 408 453-0496
wsp.com

December 11, 2018

Mr. Lorenzo Perez
Hazardous Materials Specialist
Santa Clara County Fire Department
14700 Winchester Boulevard
Los Gatos, CA 95032

Subject: Vallco Shopping Mall, 10123 West Wolfe Road, Cupertino, CA: West Side Closure Plan

Dear Mr. Perez:

Per your inspections at the referenced site and interactions with Mr. Mike Rohde, General Manager of the Vallco Shopping Mall, WSP presents the following details regarding the hazardous materials closure plan for the West Side of the Vallco Shopping Mall.

- 1. Removal of Drums in Storage Area of West Garage**
Attached is a letter documenting the removal of the seven (7) drums from the storage area within the west garage (identified during your site visit on October 5, 2018).
- 2. AMC Movie Theatres Inverter System**
The batteries within the inverter system were removed the week of November 12 and the bill of lading for disposal/recycling is included as an attachment..
- 3. Elevators**
Kone has decommissioned all the elevators. The removal of the hydraulic oil was completed on December 7, 2018 and the paperwork for its disposition is attached.
- 4. Grease Interceptors**
All grease interceptors were cleaned and contents removed by December 5, 2018.
- 5. Mall Generator and Embedded Diesel Fuel Tank (Stairwell #3 Generator Room)**
The generator was operated so as to empty the diesel fuel tank and the generator/tank skid was removed by a third party during the week of December 3, 2018. Documentation concerning the removal of the generator/tank is included as an attachment.
- 6. Miscellaneous Paint and Other Waste**
During your site inspection of December 4, 2018, various paint materials and other waste were identified. These wastes were removed on December 7, 2018 and the paperwork for the disposition of these materials is attached.

Additionally, for your information, we are attaching the Asbestos and Lead (Pb) Survey and Evaluation Report dated October 26, 2018 and the Limited Lead (Pb) Testing Report dated October 31, 2018, both



prepared by ProTech. The results of the Report provide the demolition contractor with the necessary information to ensure that these materials have been properly identified and will be safely removed and properly disposed of during demolition activities.

We are also providing for your additional information the attached report by Trillo Mechanical regarding the refrigerant recovery at the Mall.

Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely Yours,

A handwritten signature in black ink that reads "Richard E. Freudenberger". The signature is written in a cursive style with a large, looped 'R' and 'F'.

Richard E. Freudenberger
Executive Vice President

Attachment

cc: Mike Rohde, Vallco Shopping Mall
Paul Hansen, Sand Hill Construction Management

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CAL 000405154	2. Page 1 of 1	3. Emergency Response Phone 408-363-3678	4. Manifest Tracking Number 019594840 JJK		
5. Generator's Name and Mailing Address VALLCO SHOPPING MALL 10123 N WOLFE RD., STE 1095 CUPERTINO, CA 95014			Generator's Site Address (if different than mailing address)				
Generator's Phone: 408-627-3205			U.S. EPA ID Number				
6. Transporter 1 Company Name ALL CLEAN HAZARDOUS WASTE REMOVAL INC.			U.S. EPA ID Number CAD982492308				
7. Transporter 2 Company Name TEMARRY RECYCLING, INC.			U.S. EPA ID Number CARD00194217				
8. Designated Facility Name and Site Address RECICLADORA TEMARRY DE MEXICO CARRETERA FEDERAL NO. 2 MEX SAN PABLO, TECATE BC			U.S. EPA ID Number MXG130619001				
Facility's Phone: 619-270-9453							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	1. NON RCRA HAZARDOUS WASTE LIQUIDS, (OIL.)	17	DM	770	G	221	
	2.						
	3.						
	4.						
14. Special Handling Instructions and Additional Information 1) R18-20869 / 1.1.11 (Non RCRA Liquid - Oil) R18-21876 17x55DL							
			Primary Exporter: Temarry Recycling inc.		POW13566		
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name				Signature	Month	Day	Year
					12	3	18
16. International Shipments <input type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name				Signature	Month	Day	Year
					12	3	18
Transporter 2 Printed/Typed Name				Signature	Month	Day	Year
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number: _____							
18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
Facility's Phone: _____							
18c. Signature of Alternate Facility (or Generator)				Month	Day	Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.	2.	3.	4.				
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name				Signature	Month	Day	Year

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY



SERVICE AGREEMENT

21 Great Oaks Boulevard
 San Jose, CA 95119
 Phone: (408) 363-3678
 Fax: (408) 363-3774
 Contractor's License No. 992495

Site Information

Customer: Vallec
 Site Address: 10123 N Wolf rd
 City, State, and Zip: Cupertino CA
 Contact: _____
 Phone Number: _____

Service Date: _____
 Project Number: _____

Scope of Work

PIU 0195448425516

Labor

Ju

Project Notes

Customer requests All Clean to submit copy of manifest(s) to DTSC.

Supplies/Equipment

Qty	Supplies	Qty	Poly OT Drums	Qty	Metal OT Drums	Qty	Fiber Drum/Boxes	Qty	Equipment
<input type="checkbox"/>	PPE - Level D	<input type="checkbox"/>	UN1H2 - 55 Gal	<input type="checkbox"/>	UN1A2 - 55 Gal	<input type="checkbox"/>	UN1G - 55 Gal	<input type="checkbox"/>	HEPA Vacuum
<input type="checkbox"/>	PPE - Level C	<input type="checkbox"/>	UN1H2 - 30 Gal	<input type="checkbox"/>	UN1A2 - 30 Gal	<input type="checkbox"/>	55 gal Labpacker	<input type="checkbox"/>	Pump
<input type="checkbox"/>	Nitrile Gloves, pair	<input type="checkbox"/>	UN1H2 - 20 Gal	<input type="checkbox"/>	UN1A2 - 20 Gal	<input type="checkbox"/>	30 gal Labpacker	<input type="checkbox"/>	Wet/Dry Vacuum
<input type="checkbox"/>	Box, Rags	<input type="checkbox"/>	UN1H2 - 15 Gal	<input type="checkbox"/>	UN1A2 - 5 Gal	<input type="checkbox"/>	20 gal Labpacker	<input type="checkbox"/>	Pressure Washer
<input type="checkbox"/>	Drum liner	<input type="checkbox"/>	UN1H2 - 5 Gal	<input type="checkbox"/>	UN1A2 - Overpack	<input type="checkbox"/>	10 gal Labpacker	<input type="checkbox"/>	Sawzall
<input type="checkbox"/>	Simple Green, gal	<input type="checkbox"/>	UN1H2 - 2.5 Gal	<input type="checkbox"/>		<input type="checkbox"/>	5 gal Labpacker	<input type="checkbox"/>	Floor Buffer
<input type="checkbox"/>	Bleach, gal	<input type="checkbox"/>	UN1H2 - Overpack	<input type="checkbox"/>		<input type="checkbox"/>	8' Bulb drum	<input type="checkbox"/>	Small Tools
<input type="checkbox"/>	IPA, gal	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	4' Bulb drum	<input type="checkbox"/>	Air Compressor
<input type="checkbox"/>	Vermiculite, bag	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	8' Bulb box	<input type="checkbox"/>	Generator
<input type="checkbox"/>	Preprinted Labels	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	4' Bulb box	<input type="checkbox"/>	
<input type="checkbox"/>	Respirator Cartridge, Single	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	4G PIH/Mercury	<input type="checkbox"/>	
<input type="checkbox"/>	Respirator Cartridge, Combo	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	Cubic yard box	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	

By signing below as an authorized representative, you acknowledge the obligations presented in this agreement.

Juan Guerrero
 Signature

Juan Guerrero
 Print Name, Title

12-3-2008
 Date



1766 Rogers Avenue
San Jose, CA 95112

October 5, 2018

Mike Rohde
Vallco Shopping Mall
10123 N. Wolfe Road, Suite 1095
Cupertino, CA 95014

Re: 7 - 55 Gallon Drums at 10123 N. Wolfe Road, Cupertino, CA 94015

Dear Mike,

Per our conversation on 10/5/18, seven drums will be picked up from the storage facility at 10123 N. Wolfe Road and taken to our yard at 1766 Rogers Ave, San Jose, CA 95112. All seven will no longer be onsite by 5PM on 10/5/18.

Please contact me should you have any questions, comments or concerns regarding this action item, or any other matter, by email at rvalentine@petalon.com, or mobile phone: (408) 595-1006.

Sincerely,

A handwritten signature in black ink that reads "Ryan Valentine". The signature is written in a cursive, flowing style.

Ryan Valentine, Senior Account Manager
Petalon Landscape Management, Inc.

Trillo Mechanical

YOUR EPA REFRIGERANT RECOVERY REPORT

To Meet Your Requirements Under Section 608 of the Clean Air Act



92

Units/Circuits Recovered

0

Cylinders Recovered



REFRIGERANT RECOVERED (LBS.)

R-22 FOR RECLAMATION	2511
R-502 FOR RECLAMATION	48
R-404A FOR RECLAMATION	39
R-410A FOR RECLAMATION	25

Total Recovered: 2623

RECLAIM & RETURN SERVICE

Total RRS: 0

REFRIGERANT SALES

Total Refrigerant: 0

Thank You For Your Business!



RAPID RECOVERY®
RECOVER • RECLAIM • RETURN®



RAPID RECOVERY[®]
RECOVER • RECLAIM • RETURN[®]

JOBSITE REPORT
Trillo Mechanical





RECOVERY DETAILS

11-09-2018
178457, 160081, 160082, 160083

Ref Order #:
Jobsite Address
10123 North Wolfe Rd Cupertino, CA 95014

Description	Make	Model#	Serial#	RapRec ID#	Recovered Refrigerant	Purity	Quantity
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	TCD150C300 CA	R27103113D	0985162			2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHCC4040	J84E71193	0983292			2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHCC5040B	J84E71187	0983291			2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHCC5040B 5	J84E71189	0983290			2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHGCC4040	J84E71191	0983289			2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHCC4040B	J84E71194	0983288			2
REFRIGERANT RECOVERY SERVICE	TRANE - TRIPLE	SFHB2504HG	J84E81201	0983287			3
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAHCC5040B 53C	J84E71188	0983286			2
REFRIGERANT RECOVERY SERVICE	GLASTENDER	PJB4-R1-GNH	404122953N	0985181			1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	RS47C2-1AA-959	ORD10378B	0985180			1
REFRIGERANT RECOVERY SERVICE	COPELAND	C7AB-0200-TAC-001	PLACARD MISSING	0985179			1
REFRIGERANT RECOVERY SERVICE	COPELAND	CRD1-0200-PFV-270	00112210B	0985178			1
REFRIGERANT RECOVERY SERVICE	COPELAND	E7AB-0200-TAC-001	PLACARD MISSING	0985177			1
REFRIGERANT RECOVERY SERVICE	COPELAND	E7AB-0200-TAC-001	PLACARD MISSING	0985176			1
REFRIGERANT RECOVERY SERVICE	TECUMSEH	AK166ET-038-J3	AKA9462EXD	0985175			1
REFRIGERANT RECOVERY SERVICE	TECUMSEH - FLAT	AK176ET-038-P2	AKA9455EXD	0985174			1



REFRIGERANT RECOVERY SERVICE	TECUMSEH - FLAT	PLACARD MISSING	PLACARD MISSING	0985173	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	ARE59C3-CAA-103	12A27071E	0985172	1
REFRIGERANT RECOVERY SERVICE	TECUMSEH	AKA942BEXA	PLACARD MISSING	0985171	1
REFRIGERANT RECOVERY SERVICE	HOSHIZAKI	UPC12-F	J0339BJ	0985170	1
REFRIGERANT RECOVERY SERVICE	HASHIZAKI	UPC12-F	J03397J	0985169	1
REFRIGERANT RECOVERY SERVICE	HOSHIZAKI - FLAT	S-0454	PLACARD MISSING	0985168	1
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	YHC092A3EL A0JD0	22710052L	0985167	2
REFRIGERANT RECOVERY SERVICE	TRANE	TCD090C300 BC	R24101060D	0985166	1
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	YHC120A3EL A05D0	232101700L	0985165	2
REFRIGERANT RECOVERY SERVICE	TRANE	YHC060A3EL A01D0	Z3410022BL	0985164	1
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	YHC092A3EL A0HDO	22210049BL	0985163	2
REFRIGERANT RECOVERY SERVICE	YORK - DUAL	XP102C0DN4 AAA5A	N1A2498727	0985182	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AWD041-FQ611EE	0208400688	0985183	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48HJD017-6B1AA	4907036660	0985184	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48HJD017-6B1AA	4807035934	0985185	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJD020LQ 611HH	0508063481	0985186	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJD020LQ 611HH	0508U03497	0985187	2
REFRIGERANT RECOVERY SERVICE	CARRIER	48DJD007610	1591G72349	0985188	1
REFRIGERANT RECOVERY SERVICE	CARRIER	48DJD007610	1591G72389	0985189	1
REFRIGERANT RECOVERY SERVICE	CARRIER	48DJD007610	1591G72351	0985190	1
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SANCC5040	J84F71186	0983294	2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SANCC5040B	J84E-190	0983295	2
REFRIGERANT RECOVERY SERVICE	TRANE - DUAL	SAN00404B	J84E1192	0983296	2



REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJD020	0508U03493	0983297	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJD020	0508U03495	0983298	2
REFRIGERANT RECOVERY SERVICE	CARRIER	AH0781897	R982655	0983299	1
REFRIGERANT RECOVERY SERVICE	HEAT CRAFT	MOH120615	4419827	0983300	1
REFRIGERANT RECOVERY SERVICE	HEAT CRAFT	MOH091618	4419663	0983301	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	3RA1031A-TAC800	09H63974R	0985191	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	3RA10310-TAC	CT91C0937	0985192	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	3RA1-031A-TAC-800	08E66170R	0985193	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	PLACARD MISSING	PLACARD MISSING	0985194	1
REFRIGERANT RECOVERY SERVICE	COPELAND - FLAT	PLACARD MISSING	PLACARD MISSING	0985195	1
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48ZNH060SF L600EH	2906U16614	875997	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48ZNH070SH L600GJ	2906U16617	875998	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJE030JP-611HK	3006U17410	875999	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48AJE030JP-611HK	3005U17408	8756000	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48ZNA070SG L60FH	2906U16616	8756001	2
REFRIGERANT RECOVERY SERVICE	CARRIER - DUAL	48ZNH060SF L600EH	2906U16615	8756002	2
REFRIGERANT RECOVERY SERVICE	IMI CORNELLIUS	CR1200	63G0625BE005	8756003	1
REFRIGERANT RECOVERY SERVICE	IMI CORNELLIUS	CR1200	63G031BE006	8756004	1
REFRIGERANT RECOVERY SERVICE	IMI CORNELLIUS	CR1200	63G0625BE002	8756005	1
REFRIGERANT RECOVERY SERVICE	RDI	PLACARD MISSING	PLACARD MISSING	8756006	1
REFRIGERANT RECOVERY SERVICE	RDI	PLACARD MISSING	PLACARD MISSING	8756007	1
REFRIGERANT RECOVERY SERVICE	RDI	PLACARD MISSING	PLACARD MISSING	8756008	1
REFRIGERANT RECOVERY SERVICE	CARRIER	38HDF024-301	1506X91977	8756009	1



