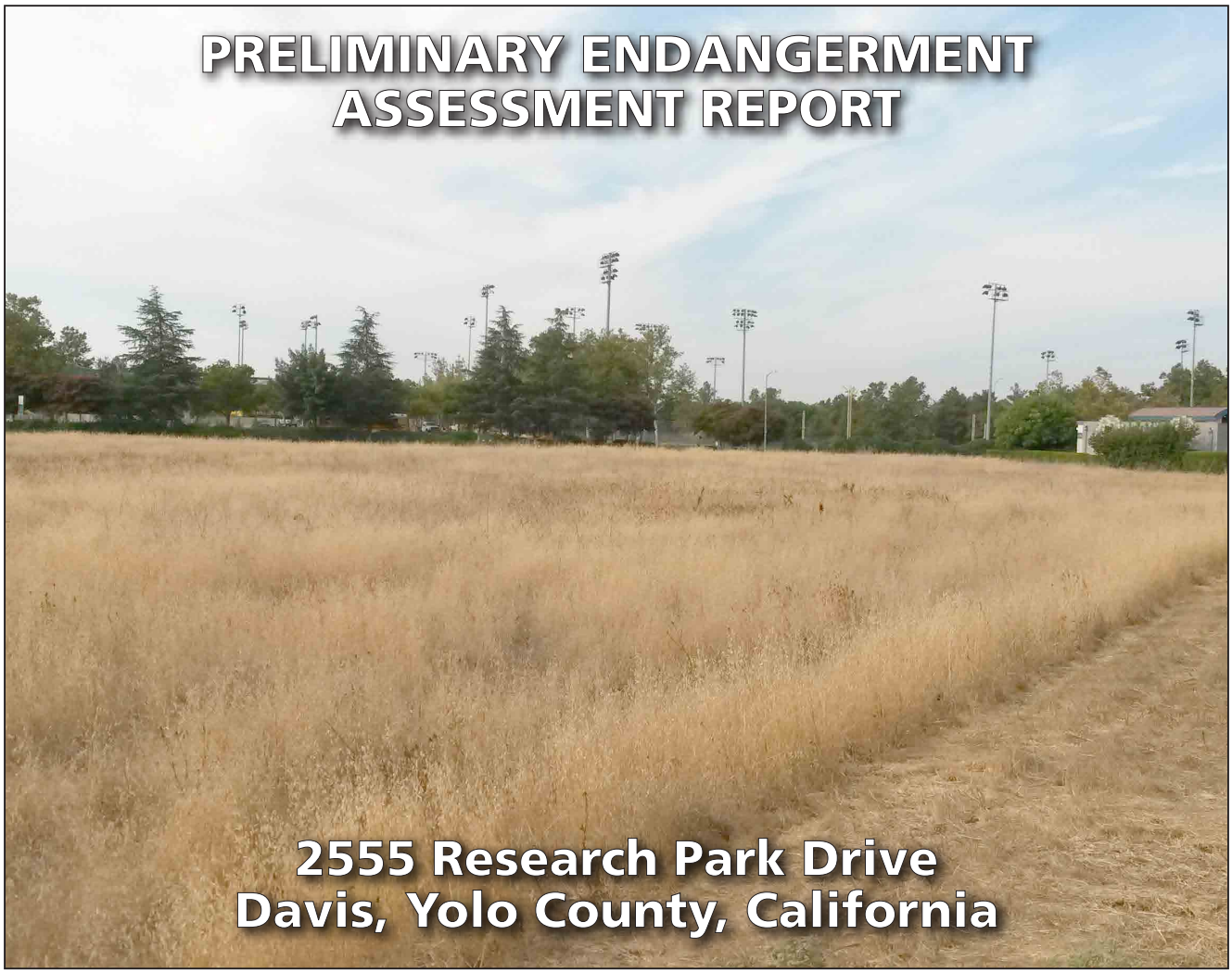
PRELIMINARY ENDANGERMENT ASSESSMENT REPORT



2555 Research Park Drive
Davis, Yolo County, California

PREPARED FOR:

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GEOCON

GEOCON PROJECT NO. S1633-03-01

OCTOBER 2018

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S1633-03-01
October 9, 2018

John Ott
P.O. Box 4400
Davis, California 95617

Subject: PRELIMINARY ENDANGERMENT ASSESSMENT REPORT
2555 RESEARCH PARK DRIVE
DAVIS, YOLO COUNTY, CALIFORNIA

Dear Mr. Ott:

In accordance with your request and our proposal LS-18-295, dated September 7, 2018, we have performed a Preliminary Endangerment Assessment (PEA) of the property at 2555 Research Park Drive (the Site) in Davis, California. We performed the PEA for John Ott to assess the environmental conditions on the Site prior to development of the Site with multi-family residential units.

The accompanying PEA report describes the methodologies, procedures, and findings of the PEA which was performed in general accordance with the California Department of Toxic Substances Control's PEA guidelines.

We appreciate the opportunity to assist you with this project. Please contact us if you have any questions concerning this report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

Rebecca Silva
Project Manager

Jim Brake, PG
Senior Geologist

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ABBREVIATIONS AND ACRONYMS	
ADMP	Asbestos Dust Mitigation Plan
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ATCM	Air Toxics Control Measure
ATL	Advanced Technology Laboratories
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
COC	chemical of concern
CSM	conceptual site model
DQI	data quality indicator
DQO	data quality objectives
DTSC	Department of Toxic Substances Control
ELAP	Environmental Laboratory Accreditation Program
ESA	Environmental Site Assessment
HERO	Human and Ecological Risk Office
MSL	mean sea level
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
NIOSH	National Institute for Occupational Safety and Health
NOA	naturally occurring asbestos
OCP	organochlorine pesticide
PEA	Preliminary Endangerment Assessment
PDF	portable document format
PG	Professional Geologist
QA/QC	quality assurance/quality control
REC	Recognized Environmental Condition
RL	reporting limit
RSL	Regional Screening Level
SL	screening level
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

PRELIMINARY ENDANGERMENT ASSESSMENT REPORT

1.0 INTRODUCTION

Geocon Consultants, Inc. performed a Preliminary Endangerment Assessment (PEA) of the property at 2555 Research Park Drive (the Site) in Davis, California (Figure 1). This PEA report describes the methodologies, procedures, and findings of the PEA.

1.1 Purpose and Objective

The purpose of the PEA was to assess the potential presence of chemicals of concern (COCs) in soil at the Site as the result of a release at the Site or onto the Site from an adjoining or nearby property and, if present, the potential health risk to future site users' (workers and residents). The findings of the PEA were further used to determine if remediation of COCs in soil might be warranted to mitigate health risk in compliance with state and federal standards. The objective of the PEA was to collect representative soil samples throughout the Site and have them analyzed for the COCs to be able to achieve the purpose of the PEA.

1.2 Scope of Work

The scope of work of the PEA included:

- Reviewing the findings of previous environmental assessment of the Site to identify past land uses of potential concern and potential COCs;
- Collecting surface and subsurface soil samples from throughout the Site;
- Analyzing the soil samples for the identified COCs;
- Preparing a human health screening evaluation using the COC concentration data for the soil samples; and
- Preparing this PEA report including conclusions and recommendations.

1.3 Report Format

This report is organized in general accordance with the suggested format in Chapter 3 of the *PEA Guidance Manual* (California Department of Toxic Substances Control [DTSC], 2015) and contains the following sections:

- Section 1.0 Introduction – states the PEA purpose and objectives and general scope of work.
- Section 2.0 Site Description – provides basic location and identifying information for the Site and identifies adjacent properties.
- Section 3.0 Background – describes current and historical site land use, information obtained from environmental regulatory agency records, the Site's regulatory status, and a summary of previous investigations performed for the Site.
- Section 4.0 Apparent Problem – describes the possible sources and types of COCs at the Site with the potential to pose a health risk to future site users and that might warrant further investigation and/or remediation to mitigate risk prior to redevelopment of the Site.