REFRIGERANT RECOVERY SERVICE	CARRIER	38HDF024-301	1506X9181	8756010		1
R-22 FOR RECLAMATION					97-100%	2511
R-404A FOR RECLAMATION					97-100%	39
R-502 FOR RECLAMATION					97-100%	48
R-410A FOR RECLAMATION					97-100%	25

EMPLOYEE CERTIFICATIONS



Program EPA Approved - December 28, 1993
Certified Technician as required by 40CFR part 82 subpart F



Technician's Name

EPA Certification#

Certification Level

Intertek
1717 Arlingate Lane
Columbus, OH 43228



**REFRIGERANT RECOVERY/RECYCLING EQUIPMENT
CERTIFICATION PROGRAM**
Program of the Air-Conditioning, Heating and Refrigeration Institute

INSPECTION REPORT

REPORT SERIAL NUMBER: RRRE-16010-1-A
INSPECTION STATUS: NO SUBSTANTIVE CHANGES - PASS
TESTED FOR: AHRI Certification Program for
Refrigerant Recovery/Recycling Equipment
2111 Wilson Blvd., Suite 500
Arlington, VA 22201

UNIT INSPECTED: **RAPREC SUPPORT, INC. (MODEL LP, LA PODEROSA)**
UNIT SERIAL NUMBER: 60076
UNIT TYPE: RECOVERY
REFRIGERANTS: R-11, R-123, R-22 AND R-410A

COMPRESSOR MANUFACTURER: DORIN
COMPRESSOR MODEL: 2GVS/BLIS, WITH 3/4" DIA. PULLEY FOR LOW PRESSURE AND 6/4" DIA. PULLEY FOR
HIGH PRESSURE
COMPRESSOR SERIAL No.: 0715S415

MOTOR (BELT/DIRECT DRIVE): BELT DRIVE, DAYTON MODEL 1K067BB, 2 HP, 1725 RPM, WITH 4/4" DIA. PULLEY FOR
LOW PRESSURE AND 3/4" DIA. PULLEY FOR HIGH PRESSURE

INLET SEPARATOR TYPE: NONE
DISCHARGE SEPARATOR TYPE: TEMPRITE MODEL 502, 5/8" PORTS, WITH BALL VALVE ON OIL RETURN PORT

CONDENSER TYPE: FLATPLATE HEAT EXCHANGER, 11 1/2" H X 4 5/8" W X 3 1/2" D
CONDENSER FAN TYPE: NONE, WATER COOLED, GARDEN HOSE FITTINGS

RECEIVER: NONE

CRO VALVE SETTING/ VERIFIED: NONE, MANUALLY THROTTLED, VAPOR ONLY

LABELS: AHRI 740 LABEL, EPA STATEMENT

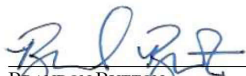
OTHER COMPONENTS: 1/2" AND (2X) 3/8" MFLARE HOSE SUCTION PORTS AND HOSES, 1/2" → 3/8" MFLARE HOSE
DISCHARGE PORT, VALVES FOR PUMPOUT MODE, SQUARE TUBE FRAME ACTS AS
ACCUMULATOR


CONDITION OF UNIT: Unit appears to be new with no observable defects.

DATE INSPECTED: May 2, 2016

INSPECTION PROCEDURE: Certification Program Operational Manual, OM-740 dated November 2014.

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Document Streamline Registered: G:\Engineering\740 RRRE\2016 tests\RapRec\RRRE-16010-1-A


BRANDON BUTTON
SENIOR ASSOCIATE ENGINEER
Project Number G102551717

REVIEWED BY: 
MIKE LINDEMAN
REVIEWER

Intertek
1717 Arlingate Lane
Columbus, OH 43228



**REFRIGERANT RECOVERY/RECYCLING EQUIPMENT
CERTIFICATION PROGRAM**
Program of the Air-Conditioning, Heating and Refrigeration Institute

INSPECTION REPORT

REPORT SERIAL NUMBER: RRRE-16009-1-A
INSPECTION STATUS: NO SUBSTANTIVE CHANGES - PASS
TESTED FOR: AHRI Certification Program for
Refrigerant Recovery/Recycling Equipment
2111 Wilson Blvd., Suite 500
Arlington, VA 22201

UNIT INSPECTED: **RAPREC SUPPORT, INC. (MODEL EM, EL MACHINO)**
UNIT SERIAL NUMBER: 101129
UNIT TYPE: RECOVERY
REFRIGERANTS: R-114, R-134A, R-22, R-407C AND R-410A

COMPRESSOR MANUFACTURER: DORIN
COMPRESSOR MODEL: 2GVS/BLIS, WITH 6 1/8" DIA. PULLEY AND HENRY S-9010 OIL LEVEL CONTROLLER
COMPRESSOR SERIAL NO.: 0715S395

MOTOR (BELT/DIRECT DRIVE): BELT DRIVE THROUGH CLUTCH, HONDA GX270 GASOLINE POWERED ENGINE, 9.0 HP,
MOTOR PULLEY 4 1/4" DIA., MANUALLY THROTTLE CONTROLLED

INLET ACCUMULATOR TYPE: HENRY S-7061HE, 3/8" FPT PORTS, 1/2" MFLARE HEAT EXCHANGER PORTS
DISCHARGE SEPARATOR TYPE: HENRY S-5887, 3/8" FPT PORTS, 3/8" MFLARE OIL RETURN PORT

CONDENSER TYPE: (2X) FINNED TUBE, 3 ROWS, 14"W x 14"H, 3/8" DIA. TUBING
CONDENSER BLOWER TYPE: (2X) DAYTON, MODELS 5ZCN7A (CW) AND 5ZCP7A (CCW), 10 1/4" DIA., BELT-DRIVEN
BY HONDA ENGINE WITH 3 1/4" DIA. MOTOR PULLEY AND 5" DIA. BLOWER PULLEY

RECEIVER: NONE

CRO VALVE SETTING/ VERIFIED: MANUALLY THROTTLED BASED ON INCOMING AND DISCHARGE REFRIGERANT
PRESSURES, SUCTION – SPORLAN CROT-6 0/60, CONDENSER – SPORLAN ORI-6 65/225

LABELS: AHRI 740 LABEL, EPA STATEMENT


OTHER COMPONENTS: (2X) 1/2" MFLARE HOSE SUCTION PORTS AND HOSE, 3/8" MFLARE HOSE DISCHARGE
PORT AND HOSE, VALVES FOR PUMPOUT MODE


CONDITION OF UNIT: Unit appears to be new with no observable defects.

DATE INSPECTED: May 2, 2016

INSPECTION PROCEDURE: Certification Program Operational Manual, OM-740 dated November 2014.

NOTICE: *This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.*
Document Streamline Registered: G:\Engineering\740 RRRE\2016 tests\RapRec\RRRE-16009-1-A


BRANDON BUTTON
SENIOR ASSOCIATE ENGINEER
Project Number G102551708

REVIEWED BY: 
MIKE LINDEMAN
REVIEWER

CERTIFICATE OF ABATEMENT

I hereby certify that all refrigerant was removed for **Trillo Mechanical** as detailed herein from the units and cylinders listed at the specified location(s) and on the specified date(s).

I also certify that:

- An EPA certified technician was used to perform the service and complete EPA documentation as required by the EPA – Clean Air Act.
- EPA certified and AHRI certified equipment was used to recover the refrigerants.
- The units were recovered to EPA required levels.
- Recovered refrigerant was transported to an EPA certified reclamation facility.



Matt Jahn

Matt Jahn
Trillo Mechanical – Rapid Recovery



Bill of lading:

11-29-2018

- Batteries

The undersigned certifies taking possession of 60 batteries for reasons of recycling; from the former Vallco Mall, located at 10123 North Wolfe Road, Cupertino, CA.

Batteries to be freighted via Six Days on the Road and will be received by Jack Armistead of American Compactor.

Note:

The transporter will make certain that the batteries are loaded so as to prevent damage, leakage of lead or acid, or short circuits, and will comply with all U.S. Department of Transportation (DOT) regulations for hazardous materials.

Sincerely,



Jack Armistead
President
American Compactor Equipment Sales

American Compactor Equipment Sales
Ph. 559-392-6444 Jack@Acespack.com



Bill of lading:

12-03-2018

- Generator

The undersigned certifies taking possession of one generator model D60FRH1 from the former Vallco Mall, located at 10123 North Wolfe Road, Cupertino, CA and acknowledges that the diesel fuel tank within the generator equipment has been emptied of all diesel fuel through consumption during the final use of the generator. Therefore, the generator being removed can no longer be considered as containing, or constitute, a hazardous waste under 22 CCR § 66261.7, summarized as follows:

If a portable or fixed tank for gasoline or diesel fuel is empty, meaning drained of all material that can be removed from the container by normal methods like pouring or pumping, and no more than one inch (or 3% by weight) of residue remains in the container, it can be disposed of as regular solid waste, can be recycled as scrap metal, or can be reused for its original purpose.

Sincerely,

Jack Armistead
President
American Compactor Equipment Sales

American Compactor Equipment Sales
Ph. 559-392-6444 Jack@Acespack.com



LIMITED LEAD (PB) TESTING REPORT

DATE:	October 31, 2018	PROJECT NO.:	578-MA18
REQUESTED BY: (CLIENT)	Sand Hill Construction Management 10123 N. Wolfe Road Suite 1043 Cupertino, CA 95014		
PROJECT:	Valco Shopping Mall 10123 N. Wolfe Road Cupertino, CA 95014		
SERVICES AREA(S):	Sampling was conducted in areas required by Santa Clara Fire Department Hazardous Materials Division. Concrete floor lead wipes samples collected in the following areas: <ul style="list-style-type: none"> • Section A, Macy's, areas 1-3 • Section B, JC Penney, areas 1-3 • Section C, Sears, areas 1-3 		

October 2018, ProTech Consulting and Engineering performed limited wipe sampling services. Sampling services were requested by the client to assess the presence (or non-presence) of lead on concrete floor surfaces in certain areas. Sampling was required by the Santa Clara Fire Department Hazardous Materials Division in areas that once housed lead-acid batteries.

Sampling was conducted as follows:

AFFECTED AREA	SUBSTRATE SAMPLED	SAMPLE TYPE	ANALYTE
1 Section A 1-3	Concrete floor	Wipe – 1'x1' sample area	Lead (Pb)
2 Section B 1-3	Concrete floor	Wipe – 1'x1' sample area	Lead (Pb)
3 Section C 1-3	Concrete floor	Wipe – 1'x1' sample area	Lead (Pb)

Services provided by ProTech were limited to the specific items, tasks, and analytes described herein. No other services or analytes were intended or implied.

SERVICES REQUESTED & PERFORMED

ProTech performed the following services:

- Performed **surface** sampling of **concrete floors potentially contaminated with lead**.
- Performed a field assessment **and floor surface wipe sampling in areas required by the Santa Clara Fire Department Hazardous Materials Division**.
- Submitted **lead wipe sample** to a certified laboratory for analysis.
- Prepared and delivered a written report presenting an evaluation and assessment of the data.

INTENT

Consulting services were performed to obtain lead-related data in areas that once housed lead-acid battery power equipment. The Santa Clara Fire Department Hazardous Materials Division identified areas where they suspected potential lead contamination. Division authorities required lead sampling to obtain data documenting lead levels prior to demolition and recycling of the of the subject concrete.

CERTIFIED STAFF

Environmental consulting services were performed by ProTech’s team of licensed and accredited inspectors as follows:

CONSULTANT	DISCIPLINE	ISSUING AGENCY	CERTIFICATION NO.
Ron Mason	Asbestos	Cal OSHA	96-1903
	Lead	CDPH	198
	IAQ	EAA	1-10-03
Emanuel Dounias	Asbestos	Cal OSHA	00-2766
	Lead	CDPH	13059

RESULTS

LEAD (Pb) HUD WIPE LABORATORY ANALYSIS			
MATERIAL, SYSTEM, LOCATION	SAMPLE NO.	RESULT MG/KG (PPM)	TYPE
Section A (Macy's)			
1 Loading dock area – right	LW-01	<8	Pass
2 Loading dock area – center	LW-02	<8	Pass
3 Loading dock area – left	LW-03	<8	Pass
Section B (JC Penny's)			
1 Loading dock area – right	LW-01	<8	Pass
2 Loading dock area – center	LW-02	18	Pass
3 Loading dock area – left	LW-03	<8	Pass
Section C (Sears)			
1 Loading dock area – back	LW-01	23	Pass
2 Loading dock area – right	LW-02	49	Pass
3 Loading dock area – left	LW-03	14	Pass

Lead abbreviations are as follows: LBP = lead-based paint; LCM = Lead containing material, ND = no lead detected (paint chip lab analysis is needed to confirm).

Lead Clearance Standard:

The California Department of Public Works (CDPH) has not defined standards of clearance for commercial and industrial facilities. However, we believe that a reasonable clearance standard for this project is a surface concentration of lead in the amount of 250 µm/ft². The 250 µm/ft² standard is the interior horizontal surface standard developed by CDPH. This is the level of lead that would be allowed on horizontal surfaces above the floor in a residential setting. **All samples were significantly below this standard.**

The floor surface clearance standard in Child occupied facilities is 40 µm/ft². All samples (excluding Section C, LW-02) were below 40 µm/ft². Sample C - LW-02 was only slightly

above the child facility floor clearance standard.

CONCLUSIONS & RECOMMENDATIONS

All samples were below hazardous lead levels.

REPORT LIMITATION

Services performed by ProTech were limited. Hazmat items may exist that are not addressed in this report.

This report is for the exclusive use of ProTech and its client, and not for use by any other party. The survey and sampling discussed in this report may not be appropriate for uses beyond its intended purpose and stated scope.

Please feel free to call us with any comments or questions.

Respectfully Submitted,

Emanuel Dounias

Emanuel Dounias
CDPH Lead Inspector 13059



SECTION A REPORT

ASBESTOS & LEAD (PB) REPORT

LIMITED PRE-DEMOLITION/RENOVATION SURVEY & EVALUATION

DATE:	Revised October 26, 2018	PROJECT NO.:	578-MA18 Revision II FINAL
REQUESTED BY: (CLIENT)	Sand Hill Construction Management 10123 N. Wolfe Road Suite 1043 Cupertino, CA 95014		
PROJECT:	Vallco Shopping Mall 10123 N. Wolfe Road Cupertino, CA 95014		
PROJECT DESCRIPTION:	Retail shopping mall, restaurants and adjacent businesses.		