- Section 5.0 Environmental Setting – describes a Conceptual Site Model (CSM), and factors relating to exposure pathways for soil, water, and air.
- Section 6.0 Sampling, Laboratory Analysis, and Results – describes sample collection and analysis and summarizes the laboratory analysis results from the PEA.
- Section 7.0 Human Health Screening Evaluation – describes the human health screening evaluation including the methods used, assumptions, and results.
- Section 8.0 Community Profile – describes the surrounding community, identified concerns, public participation activities to date and recommendations for future public participation activities.
- Section 9.0 Conclusions and Recommendations – provides conclusions based on the laboratory analysis results and human health screening evaluation and provides recommendations for appropriate next steps.
- Section 10.0 Limitations – describes the limitations of this report and its intended use.
- Section 11.0 References – lists references cited in the PEA.

2.0 SITE DESCRIPTION

This section describes the physical setting and other identifying information for the Site.

2.1 Site Identification

1) **Site Name:** 2555 Research Park Drive
2) **Site Address:** 2555 Research Park Drive, Davis, California
3) **Contact Person:** John Ott
4) **Mailing Address:** P.O. Box 4400, Davis, California 95617
5) **Phone Number:** 530-758-6700
6) **Yolo County Assessor's Parcel Number (APN):** 069-530-004
7) **Township, Range, Section and Meridian:** 8N, 2E, Section 14, Mt. Diablo Base and Meridian
8) **Land Use and Zoning:** Current – PD 7-95 (Planned Development)
9) **Current Site Owner:** John Ott

2.2 Physical Setting

The roughly triangular-shaped, 6.7-acre Site is a vacant property located north of the intersection of Research Park Drive and Cowell Boulevard in Davis, California (Figure 1). Interstate 80 (I-80) is adjacent to the north of the Site with mixed commercial facilities beyond the freeway to the north. Residential development is located beyond Cowell Boulevard southeast of the Site and Playfields Park, a sports complex of baseball and soccer fields, is located beyond Research Park Drive southwest of the Site. Comcast offices are located adjacent and west of the Site.

The Site is vegetated with seasonal grasses. Permanent fencing is located along the northern site boundary adjacent to I-80. The United States Geological Survey (USGS) Davis topographic map (USGS, 1992) shows the topography of the Site as relatively flat-lying at an elevation of approximately 43 feet above mean sea level (MSL).

3.0 BACKGROUND

3.1 Current Land Use

The Site is vacant land not currently being used (Figure 2).

3.2 Ownership and Previous Land Use/Operational History

Information obtained from a Phase I Environmental Site Assessment (ESA) of the Site performed by Harris and Lee Environmental Sciences, LLC, in May 2017 (Harris and Lee, 2017) indicates that the Site has never been developed. The Site was used for agricultural purposes from 1934 through at least 1993 as part of a ranch. Sometime between 1993 and 2005 the agricultural use ended and the Site has been vacant and covered in seasonal grass vegetation since that time.

3.3 Hazardous Waste Management

The Phase I ESA identified no records of hazardous waste/hazardous substance/petroleum product use, storage, or releases at the Site. However, pesticides (a hazardous substance) may have been used at the Site during past agricultural use. Additionally, the Site is situated in the Putah Creek watershed which drains terrain in the eastern Coast Ranges where geologic formations include ultramafic rocks. Ultramafic rocks are possible sources of naturally occurring asbestos (NOA) and, as a result, NOA may have been transported downstream to and deposited in the site area.

3.4 Regulatory Status

This PEA is being prepared to comply with a California Environmental Quality Act (CEQA) exemption for the Site. Public Resources Code section 21155.1 states:

"The site of the transit priority project is subject to a preliminary endangerment assessment prepared by an environmental assessor to determine the existence of any release of a hazardous substance on the site and to determine the potential for exposure of future occupants to significant health hazards from any nearby property or activity."

This PEA has been prepared to comply with that requirement. The code does not specify regulatory agency oversight of the PEA. However, the PEA was performed, and this report prepared, in general accordance with the DTSC's PEA guidance.

3.5 Previous Investigations

A stated in Section 3.2, Harris and Lee performed a Phase I ESA of the Site in May 2017. The Phase I ESA identified no recognized environmental conditions (RECs) in relation to the Site or adjacent properties.