SERVICES AREA(S): SECTION A

- | | |
|---|--|
| <ul style="list-style-type: none"> • Macy's • AMC Theater • Dynasty restaurant • TGIF Restaurant • Alexander Steak House Restaurant • Units 1002 • Unit 1011-1019 • Unit 1020 • Unit 1006 • Units 1023 A, B, & C • Unit 1024 • Units 1025 A & B • Units 1026 • Units 1027 • Units 1028 A & B • Units 1029-1031 • Unit 1034 • Unit 1040 • Unit 1043 • Unit 2001 • Unit 2007 • Unit 2009 • Unit 2010 • Unit 2011 • Units 2013-2015 • 2nd floor common areas • Unit 2056 • Section A Roofs (excluding Macy's & Theatre) • Sears @ Section A connection | <ul style="list-style-type: none"> • Unit 2017 • Unit 2019 • Units 2020- 2023 • Units 2026-2028 • Unit 2031 • Unit 2032 • Unit 2034 • Unit 2044 • Unit 2044A • Units 2049-2057 • Unit 2100 • Units 2104-2108 • Units 2110-2118 • Units 2119 & 2119A • Units 2120-2125 • Unit 2128 • Unit 2130 • Units 2132 - 2138 • Units 2140 - 2144 • Unit 2146 • Unit 2148 • Associated common areas • Service Halls • Mechanical rooms • Storage rooms • Exteriors • Units 2125/2127 • Old Maintenance Office and Adjacent rooms |
|---|--|

SECTION A
LIMITATIONS:

Units 2134, 2135, 2136, 2137 are on elevated plywood floor platforms, there was no access to the concrete sub floor below.

Dynasty restaurant (1688) is a functioning operational space, intrusive inspection techniques were not possible.

Sears information in this Section A report is limited to the north connection at Section A.

During September & October 2018, **ProTech Consulting & Engineering, Inc.** performed a building survey to identify asbestos-containing materials (ACM) and presence of Lead based paint (Pb) at the subject project. The survey was conducted in an effort to comply with pre-demolition/renovation regulatory requirements.

Environmental consulting services were conducted by ProTech's licensed and accredited staff as follows:

CONSULTANT	DISCIPLINE	ISSUING AGENCY	CERTIFICATION NO.
Ron Mason	Asbestos Lead IAQ	Cal OSHA CDPH EAA	96-1903 198 1-10-03
Emanuel Dounias	Asbestos Lead	Cal OSHA CDPH	00-2766 13059
Bob Newman	Asbestos IAQ	Cal OSHA UC Berkeley	00-2767 10-03
Ryan Cozart	Asbestos Lead	Cal OSHA CDPH	10-4634 26433

SERVICES REQUESTED BY CLIENT

Asbestos Survey

Consulting services were limited by the client to the following scope of services:

- Performed a visual survey of the project to identify, document, and assess suspect asbestos-containing materials (ACM).
- Collected representative samples to confirm or rebut the presence of ACM.
- Submitted necessary samples to a certified laboratory for analysis by standard polarized light microscopy (PLM) to determine asbestos content.
- Assess the friability and abatement classification of identified ACM;
- Prepared this written report presenting an evaluation and assessment of the data.

ProTech is only responsible for the specific scope of work as stated. No other services are intended or implied.

LBP Survey

- Performed a visual survey of the project to identify, document, and assess suspect lead-based paint (LBP).
- Tested painted/coated surfaces using a calibrated X-ray fluorescence analyzer (XRF).

APPENDIX

J VAPOR ENCROACHMENT SCREEN



Former Vallco Mall

10123 North Wolfe Road
Cupertino, CA 95014

Inquiry Number: 5701156.2s

June 28, 2019

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
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Primary Map	2
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Map Findings	4
Record Sources and Currency	GR-1

Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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The EDR Vapor Encroachment Worksheet enables EDR's customers to make certain online modifications that effects maps, text and calculations contained in this Report. As a result, maps, text and calculations contained in this Report may have been so modified. EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. Environmental Data Resources shall not be responsible for any customer's decision to include or not include in any final report any records determined to be within the relevant minimum search distances.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Federal NPL site list	1.0	0	0	1
Federal Delisted NPL site list	1.0	0	0	0
Federal CERCLIS list	0.5	0	0	1
Federal CERCLIS NFRAP site list	0.5	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0
Federal RCRA generators list	0.25	0	0	4
Federal institutional controls / engineering controls registries	0.5	0	0	1
Federal ERNS list	property	0	-	-
State- and tribal - equivalent NPL	1.0	0	0	0
State- and tribal - equivalent CERCLIS	1.0	0	0	1
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	5
State and tribal registered storage tank lists	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.5	0	0	0
State and tribal Brownfields sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	2
Local Lists of Registered Storage Tanks	0.25	0	0	4
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	2	-	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	2	-	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

FORMER VALLCO MALL
10123 NORTH WOLFE ROAD
CUPERTINO, CA 95014

COORDINATES

Latitude (North): 37.325722 - 37° 19' 32.598267"
Longitude (West): 122.014995 - 122° 0' 53.970337"
Elevation: 189 ft. above sea level

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records.

Site

SEARS AUTOMOTIVE CENTER
10123 WOLFE RD N
CUPERTINO, CA

SEARS AUTOMOTIVE CENTER
10123 N WOLFE RD
CUPERTINO, CA

Database(s)

RGA LUST
Facility ID:

RGA LUST
Facility ID:

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
INTERSIL INC./SIEMENS COMPONENTS US ENG CONTROLS: US ENG CONTROLS ROD: ROD FINDS: FINDS ECHO: ECHO NPL: NPL PRP: PRP SEMS: SEMS RCRA-SQG: RCRA-SQG CERS: CERS CIWQS: CIWQS ENF: ENF HIST Cal-Sites: HIST CAL-SITES WDS: WDS CPS-SLIC: CPS-SLIC HAZNET: HAZNET ENVIROSTOR: ENVIROSTOR	10900 N TANTAU AVE/19000 HOMESTEAD RD	1/2 - 1 NE	Region	10
SEARS ROEBUCK & CO RCRA-SQG: RCRA-SQG SWEEPS UST: SWEEPS UST LUST: LUST CA FID UST: CA FID UST HIST UST: HIST UST HIST LUST: HIST LUST SANTA CLARA	10101 WOLFE RD	1/10 - 1/3 SSW	▲ B3	38
BAY CLUB SILICON VALLEY FINDS: FINDS ECHO: ECHO CERS: CERS LUST: LUST HIST UST: HIST UST	10101 N WOLFE RD	1/10 - 1/3 SSW	▲ B4	47
J. C. PENNEY CO., INC. SWEEPS UST: SWEEPS UST LUST: LUST CA FID UST: CA FID UST HIST LUST: HIST LUST SANTA CLARA	10150 N WOLFE RD	1/10 - 1/3 NE	◆ D5	49
J. C. PENNEY CO., INC. CERS: CERS LUST: LUST HIST UST: HIST UST	10150 N WOLFE RD	1/10 - 1/3 NE	◆ D6	51
ONE HOUR MARTINIZING BY LEE FINDS: FINDS RCRA-SQG: RCRA-SQG ECHO: ECHO CERS: CERS HAZNET: HAZNET DRYCLEANERS: DRYCLEANERS	10045 E ESTATES DR	1/10 - 1/3 S	▲ E8	54
WARDROB CUSTOM CLEANERS	19705 STEVENS CRK BLVD	1/10 - 1/3 SW	▲ 10	65

EXECUTIVE SUMMARY

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
ECHO: ECHO RCRA-SQG: RCRA-SQG FINDS: FINDS				

ADDITIONAL ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
INTERSIL INC./SIEMENS COMPONENTS US ENG CONTROLS: US ENG CONTROLS ROD: ROD FINDS: FINDS ECHO: ECHO NPL: NPL PRP: PRP SEMS: SEMS RCRA-SQG: RCRA-SQG CERS: CERS CIWQS: CIWQS ENF: ENF HIST Cal-Sites: HIST CAL-SITES WDS: WDS CPS-SLIC: CPS-SLIC HAZNET: HAZNET ENVIROSTOR: ENVIROSTOR	10900 N TANTAU AVE/19000 HOMESTEAD RD	1/2 - 1 NE	Region	
SEARS ROEBUCK & CO RCRA-SQG: RCRA-SQG SWEEPS UST: SWEEPS UST LUST: LUST CA FID UST: CA FID UST HIST UST: HIST UST HIST LUST: HIST LUST SANTA CLARA	10101 WOLFE RD	1/10 - 1/3 SSW	▲ B3	38
BAY CLUB SILICON VALLEY FINDS: FINDS ECHO: ECHO CERS: CERS LUST: LUST HIST UST: HIST UST	10101 N WOLFE RD	1/10 - 1/3 SSW	▲ B4	47
J. C. PENNEY CO., INC. SWEEPS UST: SWEEPS UST LUST: LUST CA FID UST: CA FID UST HIST LUST: HIST LUST SANTA CLARA	10150 N WOLFE RD	1/10 - 1/3 NE	◆ D5	49
J. C. PENNEY CO., INC. CERS: CERS LUST: LUST HIST UST: HIST UST	10150 N WOLFE RD	1/10 - 1/3 NE	◆ D6	51
JC PENNEY HIST CORTESE: HIST CORTESE	10150 WOLFE	1/10 - 1/3 NE	◆ D7	54
ONE HOUR MARTINIZING BY LEE FINDS: FINDS RCRA-SQG: RCRA-SQG ECHO: ECHO CERS: CERS HAZNET: HAZNET DRYCLEANERS: DRYCLEANERS	10045 E ESTATES DR	1/10 - 1/3 S	▲ E8	54

EXECUTIVE SUMMARY

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
ONE HOUR CLEANERS BY LEE CERS: CERS CUPA Listings: CUPA CERS HAZ WASTE: CERS HAZ WASTE	10045 ESTATES DR	1/10 - 1/3 S	▲ E9	59

WARDROB CUSTOM CLEANERS ECHO: ECHO RCRA-SQG: RCRA-SQG FINDS: FINDS	19705 STEVENS CRK BLVD	1/10 - 1/3 SW	▲ 10	65
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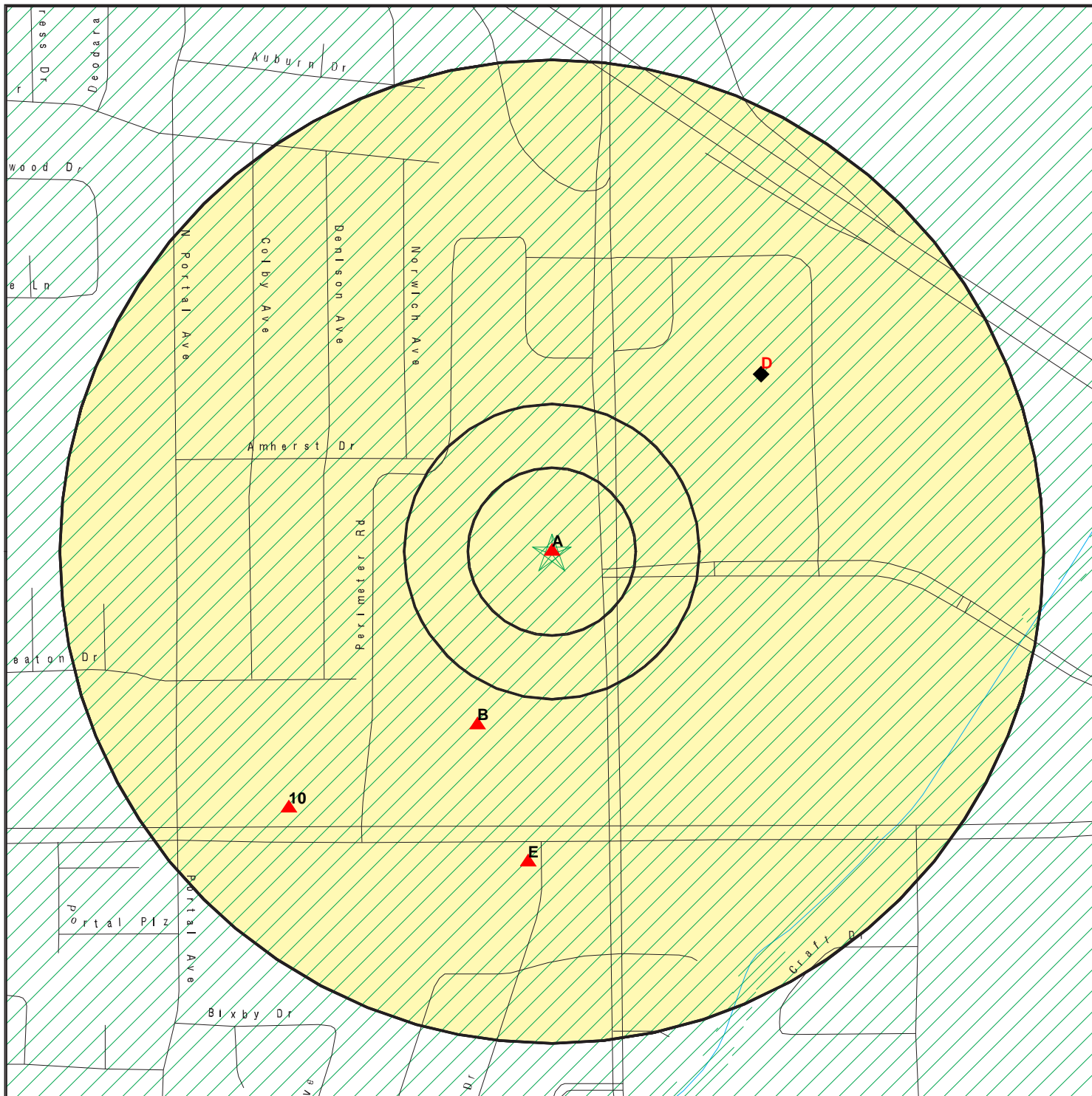
EDR HIGH RISK HISTORICAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

EDR RECOVERED GOVERNMENT ARCHIVES

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
SEARS AUTOMOTIVE CENTER RGA LUST: RGA LUST	10123 WOLFE RD N	Property	▲ A1	36
SEARS AUTOMOTIVE CENTER RGA LUST: RGA LUST	10123 N WOLFE RD	Property	▲ A2	37