4.0 APPARENT PROBLEM

Although the Phase I ESA did not identify any RECs on the Site, it noted past agricultural use of the Site that we consider to be potential environmental concerns and which was the basis for part of the sampling and analysis approach of the PEA. Additionally, we noted other potential environmental concerns (NOA) that the Phase I ESA did not identify and which are further described in this section. Our experience performing PEAs under DTSC oversight for properties with similar past uses, in similar locations, and with similar planned development is that the DTSC would require the environmental concerns described in this section to be assessed by the PEA.

4.1 Pesticides and Arsenic

The Phase I ESA report states that the Site was used for agricultural purposes from 1934 until sometime between 1993 and 2005. Although not identified as an REC by Harris and Lee, pesticides may have been applied to crops on the Site and, as a result, persistent pesticides including organochlorine pesticides (OCPs), which were widely used from the late 1940s until they were banned in 1978, could be present in site soil as a result. Additionally, some pesticides and herbicides were formulated with arsenic and, if used at the Site, could have impacted site soil with arsenic. The DTSC routinely requires assessment of soil on properties planned for residential, school, and other uses for the potential presence of OCPs and arsenic.

4.2 NOA

As described in Section 3.3, the Site is situated in the Putah Creek watershed which drains terrain in the Coast Ranges with ultramafic rocks that are known to contain NOA. Asbestos could be present in site soil as a result of downstream transport and deposition of NOA-containing sediment in the site area. We have assessed soil at other properties in Davis planned for residential use for asbestos and the DTSC requires assessment of soil for asbestos when a property is within 10 miles, or downstream, of an ultramafic formation.

5.0 ENVIRONMENTAL SETTING

This section describes the environmental characteristics of the Site that could affect the fate and transport of COCs and identifies pathways for site users' potential exposure to COCs.

5.1 Conceptual Site Model

We developed a CSM integrating our understanding of onsite and offsite conditions that may have contributed to the presence of COCs in soil at the Site, and potentially complete pathways through which future site receptors might be exposed to the COCs, if present.

5.2 Factors Related to Soil Pathways

5.2.1 Topography

As stated in Section 2.2, the topography of the Site and vicinity is relatively flat-lying with an elevation of approximately 43 feet above MSL (USGS, 1992). The Site is situated in the Putah Creek watershed, which drains terrain with ultramafic geologic formations west of the Site.

5.2.2 Evidence of Impacts

We identified evidence of potential COC impacts to surficial/shallow soil at the Site including pesticides and arsenic from past agricultural use of the Site and NOA associated with the Site's geologic and topographic setting.

5.2.3 Soil Types

Soil observed during sampling at the Site was dry and loose silt with some gravel. We also obtained information concerning soil conditions at and in proximity to the Site from the United States Department of Agriculture's (USDA) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx). Information available on Web Soil Survey indicates that surficial onsite soil is classified as Sycamore silt loam, which is a somewhat poorly drained soil derived from mixed sedimentary alluvium.

5.2.4 Site Access

Access to the Site is from Cowell Boulevard and Research Park Drive, which are adjacent to the south of the Site (Figure 2).

5.3 Factors Related to Water Pathways

5.3.1 Groundwater

None of the potential COCs are readily soluble and therefore their mobility in soil is low and they have a tendency to remain absorbed to soil unless released in large, liquid quantities (i.e., pesticides mixed in

water for loading into containers, leaking or spilling from containers, or wash-out of application equipment). This is not suspected for the Site, however, as the Site is not known to have had facilities for storage or loading of pesticides or wash-out facilities. Depth to groundwater in the site vicinity ranges from approximately 25 to 30 feet. Therefore, transport to and/or in groundwater is not considered an exposure pathway for COCs at the Site.

5.3.2 Surface Water

Putah Creek is the nearest surface water body and is located approximately 3,600 feet south of the Site. Stormwater on the Site is anticipated to flow across the majority of the Site into storm drains along Research Park Drive. Surface water is not considered an exposure pathway for COCs at the Site.

5.4 Factors Related to Air Pathways

Potential exposure of future site occupants to COCs via an air pathway would most likely occur through inhalation of airborne dust containing COCs. However, the proposed multi-family development, including buildings, parking, and landscaping, is planned to cover the entirety of the Site, leaving no native soil exposed at the ground surface. Therefore, airborne dust generation on the Site is generally only possible during future soil-disturbing construction activities. Onsite construction workers and offsite, downwind residents and workers would be the potential receptors. Historical data regarding wind speed and direction for the Davis area is available from Weather Spark (https://weatherspark.com/y/1120/Average-Weather-in-Davis-California-United-States-Year-Round). The average wind direction varies seasonally, but is generally from the west, north, and south; therefore, receptors to the north, south, and east of the Site are potentially downwind and could be exposed to dust containing COCs from the Site. The following table identifies nearby receptors types and their distances and directions from the Site.

Receptor	Facility Name	Address	Distance (feet)	Direction
Commercial	Comcast Offices	2501 Research Park Drive	Adjacent	West
Recreational	Playfields Park	2500 Research Park Drive	Adjacent	Southwest
Residential	Subdivision	Albany Avenue	150 feet	Southeast

6.0 PROJECT AND DATA QUALITY OBJECTIVES

This section summarizes information regarding the data quality objectives (DQO), data quality indicators (DQIs), data review and validation procedures, data management tasks, and assessment oversight associated with project activities.

6.1 Data Quality Objectives and Screening Levels

DQOs are qualitative and quantitative statements for establishing criteria for data quality and for developing data collection designs (United States Environmental Protection Agency [USEPA], 2009). DQOs are developed by a seven-stage strategic planning approach based on the scientific method that is used to prepare for a data collection activity (USEPA 1994, 2007). DQOs are developed to clarify the study objective, define the most appropriate data to collect and the conditions under which to collect the data, and specify tolerable limits on decision-making. DQOs are used to develop a scientific and resource-effective design for data collection. Using the DQO process ensures that the type, quantity, and quality of environmental data used in decision-making will be appropriate for the intended application.

The purpose of the DQOs was to provide data of known and sufficient quality and quantity useful to evaluate potential impacts and manage risk associated with the Site (if any). Data quality requirements were flexible, but based on specific decisions made as a result of specific project activities. The data obtained were of sufficient quality to determine whether site soil has been impacted by COCs at concentrations that equal or exceed respective screening levels.

Based on exposure assumptions and established toxicity criteria, the USEPA and state regulatory authorities developed conservative health risk-based screening levels for many (but not all) COCs to provide aid in determining the need for additional investigation, cleanup, or no-further-action at properties/facilities where a release of a hazardous chemical has occurred. Screening levels for COCs in soil used in this PEA include the USEPA's Regional Screening Levels (RSL) and the DTSC, Human and Ecological Risk Office's (HERO), Note 3 screening levels (SLs). These screening levels were developed as conservative screening tools applicable to potentially impacted sites and are not enforceable cleanup standards. COCs detected in soil at concentrations that are less than respective screening levels are generally assumed not to pose a significant threat to human health or the environment and no further action would be required. When COCs concentrations in soil equal or exceed their respective screening levels, additional characterization or cleanup actions are appropriate.

The USEPA and DTSC have not developed other cleanup "standards". If the screening levels for COCs are believed to be too generalized, overly conservative, or not applicable for a given property/facility, then site-specific, risk-based cleanup levels can be calculated in consultation with the overseeing regulatory agency. Development of site-specific, risk-based cleanup levels requires adherence to certain risk assessment "standards" of process, exposure considerations, and toxicity criteria.

In our effort to be conservative and protective of the health of future site users, we compared OCP concentrations in soil samples collected from the Site to the applicable screening levels for residential land use. For arsenic, which is a naturally occurring element that is often present in soil at concentrations that equal or exceed screening levels for both residential and industrial soil (in fact, residential/industrial screening levels for arsenic are less than reporting limits [RLs] used by many analytical laboratories), we compared arsenic concentrations in site soil to naturally occurring ("background") concentrations (Bradford, 1996). Comparison of arsenic concentrations at a property to background concentrations is accepted by the DTSC.