PRIMARY MAP - 5701156.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

0 300 1/3 Miles

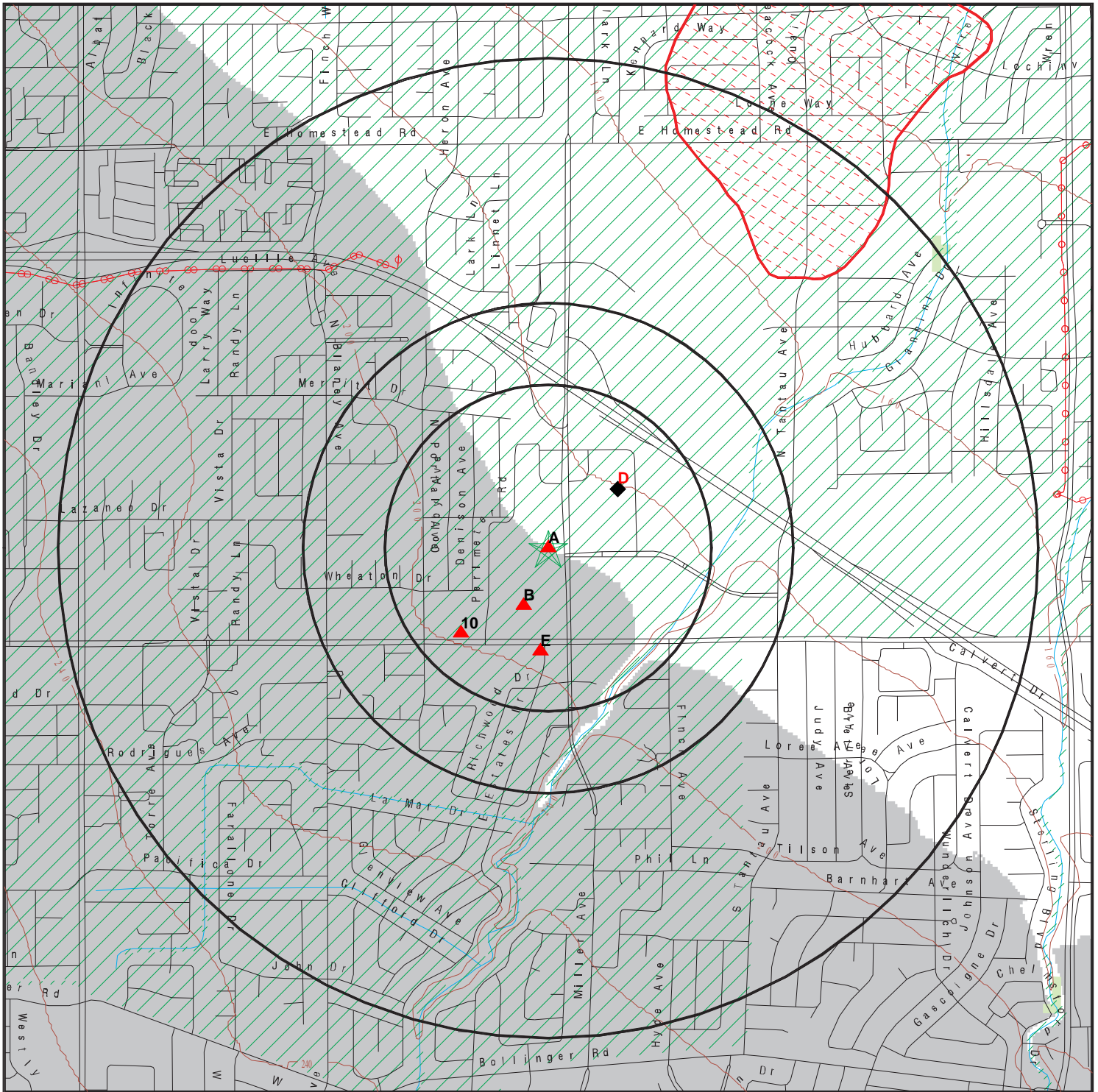


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former Vallco Mall
 ADDRESS: 10123 North Wolfe Road
 Cupertino CA 95014
 LAT/LONG: 37.325722 / 122.014995

CLIENT: WSP USA Inc.
 CONTACT: Richard Freudenberger
 INQUIRY #: 5701156.2s
 DATE: June 28, 2019 8:32 am

SECONDARY MAP - 5701156.2S



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Manufactured Gas Plants

☒ National Priority List Sites

☒ Dept. Defense Sites

☒ Indian Reservations BIA

⚡ Power transmission lines

▨ 100-year flood zone

▨ 500-year flood zone

■ National Wetland Inventory

■ State Wetlands

■ Upgradient Area

■ Areas of Concern

0 1/3 1/2 1 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former Vallco Mall
 ADDRESS: 10123 North Wolfe Road
 Cupertino CA 95014
 LAT/LONG: 37.325722 / 122.014995

CLIENT: WSP USA Inc.
 CONTACT: Richard Freudenberger
 INQUIRY #: 5701156.2S
 DATE: June 28, 2019 8:32 am

MAP FINDINGS

LEGEND

FACILITY NAME FACILITY ADDRESS, CITY, ST, ZIP		EDR SITE ID NUMBER
◆ MAP ID#	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
Worksheet: Comments: Comments may be added on the online Vapor Encroachment Worksheet.		

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

INTERSIL INC./SIEMENS COMPONENTS 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA, 95014		1000218337
Region	NE 1/2 - 1 (3794 ft. / 0.719 mi.)	Federal NPL site list Federal CERCLIS list Federal RCRA generators list Federal institutional controls / engineering controls registries State- and tribal - equivalent CERCLIS State and tribal leaking storage tank lists Local Lists of Hazardous waste / Contaminated Sites Other Ascertainable Records

Worksheet:

NPL: Federal NPL site list

EPA ID: CAD041472341
 Cerclis ID: 901325
 EPA Region: 9
 Federal: N
 Final Date: 1990-08-30 00:00:00
 Site Score: 28.899999999999999
 Latitude: 37.336100000000002
 Longitude: -122.00149999999999

Category Details:

NPL Status: Currently on the Final NPL
 Category Description: Depth To Aquifer-> 100 Feet
 Category Value: 130 FTBGS

 NPL Status: Currently on the Final NPL
 Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
 Category Value: 1300

Site Details:

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Site Name: INTERSIL INC./SIEMENS COMPONENTS
 Site Status: Final
 Site Zip: 95014
 Site City: CUPERTINO
 Site State: CA
 Federal Site: No
 Site County: SANTA CLARA
 EPA Region: 09
 Date Proposed: 06/24/88
 Date Deleted: Not Reported
 Date Finalized: 08/30/90

Substance Details:

NPL Status: Currently on the Final NPL
 Substance ID: Not Reported
 Substance: Not Reported
 CAS #: Not Reported
 Pathway: Not Reported
 Scoring: Not Reported

NPL Status: Currently on the Final NPL
 Substance ID: C069
 Substance: ISOPROPANOL
 CAS #: 67-63-0
 Pathway: NO PATHWAY INDICATED
 Scoring: 1

NPL Status: Currently on the Final NPL
 Substance ID: C290
 Substance: BUTYL ACETATE
 CAS #: 123-86-4
 Pathway: NO PATHWAY INDICATED
 Scoring: 1

NPL Status: Currently on the Final NPL
 Substance ID: C401
 Substance: TRICHLOROBENZENE
 CAS #: 12002-48-1
 Pathway: NO PATHWAY INDICATED
 Scoring: 1

NPL Status: Currently on the Final NPL
 Substance ID: U078
 Substance: DICHLOROETHENE, 1,1-
 CAS #: 75-35-4
 Pathway: NO PATHWAY INDICATED
 Scoring: 1

NPL Status: Currently on the Final NPL
 Substance ID: U121
 Substance: TRICHLOROFLUOROMETHANE

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

CAS #:	75-69-4
Pathway:	NO PATHWAY INDICATED
Scoring:	1
NPL Status:	Currently on the Final NPL
Substance ID:	U154
Substance:	METHANOL
CAS #:	67-56-1
Pathway:	NO PATHWAY INDICATED
Scoring:	1
NPL Status:	Currently on the Final NPL
Substance ID:	U210
Substance:	TETRACHLOROETHENE
CAS #:	127-18-4
Pathway:	NO PATHWAY INDICATED
Scoring:	1
NPL Status:	Currently on the Final NPL
Substance ID:	U220
Substance:	TOLUENE
CAS #:	108-88-3
Pathway:	NO PATHWAY INDICATED
Scoring:	1
NPL Status:	Currently on the Final NPL
Substance ID:	U226
Substance:	TRICHLOROETHANE, 1,1,1-
CAS #:	71-55-6
Pathway:	GROUND WATER PATHWAY
Scoring:	3
NPL Status:	Currently on the Final NPL
Substance ID:	U228
Substance:	TRICHLOROETHYLENE (TCE)
CAS #:	79-01-6
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U239
Substance:	XYLENE
CAS #:	1330-20-7
Pathway:	NO PATHWAY INDICATED
Scoring:	1

Summary Details:

Conditions at proposal June 24, 1988): Intersil, Inc., and Siemens Components have manufactured semiconductors for several years on two locations near one another covering 15 acres in Cupertino, Santa Clara County, California. The facilities are surrounded by residential, industrial, and

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

business areas. Investigations conducted in 1982 as part of the California Regional Water Quality Control Board's underground tank leak detection program found organic solvents, including trichloroethylene, 1,1,1-trichloroethane, tetrachloroethylene, trichlorofluoroethane, and 1,1-dichloroethylene, in soils on the site and in ground water on and off the site. Contamination is believed to have resulted from localized spills and from leaking underground storage tanks, piping, and other equipment involving the two companies. More than 300,000 people obtain drinking water from public wells within 3 miles of the site. Siemens and Intersil began remedial investigations at the site in 1982 and 1983, respectively, under State supervision. The underground storage tanks were removed, and in 1983 a system was installed to extract gases from soil; the system was expanded in 1985. In June 1986, the California Regional Water Quality Control Board issued Waste Discharge Requirements under the California Water Code requiring both companies to determine the extent of contamination in ground water and soils. In July 1986, a system was installed to pump contaminated ground water in the uppermost aquifer to the surface and treat it. Since April 1988, a pump and treat system for the two uppermost aquifers has been in full-scale operation. Intersil stopped operations in 1988, and all remaining underground equipment was removed. Status August 30, 1990): In February 1990, the two companies released draft reports of remedial investigations/feasibility studies for the site and off-site downgradient areas. Interim off-site remedial activities are scheduled to begin in June 1990. Also in June 1990, the State plans to issue tentative site cleanup requirements and hear public comments on the proposed remedial action plan.

Site Status Details:

NPL Status:	Final
Proposed Date:	06/24/1988
Final Date:	08/30/1990
Deleted Date:	Not Reported

Narratives Details:

NPL Name:	INTERSIL INC./SIEMENS COMPONENTS
City:	CUPERTINO
State:	CA

SEMS: Federal CERCLIS list

Site ID:	0901325
EPA ID:	CAD041472341

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Cong District: 14,17
 FIPS Code: 06085
 Latitude: +37.336100
 Longitude: -122.001500
 FF: N
 NPL: Currently on the Final NPL
 Non NPL Status: Not Reported

SEMS Detail:

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: PA
 Action Name: PA
 SEQ: 1
 Start Date: 1987-03-01 05:00:00
 Finish Date: 3/1/1987 5:00:00 AM
 Qual: H
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: HR
 Action Name: HAZRANK
 SEQ: 1
 Start Date: 1987-06-01 04:00:00
 Finish Date: 6/1/1987 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: CM
 Action Name: PCOR
 SEQ: 1
 Start Date: 1992-09-08 04:00:00
 Finish Date: 9/8/1992 4:00:00 AM

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1986-05-01 04:00:00
Finish Date:	5/1/1986 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	3
Start Date:	1990-08-14 04:00:00
Finish Date:	8/14/1990 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1989-08-07 04:00:00
Finish Date:	8/7/1989 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1990-08-30 04:00:00
Finish Date:	8/30/1990 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1988-06-24 04:00:00
Finish Date:	6/24/1988 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1990-11-26 05:00:00
Finish Date:	Not Reported
Qual:	E
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	1

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Start Date: 1990-09-27 04:00:00
 Finish Date: 9/27/1990 4:00:00 AM
 Qual: R
 Current Action Lead: EPA Perf

 Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: SI
 Action Name: SI
 SEQ: 1
 Start Date: 1987-06-01 04:00:00
 Finish Date: 6/1/1987 4:00:00 AM
 Qual: H
 Current Action Lead: EPA Perf

 Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: FE
 Action Name: 5 YEAR
 SEQ: 1
 Start Date: 1995-09-28 04:00:00
 Finish Date: 9/28/1995 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

 Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: FE
 Action Name: 5 YEAR
 SEQ: 5
 Start Date: 2014-11-05 05:00:00
 Finish Date: 9/22/2015 5:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

 Region: 09
 Site ID: 0901325

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: FE
 Action Name: 5 YEAR
 SEQ: 4
 Start Date: 2010-09-30 04:00:00
 Finish Date: 9/30/2010 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: FE
 Action Name: 5 YEAR
 SEQ: 2
 Start Date: 2000-08-01 04:00:00
 Finish Date: 9/28/2000 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: FE
 Action Name: 5 YEAR
 SEQ: 3
 Start Date: 2004-12-31 05:00:00
 Finish Date: 9/29/2005 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: RS

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Action Name: RV ASSESS
 SEQ: 1
 Start Date: 1992-12-29 05:00:00
 Finish Date: 12/29/1992 5:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 01
 Action Code: BD
 Action Name: PRP RI/FS
 SEQ: 1
 Start Date: 1989-03-16 05:00:00
 Finish Date: 9/27/1990 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: St Ovrsght

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 01
 Action Code: BE
 Action Name: PRP RD
 SEQ: 1
 Start Date: 1990-09-27 04:00:00
 Finish Date: 9/27/1990 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: St Ovrsght

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 01
 Action Code: OM
 Action Name: OM
 SEQ: 1
 Start Date: 1990-09-27 04:00:00
 Finish Date: Not Reported
 Qual: Not Reported
 Current Action Lead: St Ovrsght

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 01
 Action Code: BF
 Action Name: PRP RA
 SEQ: 1
 Start Date: 1990-09-27 04:00:00
 Finish Date: 9/8/1992 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: St Ovrsght

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 00
 Action Code: MA
 Action Name: ST COOP
 SEQ: 1
 Start Date: 1989-09-15 04:00:00
 Finish Date: Not Reported
 Qual: Not Reported
 Current Action Lead: St Ovrsght

Region: 09
 Site ID: 0901325
 EPA ID: CAD041472341
 Site Name: INTERSIL INC./SIEMENS COMPONENTS
 NPL: F
 FF: N
 OU: 01
 Action Code: NA
 Action Name: PRP RI
 SEQ: 1
 Start Date: 2011-10-12 04:00:00
 Finish Date: 11/19/2014 5:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Ovrsght

RCRA-SQG: Federal RCRA generators list

Date form received by agency: 09/01/1996
 Facility name: INTERSIL INC
 Facility address: 10900 N TANTAU AVE
 CUPERTINO, CA 95014

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

EPA ID: CAD041472341
 Mailing address: 10710 NORTH TANTAU AVENUE
 CUPERTINO, CA 95014
 Contact: Not Reported
 Contact address: Not Reported
 Contact country: US
 Contact telephone: Not Reported
 Contact email: Not Reported
 EPA Region: 09
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: INTERSIL INCORPORATED
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999

Owner/operator country: Not Reported
 Owner/operator telephone: 415-555-1212
 Owner/operator email: Not Reported
 Owner/operator fax: Not Reported
 Owner/operator extension: Not Reported
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not Reported
 Owner/Op end date: Not Reported

Owner/operator name: NOT REQUIRED
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999

Owner/operator country: Not Reported
 Owner/operator telephone: 415-555-1212
 Owner/operator email: Not Reported
 Owner/operator fax: Not Reported
 Owner/operator extension: Not Reported
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: Not Reported
 Owner/Op end date: Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No

MAP FINDINGS

INTERSIL INC./SIEMENS COMPONENTS, 10900 N TANTAU AVE/19000 HOMESTEAD RD, CUPERTINO, CA 95014 (Continued)

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/29/1992
Site name: INTERSIL, INC.
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Site name: INTERSIL INC
Classification: Large Quantity Generator

Violation Status: No violations found

US ENG CONTROLS: Federal institutional controls / engineering controls registries

EPA ID: CAD041472341
Site ID: 0901325
Name: INTERSIL INC./SIEMENS COMPONENTS
Address: 10900 N TANTAU AVE/19000 HOMESTEAD RD
CUPERTINO, CA 95014