For NOA, we compared asbestos concentrations in the soil samples to the 0.25% level that the California Air Resources Board (CARB) uses to define "asbestos-containing material". Exceeding this level triggers the requirement for preparing an Asbestos Dust Mitigation Plan (ADMP) prior to soil-disturbing construction activities.

6.2 Project-specific Measurement Quality Objectives

Measurement quality objectives are criteria established to assess the viability and usability of data. They are based on both field and laboratory protocols that examine whether the DQIs meet criteria established for various aspects of data gathering, sampling, or analysis activity. Quantitative DQIs include precision, accuracy, completeness, and sensitivity. Qualitative DQIs include representativeness and comparability.

6.3 Data Review and Validation

We reviewed field and laboratory data to ensure that the type, quantity and quality of data used in decision-making are appropriate for intended applications. Our Project/Technical Manager was responsible for review of field data and final laboratory reports. Analytical laboratory department managers were responsible for review of analytical activities and data.

Field data verification by our Project/Technical Manager was based on (but not limited to) communication with field personnel and review of personnel timesheets, field notes, sample chain-of-custody forms, and other documentation associated with field activities. Our field geologist was responsible for implementing the sampling and documentation procedures and for appropriately communicating information obtained in the field to our Project/Technical Manager.

Our Project/Technical Manager was responsible for review, evaluation, and use of field and laboratory data with respect to qualitative and quantitative DQIs. Suspect data or data failing to meet acceptance criteria were "flagged" with a qualifier identifying the associated problem. Based on his data review and evaluation results, our Project/Technical Manager made judgments regarding whether rejection of data, re-analysis of some samples, re-sampling, or other actions were appropriate to support project DQOs.

Our Project/Technical Manager was responsible for review and approval of draft and final versions of investigative reports prepared by project staff. He was responsible for ensuring that data presented in draft/final reports (e.g., in tables, on figures, and summarized in text) are compatible with accumulated field and laboratory data based on review of field documentation and laboratory reports. Our Project/Technical Manager was responsible for ensuring that the project findings reported are technically accurate and that our associated conclusions and recommendations are technically justifiable.

Laboratory analysts were responsible for preparation of data packages in accordance with laboratory standard operating procedures that require the analyst to submit a data package to a department supervisor for review and verification of the analysis. A data package was approved by a department supervisor prior to sending it to client services for reporting. If there were problems or questions, the supervisor was to send the entire data package back to the analyst for review.

6.4 Data Management

Our Project/Technical Manager was responsible for the collection, storage, review, and use of field and laboratory data. Our field geologist was responsible for field data accumulation and documentation (e.g., in a field logbook) and for transmitting data obtained in the field to our Project/Technical Manager.

Analytical laboratory department managers were responsible for management of analytical data as specified in their document control and data storage procedures. The analytical laboratory project manager was responsible for transmittal of laboratory reports to our Project/Technical Manager.

Field and laboratory data are archived in Geocon's files in hard-copy form, electronically as portable document format (PDF), and/or other appropriate format. Files and individual documents are designated and dated according to a consistent convention to facilitate retrieval and review. Analytical data was transferred to a spreadsheet or word processing program for analysis and/or presentation.

6.5 Assessment Oversight

Our field geologist was responsible for completion of field sampling activities under the assessment oversight of our Project/Technical Manager. To ensure rapid identification of anomalous findings that could require revision of project objectives or activities, assessment oversight (if necessary) was conducted as soon as possible after data become available and information was transmitted from one level of oversight responsibility to another as soon as possible. Anomalous findings were evaluated and addressed immediately by our Project/Technical Manager. Our Project/Technical Manager had the authority to ensure that judgments regarding rejection of data, re-analysis of some samples, re-sampling, or other corrective actions appropriate to support project DQOs were implemented.

Analytical laboratory department managers were responsible for oversight of analysts, analytical data management, and quality assurance processes. The Laboratory Director and the Laboratory Quality Assurance Director, with concurrence of the laboratory department managers, had the authority to direct corrective actions when problems that affect product or service quality were identified (if any).