EPA Region: 09
County: SANTA CLARA
Event Code: Not Reported
Actual Date: 09/30/1990
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/27/1990
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/27/1990
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Discharge

APPENDIX

B

RWQCB ENVIRONMENTAL SCREENING LEVELS FOR CONSTRUCTION WORKERS

January 2019 (Rev. 1)		Summary of Soil ESLs (mg/kg)															
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas								
Acenaphthene [PAH]	83-32-9	--	3.6E+03	--	4.5E+04	--	1.0E+04	6.6E+03	4.6E+04	1.2E+01	1.2E+01	1.2E+02	1.0E+03	2.5E+03	2.5E+03	1.2E+01	Leaching
Acenaphthylene [PAH]	208-96-8	--	--	--	--	--	--	--	--	6.4E+00	6.4E+00	5.9E+01	5.0E+02	1.0E+03	1.0E+03	6.4E+00	Leaching
Acetone	67-64-1	--	6.1E+04	--	6.7E+05	--	2.7E+05	5.6E+01	5.6E+01	9.2E-01	9.2E-01	1.1E+05	5.0E+02	1.0E+03	1.0E+03	9.2E-01	Leaching
Aldrin	309-00-2	3.5E-02	2.1E+00	1.5E-01	2.9E+01	1.0E+00	7.4E+00	2.4E-03	1.0E-01	8.4E+00	8.4E+00	8.4E+00	1.0E+03	2.5E+03	2.5E+03	2.4E-03	Terr Habitat
Anthracene [PAH]	120-12-7	--	1.8E+04	--	2.3E+05	--	5.0E+04	3.1E+00	4.0E+01	1.9E+00	1.9E+00	4.1E+00	5.0E+02	1.0E+03	1.0E+03	1.9E+00	Leaching
Antimony	7440-36-0	--	1.1E+01	--	1.6E+02	--	5.0E+01	2.5E+01	5.0E+01	--	--	--	--	--	--	1.1E+01	NC-Hazard
Arsenic	7440-38-2	6.7E-02	2.6E-01	3.1E-01	3.6E+00	2.0E+00	9.8E-01	2.5E+01	5.0E+01	--	--	--	--	--	--	6.7E-02	Canc-Risk
Barium	7440-39-3	--	1.5E+04	--	2.2E+05	--	3.0E+03	3.9E+02	6.7E+02	--	--	--	--	--	--	3.9E+02	Terr Habitat
Benzene	71-43-2	3.3E-01	1.1E+01	1.4E+00	4.7E+01	3.3E+01	4.5E+01	6.0E+01	3.1E+02	2.5E-02	2.5E-02	1.9E+03	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching
Benzo[a]anthracene [PAH]	56-55-3	1.1E+00	--	2.0E+01	--	1.1E+02	--	6.3E-01	1.3E+00	1.0E+01	1.0E+01	1.0E+01	5.0E+02	1.0E+03	1.0E+03	6.3E-01	Terr Habitat
Benzo[a]pyrene [PAH]	50-32-8	1.1E-01	1.8E+01	2.1E+00	2.2E+02	1.1E+01	1.0E+01	2.5E+01	9.0E+01	5.7E+00	5.7E+00	5.7E+00	5.0E+02	1.0E+03	1.0E+03	1.1E-01	Canc-Risk
Benzo[b]fluoranthene [PAH]	205-99-2	1.1E+00	--	2.1E+01	--	1.1E+02	--	--	--	5.4E+00	7.5E+01	5.4E+00	5.0E+02	1.0E+03	1.0E+03	1.1E+00	Canc-Risk
Benzo[g,h,i]perylene [PAH]	191-24-2	--	--	--	--	--	--	8.3E+00	1.7E+01	2.7E+01	2.7E+01	2.5E+00	5.0E+02	1.0E+03	1.0E+03	2.5E+00	Gross Contam
Benzo[k]fluoranthene [PAH]	207-08-9	1.1E+01	--	2.1E+02	--	9.1E+02	--	9.5E+00	1.9E+01	4.8E+00	3.9E+01	2.8E+00	5.0E+02	1.0E+03	1.0E+03	2.8E+00	Gross Contam
Beryllium	7440-41-7	1.6E+03	1.6E+01	6.9E+03	2.3E+02	1.8E+02	2.7E+01	5.0E+00	1.0E+01	--	--	--	--	--	--	5.0E+00	Terr Habitat
1,1-Biphenyl	92-52-4	6.8E+01	4.7E+01	2.9E+02	2.0E+02	1.7E+03	1.8E+02	--	--	4.2E-01	4.2E+00	2.3E+02	5.0E+02	1.0E+03	1.0E+03	4.2E-01	Leaching
Bis(2-chloroethyl) ether	111-44-4	1.0E-01	--	4.7E-01	--	6.4E+00	--	--	--	3.4E-05	3.1E-02	5.0E+03	5.0E+02	1.0E+03	1.0E+03	3.4E-05	Leaching
Bis(2-chloro-1-methylethyl) ether	108-60-1	5.0E+00	3.1E+03	2.3E+01	4.7E+04	2.7E+02	1.4E+04	--	--	5.1E-03	8.7E-01	1.0E+03	5.0E+02	1.0E+03	1.0E+03	5.1E-03	Leaching
Bis(2-ethylhexyl) phthalate	117-81-7	3.9E+01	1.3E+03	1.6E+02	1.6E+04	9.5E+02	3.8E+03	8.0E-01	3.5E+01	1.9E+02	6.4E+02	1.9E+02	5.0E+02	1.0E+03	1.0E+03	8.0E-01	Terr Habitat
Boron	7440-42-8	--	1.6E+04	--	2.3E+05	--	4.5E+04	1.2E+02	1.2E+02	--	--	--	--	--	--	1.2E+02	Terr Habitat
Bromodichloromethane	75-27-4	2.9E-01	1.6E+03	1.3E+00	2.3E+04	2.8E+01	7.1E+03	--	--	1.6E-02	1.6E-02	9.3E+02	1.0E+03	2.5E+03	2.5E+03	1.6E-02	Leaching
Bromoform (Tribromomethane)	75-25-2	1.8E+01	1.6E+03	8.0E+01	2.3E+04	1.2E+03	7.1E+03	--	--	6.9E-01	1.0E+00	9.2E+02	5.0E+02	1.0E+03	1.0E+03	6.9E-01	Leaching
Bromomethane	74-83-9	--	6.9E+00	--	3.0E+01	--	2.9E+01	--	--	3.6E-01	8.3E-01	3.5E+03	5.0E+02	1.0E+03	1.0E+03	3.6E-01	Leaching
Cadmium (soil)	7440-43-9	9.1E+02	7.8E+01	4.0E+03	1.1E+03	1.1E+02	5.1E+01	1.9E+00	1.9E+00	--	--	--	--	--	--	1.9E+00	Terr Habitat
Cadmium (water)	7440-43-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	56-23-5	1.0E-01	5.3E+01	4.4E-01	2.5E+02	1.0E+01	2.2E+02	7.3E+00	1.5E+01	1.1E-02	1.1E-02	4.5E+02	5.0E+02	1.0E+03	1.0E+03	1.1E-02	Leaching
Chlordane	12789-03-6	4.8E-01	3.6E+01	2.2E+00	5.0E+02	1.4E+01	1.3E+02	8.5E-03	8.5E-03	2.3E+01	2.3E+01	2.3E+01	1.0E+03	2.5E+03	2.5E+03	8.5E-03	Terr Habitat
p-Chloroaniline	106-47-8	3.5E+00	3.1E+02	1.6E+01	4.7E+03	1.2E+02	1.4E+03	2.5E+01	5.0E+01	6.7E-03	9.1E-02	3.0E+03	5.0E+02	1.0E+03	1.0E+03	6.7E-03	Leaching
Chlorobenzene	108-90-7	--	2.7E+02	--	1.3E+03	--	1.2E+03	7.5E+00	1.5E+01	1.4E+00	1.4E+00	7.5E+02	5.0E+02	1.0E+03	1.0E+03	1.4E+00	Leaching
Chloroethane	75-00-3	--	1.4E+04	--	5.9E+04	--	5.9E+04	--	--	1.2E+00	1.2E+01	2.1E+03	5.0E+02	1.0E+03	1.0E+03	1.2E+00	Leaching
Chloroform	67-66-3	3.2E-01	2.0E+02	1.4E+00	1.0E+03	3.4E+01	8.6E+02	4.3E+01	8.5E+01	2.3E-02	2.3E-02	2.6E+03	5.0E+02	1.0E+03	1.0E+03	2.3E-02	Leaching
Chloromethane	74-87-3	--	1.1E+02	--	4.7E+02	--	4.7E+02	--	--	1.1E+01	1.5E+01	1.3E+03	1.0E+02	5.0E+02	5.0E+02	1.1E+01	Leaching
2-Chlorophenol	95-57-8	--	3.9E+02	--	5.8E+03	--	1.8E+03	2.0E+00	3.9E+00	1.2E-02	1.2E-01	2.7E+04	1.0E+02	5.0E+02	5.0E+02	1.2E-02	Leaching
Chromium (total)	7440-47-3	--	--	--	--	--	--	1.6E+02	1.6E+02	--	--	--	--	--	--	1.6E+02	Terr Habitat
Chromium III	16065-83-1	--	1.2E+05	--	1.8E+06	--	5.3E+05	--	--	--	--	--	--	--	--	1.2E+05	NC-Hazard
Chromium VI	18540-29-9	3.0E-01	2.3E+02	6.2E+00	3.5E+03	2.8E+00	4.0E+02	1.0E+01	1.0E+01	--	--	--	--	--	--	3.0E-01	Canc-Risk
Chrysene [PAH]	218-01-9	1.1E+02	--	2.1E+03	--	9.1E+03	--	8.8E+00	1.8E+01	2.2E+00	1.0E+01	2.2E+00	5.0E+02	1.0E+03	1.0E+03	2.2E+00	Leaching
Cobalt	7440-48-4	4.2E+02	2.3E+01	1.9E+03	3.5E+02	4.9E+01	2.8E+01	5.0E+01	1.0E+02	--	--	--	--	--	--	2.3E+01	NC-Hazard
Copper	7440-50-8	--	3.1E+03	--	4.7E+04	--	1.4E+04	1.8E+02	3.0E+02	--	--	--	--	--	--	1.8E+02	Terr Habitat
Cyanide	57-12-5	--	5.5E+00	--	2.5E+01	--	2.2E+01	1.1E-01	1.1E-01	3.4E-03	3.4E-03	1.9E+04	1.0E+02	5.0E+02	5.0E+02	3.4E-03	Leaching
Dibenz[a,h]anthracene [PAH]	53-70-3	1.1E-01	--	2.1E+00	--	1.1E+01	--	--	--	2.9E+01	3.9E+02	2.9E+01	5.0E+02	1.0E+03	1.0E+03	1.1E-01	Canc-Risk
Dibromochloromethane	124-48-1	8.3E+00	1.6E+03	3.9E+01	2.3E+04	2.9E+02	7.1E+03	--	--	3.5E-01	1.1E+01	8.0E+02	1.0E+02	5.0E+02	5.0E+02	3.5E-01	Leaching
1,2-dibromo-3-chloropropane	96-12-8	4.4E-03	4.8E+00	5.9E-02	2.6E+01	1.1E+00	2.0E+01	--	--	5.9E-04	5.9E-04	9.9E+02	5.0E+02	1.0E+03	1.0E+03	5.9E-04	Leaching
1,2-Dibromoethane	106-93-4	3.6E-02	7.2E+00	1.6E-01	3.0E+01	3.3E+00	3.0E+01	--	--	5.3E-04	1.9E-03	1.3E+03	5.0E+02	1.0E+03	1.0E+03	5.3E-04	Leaching