Our Project/Technical Manager was responsible for assessment oversight of this report. He was responsible for ensuring that the data presented in this report were compatible with accumulated field and laboratory data based on review of field documentation and laboratory reports. Our Project/Technical Manager was responsible for ensuring that the investigation findings reported are technically accurate and that our associated conclusions and recommendations are technically justifiable.

7.0 SOIL SAMPLING AND LABORATORY ANALYSIS RESULTS

This section describes our soil sampling rationale and procedures and field observations and presents the results of laboratory analysis of soil samples.

7.1 Soil Sampling Rationale

The sampling approach was developed based on our knowledge of past use and development of the Site and its current vacant status. OCPs (agricultural), arsenic, and NOA are the COCs at the Site. "Agricultural OCPs" (from pesticide applications) and arsenic (from arsenical pesticides) if used at the Site would likely have been applied as a dust or in a water spray over the entire Site, as the Site was part of a larger area of agricultural fields. No specific locations or areas of the Site were suspected of having had an uncontrolled release and therefore higher OCP or arsenic concentrations than anywhere else on the Site. Therefore, we used a site-wide sampling approach to assess the potential presence of OCPs and arsenic in site soil as described in Section 7.2.

Asbestos from NOA would have been eroded from its source rocks in the Coast Range and transported by alluvial processes to downstream portions of the watershed and deposited over a wide area, over a geologic period of time. Therefore, we used the same site-wide sampling approach to assess the potential presence of NOA in site soil.

7.2 Soil Sampling Procedures

To collect an appropriate number of surface soil samples from the Site for laboratory analysis, we used a systematic random soil sampling approach that exceeded DTSC requirements as described in: *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (DTSC, 2008) and which was consistent with DTSC's PEA guidance (DTSC, 2015). We collected discrete surface soil samples from 16 locations across the Site. We divided the Site into four quadrants of approximate equal area, then divided each quadrant into four sub-quadrants of approximate equal area. We collected one discrete surface soil sample (0 – 6 inches) and one subsurface soil sample (2 – 2.5 feet) from each of the 16 sub-quadrants (Figure 2) using a clean stainless-steel hand-auger. We placed the four discrete surface soil samples from the same quadrant into a one-gallon sealable plastic bag and homogenized the soil to create a composite soil sample for that quadrant. We then filled one laboratory-supplied 8-ounce glass jar and one Ziploc bag with the composited and homogenized soil – the jar for OCP analysis and bag for asbestos analysis. We also filled a second 8-ounce jar from with soil from one discrete soil sample within each quadrant for arsenic analysis. We labeled each sample container with a unique sample identification and placed them in chilled coolers for transportation under standard chain-of-custody protocol to the analytical laboratories.

7.3 Field QA/QC Procedures

Quality Assurance/Quality Control (QA/QC) sampling procedures were adhered to during the field activities. The procedures included changing of disposable gloves and decontaminating the sampling equipment prior to soil sample collection in each quadrant and providing chain-of-custody documentation for each sample collected and transferred to the laboratory for analytical testing. Sampling equipment was decontaminated in an Alconox® solution followed by two deionized water rinses.

Samples collected in each quadrant included sufficient volume for analysis and laboratory QC use.

7.4 Analytical Testing

We retained Advanced Technology Laboratories (ATL) of Signal Hill, California, for analysis of the soil samples for OCPs and arsenic. ATL is accredited by the State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP) (No. 1838). We retained EMSL of San Leandro, California, for analysis of the soil samples for asbestos. EMSL is ELAP- (No. 1620) and American Industrial Hygiene Association-certified (No. 101748).

ATL analyzed the composite soil samples for OCPs by USEPA Method 8081A and the discrete soil samples for arsenic by USEPA Test Method 6010B. Laboratory analysis results are summarized in Section 7.6.

EMSL analyzed the composite soil samples for asbestos by USEPA Method 600/R-93-116 with CARB 435 prep (milling), Level A for 0.25% target analytical sensitivity.

7.5 Field Observations

The Site is vacant and covered with seasonal grass vegetation. Observed surface soil consisted of dry, loose silt with some gravel. We observed no indication of contaminant releases (staining or odors) in the soil.