January 2019 (Rev. 1)		Summary of Soil ESLs (mg/kg)															
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas								
1,2-Dichlorobenzene	95-50-1	--	1.8E+03	--	9.4E+03	--	7.8E+03	4.3E+00	8.5E+00	1.0E+00	1.0E+00	3.8E+02	1.0E+03	2.5E+03	2.5E+03	1.0E+00	Leaching
1,3-Dichlorobenzene	541-73-1	--	--	--	--	--	--	6.0E+00	1.2E+01	7.4E+00	7.4E+00	6.1E+02	1.0E+02	5.0E+02	5.0E+02	6.0E+00	Terr Habitat
1,4-Dichlorobenzene	106-46-7	2.6E+00	3.4E+03	1.2E+01	2.6E+04	2.8E+02	1.5E+04	4.5E+00	9.0E+00	2.0E-01	2.0E-01	1.9E+02	5.0E+02	1.0E+03	1.0E+03	2.0E-01	Leaching
3,3-Dichlorobenzidine	91-94-1	5.8E-01	--	2.7E+00	--	2.0E+01	--	--	--	2.5E-02	1.3E+02	6.0E+01	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching
DDD	72-54-8	2.7E+00	--	1.2E+01	--	8.1E+01	--	8.5E+00	1.7E+01	6.5E+01	6.5E+01	6.5E+01	5.0E+02	1.0E+03	1.0E+03	2.7E+00	Canc-Risk
DDE	72-55-9	1.8E+00	--	8.3E+00	--	5.7E+01	--	3.3E-01	6.5E-01	2.9E+01	2.9E+01	2.9E+01	5.0E+02	1.0E+03	1.0E+03	3.3E-01	Terr Habitat
DDT	50-29-3	1.9E+00	3.7E+01	8.5E+00	5.2E+02	5.7E+01	1.4E+02	1.1E-03	7.8E+00	5.6E+00	5.6E+00	5.6E+00	5.0E+02	1.0E+03	1.0E+03	1.1E-03	Terr Habitat
1,1-Dichloroethane	75-34-3	3.6E+00	1.6E+04	1.6E+01	2.3E+05	3.7E+02	7.1E+04	1.1E+01	2.1E+01	2.0E-01	3.1E-01	1.7E+03	5.0E+02	1.0E+03	1.0E+03	2.0E-01	Leaching
1,2-Dichloroethane	107-06-2	4.7E-01	3.2E+01	2.1E+00	1.4E+02	4.5E+01	1.3E+02	2.9E+01	2.9E+01	7.0E-03	3.1E-02	3.0E+03	1.0E+02	5.0E+02	5.0E+02	7.0E-03	Leaching
1,1-Dichloroethene	75-35-4	--	8.3E+01	--	3.5E+02	--	3.5E+02	4.3E+01	1.3E+02	5.4E-01	4.2E+00	1.2E+03	5.0E+02	1.0E+03	1.0E+03	5.4E-01	Leaching
cis-1,2-Dichloroethene	156-59-2	--	1.9E+01	--	8.5E+01	--	7.8E+01	8.4E+01	9.4E+02	1.9E-01	1.6E+00	2.4E+03	1.0E+02	5.0E+02	5.0E+02	1.9E-01	Leaching
trans-1,2-Dichloroethene	156-60-5	--	1.3E+02	--	6.0E+02	--	5.7E+02	8.4E+01	9.4E+02	6.5E-01	1.4E+01	1.9E+03	5.0E+02	1.0E+03	1.0E+03	6.5E-01	Leaching
2,4-Dichlorophenol	120-83-2	--	2.3E+02	--	3.5E+03	--	1.1E+03	2.1E+00	--	7.5E-03	7.5E-02	5.6E+03	5.0E+02	1.0E+03	1.0E+03	7.5E-03	Leaching
1,2-Dichloropropane	78-87-5	1.0E+00	1.6E+01	4.4E+00	6.6E+01	9.9E+01	6.6E+01	3.1E+01	6.3E+01	6.5E-02	6.5E-02	1.4E+03	1.0E+02	5.0E+02	5.0E+02	6.5E-02	Leaching
1,3-Dichloropropene	542-75-6	5.7E-01	7.2E+01	2.5E+00	3.1E+02	5.3E+01	3.0E+02	3.1E+01	6.3E+01	1.7E-02	4.0E-02	1.6E+03	5.0E+02	1.0E+03	1.0E+03	1.7E-02	Leaching
Dieldrin	60-57-1	3.7E-02	3.5E+00	1.6E-01	4.8E+01	1.1E+00	1.2E+01	9.6E-04	1.1E-01	4.6E-04	6.3E-03	2.4E+01	5.0E+02	1.0E+03	1.0E+03	4.6E-04	Leaching
Diethyl phthalate	84-66-2	--	5.1E+04	--	6.6E+05	--	1.5E+05	1.3E+01	2.7E+01	2.5E-02	2.5E-02	7.7E+02	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching
Dimethyl phthalate	131-11-3	--	--	--	--	--	--	2.1E+01	4.2E+01	3.5E-02	3.5E-02	4.7E+03	5.0E+02	1.0E+03	1.0E+03	3.5E-02	Leaching
2,4-Dimethylphenol	105-67-9	--	1.6E+03	--	2.3E+04	--	7.1E+03	--	--	8.1E+00	8.9E+00	2.4E+04	1.0E+02	5.0E+02	5.0E+02	8.1E+00	Leaching
2,4-Dinitrophenol	51-28-5	--	1.6E+02	--	2.3E+03	--	7.1E+02	--	--	3.0E+00	5.7E+00	8.0E+03	5.0E+02	1.0E+03	1.0E+03	3.0E+00	Leaching
2,4-Dinitrotoluene	121-14-2	2.2E+00	1.6E+02	1.1E+01	2.3E+03	7.9E+01	7.1E+02	--	--	2.3E-02	1.1E+01	7.2E+02	5.0E+02	1.0E+03	1.0E+03	2.3E-02	Leaching
1,4-Dioxane	123-91-1	4.7E+00	8.1E+02	2.2E+01	4.5E+03	2.1E+02	3.4E+03	1.8E+00	1.8E+00	1.7E-04	8.4E-01	1.2E+05	5.0E+02	1.0E+03	1.0E+03	1.7E-04	Leaching
Dioxin (2,3,7,8-TCDD)	1746-01-6	4.8E-06	5.1E-05	2.2E-05	7.2E-04	1.5E-04	2.0E-04	1.3E-05	9.9E-05	3.0E-01	3.0E-01	3.0E-01	5.0E+02	1.0E+03	1.0E+03	4.8E-06	Canc-Risk
Endosulfan	115-29-7	--	4.2E+02	--	5.8E+03	--	1.5E+03	2.3E-02	3.8E-01	9.8E-03	9.8E-03	1.3E+01	5.0E+02	1.0E+03	1.0E+03	9.8E-03	Leaching
Endrin	72-20-8	--	2.1E+01	--	2.9E+02	--	7.4E+01	1.1E-03	1.1E-03	7.6E-03	7.6E-03	3.0E+01	5.0E+02	1.0E+03	1.0E+03	1.1E-03	Terr Habitat
Ethylbenzene	100-41-4	5.9E+00	3.4E+03	2.6E+01	2.1E+04	5.4E+02	1.5E+04	9.0E+01	4.3E+02	4.3E-01	4.3E-01	4.9E+02	5.0E+02	1.0E+03	1.0E+03	4.3E-01	Leaching
Fluoranthene [PAH]	206-44-0	--	2.4E+03	--	3.0E+04	--	6.7E+03	6.9E-01	1.2E+05	8.6E+01	8.6E+01	8.6E+01	5.0E+02	1.0E+03	1.0E+03	6.9E-01	Terr Habitat
Fluorene [PAH]	86-73-7	--	2.4E+03	--	3.0E+04	--	6.7E+03	--	--	6.0E+00	6.0E+00	9.4E+01	5.0E+02	1.0E+03	1.0E+03	6.0E+00	Leaching
Heptachlor	76-44-8	1.2E-01	3.5E+01	5.3E-01	4.8E+02	3.7E+00	1.2E+02	2.5E-01	5.0E-01	4.4E+01	4.4E+01	4.4E+01	1.0E+03	2.5E+03	2.5E+03	1.2E-01	Canc-Risk
Heptachlor epoxide	1024-57-3	6.2E-02	9.1E-01	2.8E-01	1.3E+01	1.9E+00	3.2E+00	--	--	1.8E-04	6.0E-03	1.2E+01	1.0E+03	2.5E+03	2.5E+03	1.8E-04	Leaching
Hexachlorobenzene	118-74-1	1.8E-01	5.6E+01	7.8E-01	7.7E+02	7.7E+00	2.0E+02	1.3E+02	2.5E+02	8.0E-04	8.2E-02	2.3E-01	5.0E+02	1.0E+03	1.0E+03	8.0E-04	Leaching
Hexachlorobutadiene	87-68-3	1.2E+00	7.8E+01	5.3E+00	1.2E+03	1.0E+02	3.5E+02	--	--	2.8E-02	6.2E-02	1.7E+01	5.0E+02	1.0E+03	1.0E+03	2.8E-02	Leaching
g-Hexachlorocyclohexane (Lindane)	58-89-9	5.5E-01	2.1E+01	2.5E+00	2.9E+02	1.6E+01	7.4E+01	7.4E+00	1.5E+01	7.4E-03	7.4E-03	1.2E+02	5.0E+02	1.0E+03	1.0E+03	7.4E-03	Leaching
Hexachloroethane	67-72-1	1.8E+00	3.8E+01	7.8E+00	3.7E+02	1.3E+02	1.2E+02	--	--	1.9E-02	9.2E-02	6.7E+01	5.0E+02	1.0E+03	1.0E+03	1.9E-02	Leaching
Indeno[1,2,3-c,d]pyrene [PAH]	193-39-5	1.1E+00	--	2.1E+01	--	1.1E+02	--	4.8E-01	9.5E-01	1.6E+01	3.2E+01	2.3E+00	5.0E+02	1.0E+03	1.0E+03	4.8E-01	Terr Habitat
Lead	7439-92-1	8.2E+01	8.0E+01	3.8E+02	3.2E+02	2.7E+03	1.6E+02	3.2E+01	3.2E+01	--	--	--	--	--	--	3.2E+01	Terr Habitat
Mercury (elemental)	7439-97-6	--	1.3E+01	--	1.9E+02	--	4.4E+01	1.5E+01	2.0E+01	--	--	--	5.0E+02	1.0E+03	1.0E+03	1.3E+01	NC-Hazard
Methoxychlor	72-43-5	--	3.5E+02	--	4.8E+03	--	1.2E+03	1.3E-01	4.1E+03	1.3E-02	1.3E-02	1.6E+01	5.0E+02	1.0E+03	1.0E+03	1.3E-02	Leaching
Methylene chloride	75-09-2	1.9E+00	3.1E+02	2.5E+01	2.5E+03	4.9E+02	1.4E+03	9.8E-01	2.0E+00	1.2E-01	1.9E-01	3.3E+03	5.0E+02	1.0E+03	1.0E+03	1.2E-01	Leaching
Methyl ethyl ketone	78-93-3	--	2.7E+04	--	2.0E+05	--	1.2E+05	4.4E+01	8.8E+01	6.1E+00	1.5E+01	2.8E+04	5.0E+02	1.0E+03	1.0E+03	6.1E+00	Leaching
Methyl isobutyl ketone	108-10-1	--	3.4E+04	--	1.4E+05	--	1.4E+05	--	--	3.6E-01	5.1E-01	3.4E+03	1.0E+02	5.0E+02	5.0E+02	3.6E-01	Leaching
Methyl mercury	22967-92-6	--	6.3E+00	--	8.2E+01	--	1.9E+01	3.4E-02	3.4E-02	--	--	--	1.0E+02	5.0E+02	5.0E+02	3.4E-02	Terr Habitat
2-Methylnaphthalene	91-57-6	--	2.4E+02	--	3.0E+03	--	6.7E+02	--	--	8.8E-01	8.8E-01	3.8E+02	5.0E+02	1.0E+03	1.0E+03	8.8E-01	Leaching
Methyl tertiary butyl ether (MTBE)	1634-04-4	4.7E+01	1.6E+04	2.1E+02	6.6E+04	4.1E+03	6.5E+04	3.1E+01	6.3E+01	2.8E-02	2.5E+00	9.0E+03	1.0E+02	5.0E+02	5.0E+02	2.8E-02	Leaching

January 2019 (Rev. 1)	Summary of Soil ESLs (mg/kg)														
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Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas								
Molybdenum	7439-98-7	--	3.9E+02	--	5.8E+03	--	1.8E+03	6.9E+00	4.0E+01	--	--	--	--	--	--	6.9E+00	Terr Habitat
Naphthalene [PAH]	91-20-3	3.8E+00	1.3E+02	1.7E+01	5.8E+02	4.0E+02	5.0E+02	7.5E-01	2.8E+01	4.2E-02	1.2E+00	2.8E+02	5.0E+02	1.0E+03	1.0E+03	4.2E-02	Leaching
Nickel	7440-02-0	1.5E+04	8.2E+02	6.4E+04	1.1E+04	1.7E+03	8.6E+01	1.3E+02	3.4E+02	--	--	--	--	--	--	8.6E+01	NC-Hazard
Pentachlorophenol	87-86-5	1.0E+00	2.5E+02	4.0E+00	2.8E+03	2.0E+01	5.6E+02	1.3E-02	3.9E+01	9.8E-02	7.7E-01	5.1E+01	5.0E+02	1.0E+03	1.0E+03	1.3E-02	Terr Habitat
Perchlorate	7790-98-9	--	5.5E+01	--	8.2E+02	--	2.5E+02	--	--	--	--	--	--	--	--	5.5E+01	NC-Hazard
Petroleum - Gasoline	--	--	4.3E+02	--	2.0E+03	--	1.8E+03	1.2E+02	1.2E+02	1.1E+03	4.9E+03	1.0E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Stoddard Solvent	--	--	2.6E+02	--	1.4E+03	--	1.1E+03	2.6E+02	2.6E+02	1.3E+03	8.0E+03	2.3E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Jet Fuel	--	--	2.7E+02	--	1.4E+03	--	1.1E+03	2.6E+02	2.6E+02	1.3E+03	8.0E+03	2.3E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Diesel	--	--	2.6E+02	--	1.2E+03	--	1.1E+03	2.6E+02	2.6E+02	1.1E+03	7.3E+03	2.3E+03	5.0E+02	1.0E+03	1.0E+03	2.6E+02	NC-Hazard
Petroleum - HOPs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Petroleum - Motor Oil	--	--	1.2E+04	--	1.8E+05	--	5.4E+04	1.6E+03	1.6E+03	--	--	5.1E+03	--	--	--	1.6E+03	Terr Habitat
Phenanthrene [PAH]	85-01-8	--	--	--	--	--	--	7.8E+00	1.6E+01	1.1E+01	1.1E+01	6.9E+01	5.0E+02	1.0E+03	1.0E+03	7.8E+00	Terr Habitat
Phenol	108-95-2	--	2.3E+04	--	3.5E+05	--	9.8E+04	9.4E+00	9.4E+00	1.6E-01	1.8E+01	1.0E+05	5.0E+02	1.0E+03	1.0E+03	1.6E-01	Leaching
Polychlorinated biphenyls (PCBs)	1336-36-3	2.3E-01	--	9.4E-01	--	5.5E+00	--	1.1E+00	1.1E+00	3.3E+02	3.3E+02	3.3E+02	5.0E+02	1.0E+03	1.0E+03	2.3E-01	Canc-Risk
Pyrene [PAH]	129-00-0	--	1.8E+03	--	2.3E+04	--	5.0E+03	4.7E+03	9.9E+04	4.5E+01	4.5E+01	4.5E+01	5.0E+02	1.0E+03	1.0E+03	4.5E+01	Leaching
Selenium	7782-49-2	--	3.9E+02	--	5.8E+03	--	1.7E+03	2.4E+00	5.5E+00	--	--	--	--	--	--	2.4E+00	Terr Habitat
Silver	7440-22-4	--	3.9E+02	--	5.8E+03	--	1.8E+03	2.5E+01	5.0E+01	--	--	--	--	--	--	2.5E+01	Terr Habitat
Styrene	100-42-5	--	5.7E+03	--	3.3E+04	--	2.5E+04	2.2E+01	4.3E+01	9.2E-01	1.0E+01	8.7E+02	5.0E+02	1.0E+03	1.0E+03	9.2E-01	Leaching
tert-Butyl alcohol	75-65-0	--	--	--	--	--	--	--	--	7.5E-02	1.1E+02	3.2E+05	1.0E+02	5.0E+02	5.0E+02	7.5E-02	Leaching
1,1,1,2-Tetrachloroethane	630-20-6	2.0E+00	2.3E+03	8.9E+00	3.5E+04	1.9E+02	1.1E+04	--	--	1.7E-02	1.1E-01	7.0E+02	1.0E+02	5.0E+02	5.0E+02	1.7E-02	Leaching
1,1,2,2-Tetrachloroethane	79-34-5	6.1E-01	1.6E+03	2.7E+00	2.3E+04	4.9E+01	7.1E+03	--	--	1.8E-02	5.8E-02	1.9E+03	5.0E+02	1.0E+03	1.0E+03	1.8E-02	Leaching
Tetrachloroethene	127-18-4	5.9E-01	8.2E+01	2.7E+00	3.9E+02	3.3E+01	3.5E+02	4.5E+00	4.3E+01	8.0E-02	8.0E-02	1.7E+02	5.0E+02	1.0E+03	1.0E+03	8.0E-02	Leaching
Thallium	7440-28-0	--	7.8E-01	--	1.2E+01	--	3.5E+00	1.8E+00	4.5E+00	--	--	--	--	--	--	7.8E-01	NC-Hazard
Toluene	108-88-3	--	1.1E+03	--	5.3E+03	--	4.7E+03	1.4E+02	6.6E+02	3.2E+00	1.0E+01	8.1E+02	5.0E+02	1.0E+03	1.0E+03	3.2E+00	Leaching
Toxaphene	8001-35-2	5.1E-01	--	2.2E+00	--	1.4E+01	--	--	--	2.5E+02	2.5E+02	2.5E+02	5.0E+02	1.0E+03	1.0E+03	5.1E-01	Canc-Risk
1,2,4-Trichlorobenzene	120-82-1	2.4E+01	5.9E+01	1.1E+02	2.6E+02	8.5E+02	2.4E+02	1.6E+01	3.0E+01	1.2E+00	6.0E+00	4.2E+02	5.0E+02	1.0E+03	1.0E+03	1.2E+00	Leaching
1,1,1-Trichloroethane	71-55-6	--	1.7E+03	--	7.3E+03	--	7.2E+03	2.2E+01	4.4E+01	7.0E+00	7.0E+00	6.5E+02	5.0E+02	1.0E+03	1.0E+03	7.0E+00	Leaching
1,1,2-Trichloroethane	79-00-5	1.2E+00	1.5E+00	5.1E+00	6.4E+00	1.1E+02	6.3E+00	1.0E+02	2.0E+02	7.6E-02	7.9E-02	2.2E+03	1.0E+02	5.0E+02	5.0E+02	7.6E-02	Leaching
Trichloroethene	79-01-6	9.5E-01	4.2E+00	6.1E+00	1.9E+01	1.3E+02	1.8E+01	8.1E+00	2.5E+02	8.5E-02	8.5E-02	7.0E+02	5.0E+02	1.0E+03	1.0E+03	8.5E-02	Leaching
2,4,5-Trichlorophenol	95-95-4	--	7.8E+03	--	1.2E+05	--	3.5E+04	5.5E+00	1.0E+01	2.9E+00	2.9E+00	1.2E+04	5.0E+02	1.0E+03	1.0E+03	2.9E+00	Leaching
2,4,6-Trichlorophenol	88-06-2	9.9E+00	7.8E+01	4.7E+01	1.2E+03	3.5E+02	3.5E+02	5.5E+00	1.0E+01	4.0E-02	3.1E+01	1.9E+03	1.0E+02	5.0E+02	5.0E+02	4.0E-02	Leaching
1,2,3-Trichloropropane	96-18-4	2.3E-02	4.9E+00	1.1E-01	2.1E+01	8.3E-01	2.0E+01	--	--	1.1E-04	1.3E-04	1.4E+03	1.0E+02	5.0E+02	5.0E+02	1.1E-04	Leaching
Vanadium	7440-62-2	--	3.9E+02	--	5.8E+03	--	4.7E+02	1.8E+01	1.8E+01	--	--	--	--	--	--	1.8E+01	Terr Habitat
Vinyl chloride	75-01-4	8.3E-03	7.0E+01	1.5E-01	3.8E+02	3.4E+00	3.0E+02	4.3E+00	8.5E+00	1.5E-03	1.5E-03	3.9E+03	5.0E+02	1.0E+03	1.0E+03	1.5E-03	Leaching
Xylenes	1330-20-7	--	5.8E+02	--	2.5E+03	--	2.4E+03	5.5E+01	2.1E+02	2.1E+00	1.0E+01	2.7E+02	5.0E+02	1.0E+03	1.0E+03	2.1E+00	Leaching
Zinc	7440-66-6	--	2.3E+04	--	3.5E+05	--	1.1E+05	3.4E+02	3.4E+02	--	--	--	--	--	--	3.4E+02	Terr Habitat

Notes:
- Cadmium (Water): Groundwater levels do not apply to cadmium in soil so no soil level are listed.
- Petroleum - HOPs: Soil ESLs have not been developed at this time.

Abbreviations:
Canc - Cancer
Com/Ind - Commercial/Industrial
Contam - Contamination
CW - Construction Worker
DDD - Dichlorodiphenyldichloroethane
DDE - Dichlorodiphenyldichloroethene

January 2019 (Rev. 1)	Summary of Soil ESLs (mg/kg)												
------------------------------	-------------------------------------	--	--	--	--	--	--	--	--	--	--	--	--

Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commerical/ Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/ Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/ industrial areas								

DDT - Dichlorodiphenyltrichloroethane
 Exp - Exposure
 HOPs - Hydrocarbon Oxidation Products (biodegradation metabolites and photo-oxidation products of petroleum hydrocarbons). See User's Guide Chapter 4 for further information.
 NC - Noncancer
 Odor/Nuis - Odor Nuisance
 PAH - Polycyclic aromatic hydrocarbon
 Res - Residential
 TCDD - Tetrachlorodibenzodioxin
 Terr - Terrestrial

APPENDIX

C

SEARS AUTOMOTIVE
CENTER CLOSURE
PLAN



**FIRE DEPARTMENT
SANTA CLARA COUNTY**



14700 Winchester Blvd., Los Gatos, CA 95032-1818
(408) 378-4010 • (408) 378-9342 (fax) • www.sccfd.org

Location	10123 N. Wolfe Rd	Cupertino
Name of Business	VALLCO FASHION MALL - SEARS	

THE BUSINESS LISTED ABOVE, HAVING APPLIED PURSUANT TO THE PROVISIONS OF **Cupertino Municipal Code, Chapter 9.12** IS AUTHORIZED TO COMMENCE WITH THE FOLLOWING PROJECT:

Facility Closure **AG HazMat Closure**

SUBJECT TO COMPLIANCE WITH APPLICABLE CODES AND ORDINANCES AND THE FOLLOWING CONDITIONS:

ANY VIOLATION OF THESE PROVISIONS MAY BE GROUNDS FOR REVOCATION OF PERMIT

NOTICE
This permit does not take the place of any license required by law and is not transferable. Any change in the use, or occupancy of premises shall require a new permit.

PERMIT	19 1122	POST ON PREMISES	Fire Prevention Division PEREZ, LORENZO	Initials <i>L.P.</i>
--------	---------	------------------	--	-------------------------

Form #91

Mailing Address
WSP USA
 2025 Gateway Place Suite 348
 San Jose, CA 95110
 Attention Richard Freudenberger

PERMIT ISSUED: 4/11/19
 PERMIT EXPIRES: 10/11/19
 FEE PAID: \$90.00
 DATE PAID: 3/28/19

FIRE PREVENTION COPY CUT OFF ABOVE AND PLACE IN ADDRESS FILE

Location	10123 WOLFE RD	Cupertino	ISSUED: <u>11 April 2019</u>
Name of Business	VALLCO FASHION MALL -	Type of Activity AG HazMat Closure	EXPIRES: <u>11 October 2019</u>
PERMIT	19 1122	Issued By PEREZ, LORENZO	FEE: <u>\$90.00</u>
			PAID: <u>28 March 2019</u>

Conditions



**FIRE DEPARTMENT
SANTA CLARA COUNTY**

14700 Winchester Blvd., Los Gatos, CA 95032-1818
(408) 378-4010 • (408) 378-9342 (fax) • www.sccfd.org



PLAN REVIEW No. **19 1122**

BLDG PERMIT No. _____

PLAN REVIEW COMMENTS

This closure shall comply with the following:

1. 2016 California Fire Code (CFC), as adopted by the City of Cupertino,
2. Chapter 9.12 of the Cupertino Municipal Code (CMC)

The scope of this plan review includes the following:

- Former Sears Automotive Center Facility Closure-Please notify this office **immediately** if the above description is incorrect so that necessary changes to the plan review may be incorporated.

Inspections:

Comment #1: Visual inspections of the areas to verify that the facility and environment are free of hazardous materials as a result of previous use is required. Please call to schedule inspections to witness conditions and possible sampling of the elevator, piping, and hydraulic lifts including their respective areas. I must observe the sampling of the lead, oil-water separator, acid chamber, and tank potholing. Call 408-341-4443 to set times for facility appointments. [CFC 106.2]

Post Closure Report:

Comment #2: The post closure report containing the final disposition of hazardous materials and analytical results from sampling at Vallco Shopping Mall is required. [CFC 5001.6.3]

APPROVED subject to conditions noted above. Please call to arrange for an inspection at least 48 hours in advance. Applicant is also required to maintain copy of permit application and approval with conditions on site. [CFC 105.3.5]

The applicant and applicant's agents shall carry out the proposed activity in compliance with all laws and regulations applicable thereto, whether specified or not, and in complete accordance with approved plans and specifications. [CFC 105.3.6 and 105.4.4]

This approval shall not be construed to be an approval of a violation of the provisions of the California Fire Code or of other laws or regulations of the jurisdiction. Any inspections presuming to give authority to violate or waive provisions of such laws or regulations shall not be

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
CUP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Richard Freudenberger	04-11-2019	1 OF 1
SEC/FLOOR	AREA	LOAD	PROJECT DESCRIPTION				PROJECT TYPE OR SYSTEM			
			AG HazMat Closure				Facility Closure			
NAME OF PROJECT						LOCATION				
VALLCO FASHION MALL - SEARS						10123 N. Wolfe Rd Cupertino				
TABULAR FIRE FLOW						REDUCTION FOR FIRE SPRINKLERS	REQUIRED FIRE FLOW @ 20 PSI		BY	
						<input type="text"/>			Perez, Lorenzo	

Organized as the Santa Clara County Central Fire Protection District

Serving Santa Clara County and the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga



March 26, 2019

Mr. Lorenzo Perez
Hazardous Materials Specialist
Santa Clara County Fire Department
14700 Winchester Blvd.
Los Gatos, CA 95032

Subject: Closure Plan for Former Sears Automotive Center, Former Vallco Shopping Mall

Dear Mr. Perez,

This Closure Plan documents and presents a specific plan to address each of the items identified and discussed during your October 9, 2018 inspection of the former Sears Automotive Center located in the southwestern corner parking area of the former Vallco Shopping Mall (Site). It also includes items noted in your e-mail to Rick Freudenberger of WSP on March 12, 2019. The purpose of the inspection and the e-mail was to identify the items to be addressed in connection with final closure of the former service center. Present during the inspection were you, on behalf of the Santa Clara County Fire Department (SCCFD); and Rick Freudenberger; Mike Rohde of Sand Hill Property Company; and Paul Hansen of Sand Hill Construction Management.

PRE-DEMOLITION ACTIVITIES

Prior to demolition of the building, WSP will conduct the following activities to assure the proper identification and management of any potentially hazardous building materials during demolition activities:

- 1 Elevator:** The elevator within the building has been decommissioned and the hydraulic oil removed for proper disposal. Documentation regarding this disposal will be provided to the SCCFD.
- 2 Battery Storage Areas:** Wipe samples from the floors and lower portions of the walls in the battery storage areas in the basement and first floor will be collected and analyzed for lead. Locations of wipe samples are shown in the attached photo log. A total of approximately 52 wipe samples for analysis of lead are proposed. Results will be reported to the SCCFD and include comparisons to the applicable lead wipe standard of two hundred and fifty micrograms per square foot ($250\mu\text{g}/\text{ft}^2$) for interior horizontal surfaces;. The results of the Report will provide the demolition contractor with the necessary information to ensure that any lead containing materials have been properly identified and will be safely removed and properly disposed of during demolition activities.
- 3 Polychlorinated Biphenyls (PCBs):** Samples will be taken of any caulk/building materials suspected of containing PCBs. Locations of material samples will be determined based on field observations. Results will be reported to the SCCFD and include comparisons to applicable PCB standards.
- 4 Piping:** Piping that formerly distributed grease, oil, and other petroleum fluids remains along interior building walls, ceilings and the basement. In some areas, concrete floor and walls show staining from residual petroleum liquids, most notably in the basement. Oil stains on the floor were also observed in the area of two former air compressors. Major stained areas will be cleaned prior to demolition and the



pipings and oil stained concrete will be segregated and disposed of properly. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.

- 5 Hydraulic Lifts: There are a number of former hydraulic lifts within the service bay. The lift cylinders have been removed and the steel casings filled with concrete. The lifts in the northern portion of the building do not extend into the basement and hydraulic fluid piping and reservoirs may remain in these lifts. The steel casings for all of the former hydraulic lifts will be removed and the area around/within the casings will be inspected to ensure that any residual piping/reservoirs are cleaned/removed and any residual oil is removed for proper disposal. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.
- 6 Alleged Underground Storage Tank (UST) Location: Two exploratory trenches that are approximately 10 feet long will be excavated to about five feet below ground surface in the area of the alleged UST; the trenches will be perpendicular to each other to create an 'X' with the center of the 'X' located at a concrete square located west of the former Sears automotive building (Figure 1). This concrete square location has been presumed to be a possible access point for an alleged UST that would have been located east of and between two former oil USTs removed in 1994.

For your information, to address the possibility that any USTs remain onsite, WSP performed a geophysical GPR survey on January 25, 2019 around the former Sears Automotive Center. The survey consisted of a metal sweep performed with a Fisher TW-6 MiScope to determine the presence of any metal pipes leading to or from the suspected area of the former tanks removed in 1994 and a ground penetrating radar (GPR) scan performed with a MALA easy locator to determine if there were any indications of any underground storage tank present beneath the ground surface. The survey extended across the area proposed above for the exploratory trenches and showed no evidence of any existing underground tanks there or on the west or east sides of the Sears automotive building. The geophysical survey report is attached.

DURING DEMOLITION ACTIVITIES

WSP will conduct the following additional activities during demolition:

- 1 Stained Equipment: Any equipment/tanks/surfaces stained with petroleum products (not identified above) will be segregated and disposed of properly. Documentation for the disposal of any hazardous materials will be provided to the SCCFD.
- 2 Oil-Water Separator and Acid Neutralization Chamber: A below-ground oil/water separator exists outside the northeast corner of the building and a former acid neutralization chamber (previously emptied and closed by and filling with gravel) is located near the southeastern corner of the building (Figure 1). The oil/water separator and the acid neutralization chamber will be cleaned, as necessary, and the units removed for proper disposal. Following removal of the oil-water separator and acid neutralization chamber and any associated piping, soil samples will be collected from beneath the units and along the underground piping paths to determine if there were any significant releases. Preliminary proposed sample locations are shown on Figure 1 (attached). The soil samples will be analyzed for the following constituents per Santa Clara County guidelines :
 - TPHG and TPHD by EPA method 8015 (fuel scan)
 - Hexane Extractable Materials by EPA 9071B



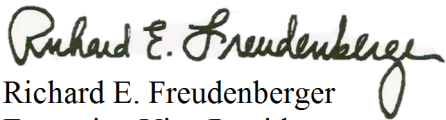
- Volatile Organic Compounds, w/chlorinated hydrocarbons (full scan) by EPA method 8260B
 - PCB's by EPA method 8082A
 - Cd, Cr, Pb, Ni, and Zn by EPA 6010B
 - Semi Volatile Organic Compounds (SVOCs) including Polycyclic Aromatic Hydrocarbons (PAHs) by EPA method 8270
- 3 Unknown UST : If any previously undetected UST and/or associated piping is discovered during the exploratory trenches proposed above, appropriate measures will be taken and regulatory permits will be obtained to arrange for removal and appropriate sampling of surrounding soils (beneath any piping and the UST) to obtain tank closure.

Documentation for the disposal of any hazardous materials removed during demolition activities will be provided to the SCCFD.

Following your review and approval of this Closure Plan, we will provide information concerning scheduling of the noted activities.

Please don't hesitate to contact us if you have any questions, comments, or require additional information.

Kind regards,



Richard E. Freudenberger
Executive Vice President

Encl.

cc: Mike Rohde, Sand Hill Property Company
Paul Hansen, Sand Hill Construction Management



PHOTOGRAPHIC LOG

Sand Hill Properties	Former Vallco Mall Cupertino, California	31401588.001
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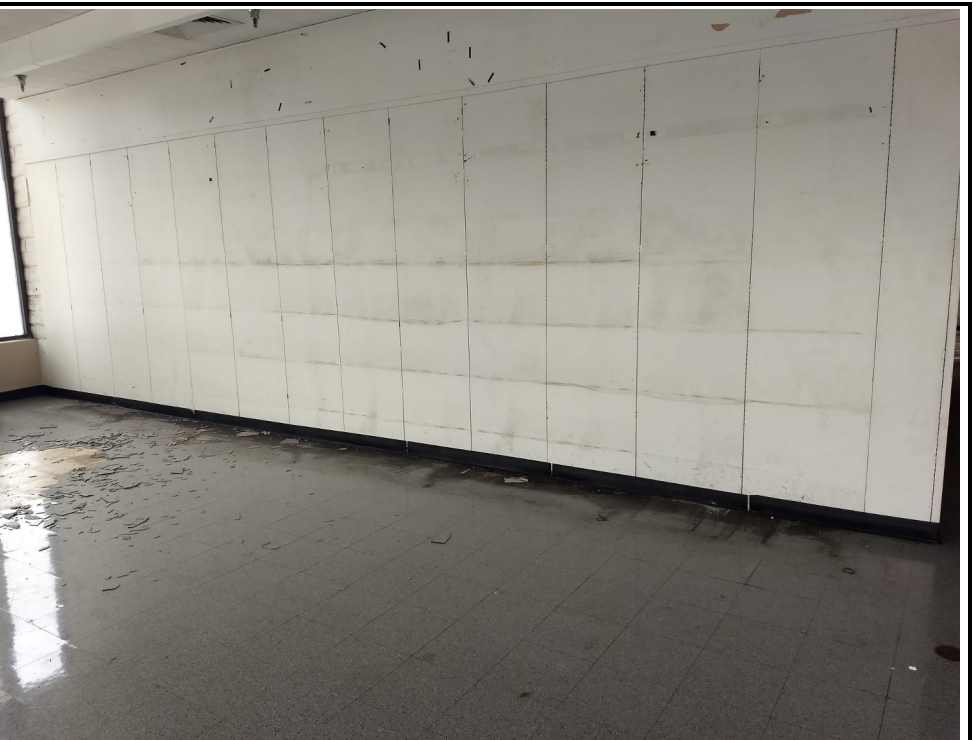
Photo No.	Date
1	March 25, 2019

Northeast corner of former Sears Automotive Building, first floor.
Three wipe samples will be collected along the floor and three along the wall.



Photo No.	Date
2	March 25, 2019

South portion of former Sears Automotive Building, first floor.
Former battery storage area. Three wipe samples will be collected along the floor and three along the wall.






PHOTOGRAPHIC LOG

Sand Hill Properties	Former Vallico Mall Cupertino, California	31401588.001
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Photo No.	Date	
3	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall.</p>		

Photo No.	Date	
4	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected along the floor, adjacent to each side of the side walls and one in the corner. Three wipe samples will be taken on the wall above where each floor sample is collected.</p>		

PHOTOGRAPHIC LOG

Sand Hill Properties	Former Valico Mall Cupertino, California	31401588.001
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Photo No.	Date
5	March 25, 2019

Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall, above the areas of staining.





PHOTOGRAPHIC LOG

Sand Hill Properties	Former Vallico Mall Cupertino, California	31401588.001
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Photo No.	Date	
6	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Two wipe samples to be collected in areas of staining on the floor and two wipe samples along the wall, above the areas of staining.</p>		

Photo No.	Date	
7	March 25, 2019	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall.</p>		

PHOTOGRAPHIC LOG

<p>Sand Hill Properties</p>	<p>Former Valico Mall Cupertino, California</p>	<p>31401588.001</p>
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<p>Photo No.</p>	<p>Date</p>	
<p>8</p>	<p>March 25, 2019</p>	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall, above the areas of staining.</p>		

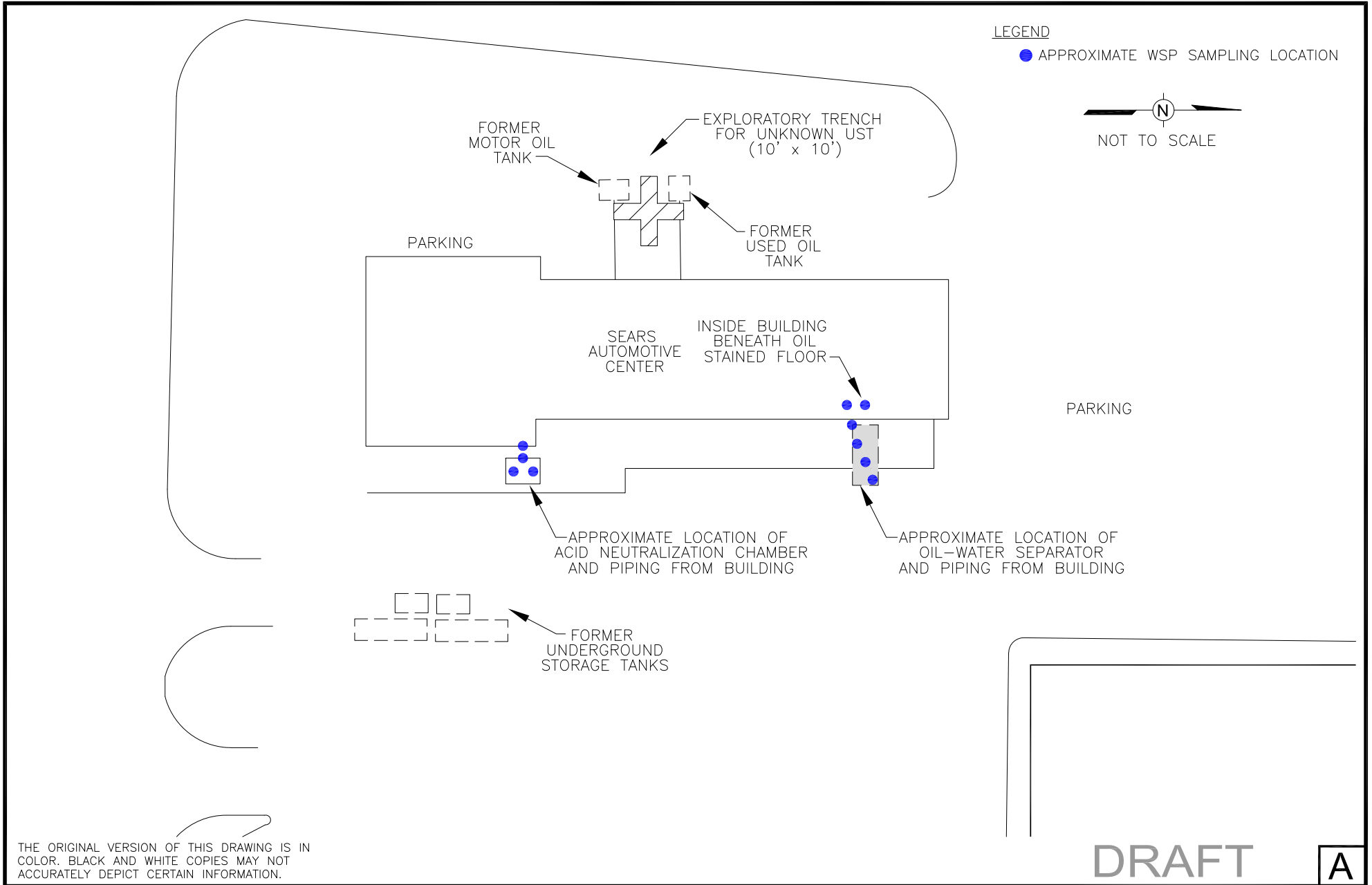
<p>Photo No.</p>	<p>Date</p>	
<p>9</p>	<p>March 25, 2019</p>	
<p>Basement level of the former Sears Automotive Center. Three wipe samples to be collected in areas of staining on the floor and three wipe samples along the wall, above the areas of staining.</p>		



PHOTOGRAPHIC LOG

Sand Hill Properties	Former Valico Mall Cupertino, California	31401588.001
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Photo No.	Date	
10	March 25, 2019	
Basement level of the former Sears Automotive Center. Two wipe samples to be collected on the floor and two along the walls.		



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DRAFT

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 <p>WSP USA Inc. 2025 GATEWAY PLACE SUITE 348 SAN JOSE, CA 95110 TEL: +1 408.453.6100</p>	<p>Figure 1</p>	<p>VALLCO FASHION MALL 10123 NORTH WOLFE ROAD CUPERTINO, CALIFORNIA PREPARED FOR SAND HILL PROPERTY COMPANY PALO ALTO, CALIFORNIA</p>	<p>Drawn By: LS 3/21/2019</p>
	<p>APPROXIMATE SAMPLING LOCATIONS – SEARS AUTOMOTIVE CENTER</p>		<p>Checked:</p> <p>Approved:</p> <p>DWG Name: 314MN1588-009</p>

Job Invoice

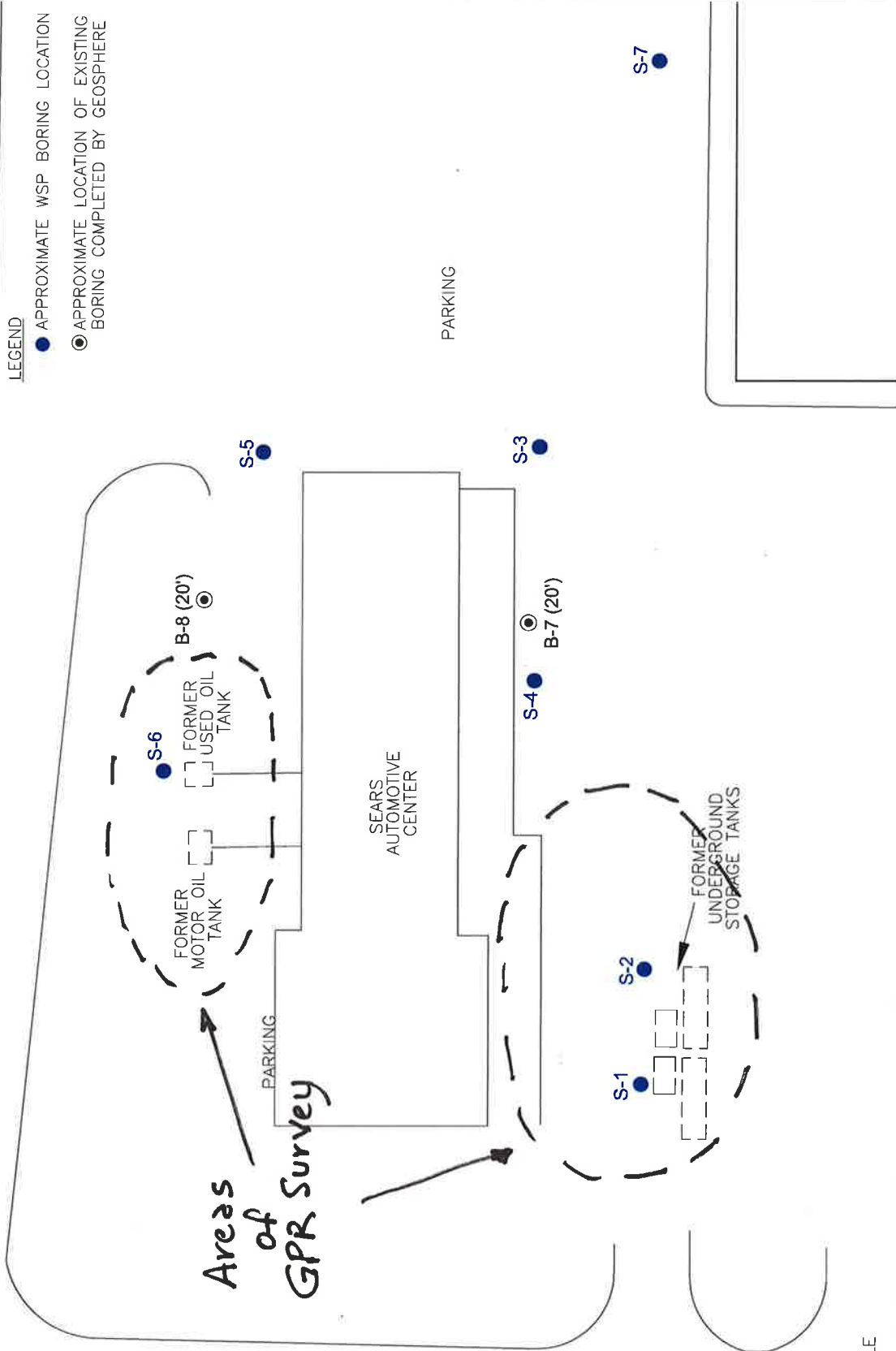
SOLD TO		DATE ORDERED	ORDER TAKEN BY
Sand Hill Property Company		1-23-2019	am
965 Page Mill Rd.		PHONE NO.	CUSTOMER ORDER #
Palo Alto, CA 94304			496
Rick Freudenberger-408-878-0657		JOB LOCATION	STARTING DATE
		Wolfe & Stevens Creek Blvd San Jose	1-28-2019
		JOB PHONE	TERMS
			8:00-10:00

QTY.	MATERIAL	UNIT	AMOUNT	DESCRIPTION OF WORK
	- Scanned areas indicated on map provided by client for suspected UST's in area			Scan for UST's w/GPR
	- Metal Sweep performed with Fisher TW-6 M-Scope and marked results with white paint. Marked out metal pipes found in area. No indication of UST's in areas scanned.			
	- GPR Scan performed with MALA Easy Locator GPR. No indication of UST's in areas scanned.			
	- Results gone over onsite.			
				MISCELLANEOUS CHARGES
				TOTAL MISCELLANEOUS
		LABOR	HRS.	RATE
		AMOUNT		
		Locating w/GPR	2	165 ⁰⁰
				330 00
Tech on site: Nicholas Buller-831-226-9052				
TOTAL MATERIALS		TOTAL LABOR		330 00

WORK ORDERED	TOTAL LABOR	330 00
DATE ORDERED	TOTAL MATERIALS	
DATE COMPLETED	TOTAL MISCELLANEOUS	
CUSTOMER APPROVAL SIGNATURE _____	SUBTOTAL	
AUTHORIZED SIGNATURE <i>Ni Buller</i>	TAX	
	GRAND TOTAL	330 00

LEGEND

- APPROXIMATE WSP BORING LOCATION
- ⊙ APPROXIMATE LOCATION OF EXISTING BORING COMPLETED BY GEOSPHERE



NOT TO SCALE

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

wsp
 WSP USA Inc.
 2025 GATEWAY PLACE
 SUITE 348
 SAN JOSE, CA 95110
 TEL: +1 408.453.6100

Figure 2

APPROXIMATE BORING LOCATION -
 SEARS AUTOMOTIVE CENTER

VALLCO FASHION MALL
 10123 NORTH WOLFE ROAD
 CUPERTINO, CALIFORNIA
 PREPARED FOR
 SAND HILL PROPERTY COMPANY
 PALO ALTO, CALIFORNIA

Drawn By: LS 12/3/2018
 Checked:
 Approved:
 DWG Name: 314MN1588-002

DRAFT

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