7.6 Analytical Testing Results

This section summarizes the results of laboratory analysis of surface soil samples. We held the subsurface samples for analysis pending results of analysis of the surface samples. Based on the analysis results for the surface soil samples, the subsurface soil samples were not analyzed. Laboratory analysis results are presented on Tables 1 through 3 and copies of laboratory reports are in Appendix A.

7.6.1 OCPs

As shown on Table 1, the OCPs 4,4'-DDE, 4,4'-DDT, and dieldrin were detected in each of the composite soil samples at maximum concentrations of 17, 3.8, and 9.5 micrograms per kilogram (µg/kg), respectively. These concentrations are orders of magnitude less than the USEPA RSLs for

4,4'-DDE, 4,4'-DDT, and dieldrin in a residential setting of 2,000 µg/kg, 1,900 µg/kg, and 34 µg/kg. There are no DTSC HERO Note 3 SLs for these OCPs.

7.6.2 Arsenic

As shown on Table 2, reported arsenic concentrations ranged from 4.7 to 6.1 milligrams per kilogram (mg/kg). Although these concentrations exceed the residential RSL and Note 3 SL, they are within the range of naturally occurring background concentrations of arsenic in California soils (Bradford, et al, 1996) and show that there has not been a release of arsenic at the Site. As described in Section 6.1, arsenic is a natural mineralogic component of soil and its naturally occurring background concentrations in California soils typically range from 0.6 to 11 mg/kg (and much higher in some areas depending on the mineralogy of the soil's parent material). The DTSC allows comparison of arsenic concentrations in soil to naturally occurring background arsenic concentrations instead of screening levels. We have evaluated soil at numerous locations in and around Davis for arsenic and naturally occurring background concentrations have consistently been within the range cited by Bradford, et al (1996).

7.6.3 Asbestos

As shown on Table 3, Chrysotile asbestos was detected in soil samples Q1-0 and Q2-0 at concentrations less than the target analytical sensitivity of 0.25% and in soil samples Q3-0 and Q4-0 at 0.25%. This value is also the CARB standard that defines "asbestos-containing material", which if exceeded, triggers the requirement to have an ADMP in place prior to construction.

Regulations promulgated by the CARB allow averaging of analysis results to determine the asbestos content of the material being tested. In this case, because two of the four site soil samples contain asbestos at concentrations less than 0.25%, then the average asbestos concentration for soil on the Site is less than 0.25% CARB standard.

However, as a conservative measure, because asbestos was detected in two site soil samples at 0.25%, asbestos worker protection measures (dust control by water application) should be implemented by the contractor(s) performing soil disturbance activities at this location.

7.7 Laboratory Data Quality

We reviewed the laboratory analytical reports to confirm data completeness as compared to the chain-of-custody and test method assignments, holding times, and acceptable QA/QC procedures to verify that the data is of sufficient quality to satisfy the objectives of the PEA.

8.0 HUMAN HEALTH RISK SCREENING EVALUATION

This section describes and presents the results of a human health risk screening evaluation for the COCs detected in soil on the Site. The methods used in the evaluation are in accordance with the *Abandoned Mine Lands Preliminary Assessment Handbook* (DTSC, 1998) and the *PEA Guidance Manual* (DTSC, 2015), and current guidance issued by the DTSC HERO (DTSC 2016). The purpose of the risk screening evaluation was to determine whether present site conditions pose a potential health risk to future site users including site workers and residents.

8.1 Physical Hazards

Because the Site is vacant, not under any current use, and not occupied, the potential risk posed by physical hazards is assumed to be only for site trespassers and construction workers and is minimal.

8.2 Chemical Hazards

8.2.1 Exposure Pathways and Media of Concern

The planned use of the Site is residential (multi-family housing); therefore, this risk screening evaluation assesses potential exposure to COCs detected in soil for residential users of the Site. We assume that potential site users may be exposed to soil from depths of 0 to 10 feet depending on their activities. For example, a construction worker may be exposed to soil at depths of 0 to 10 feet during construction earthwork (e.g., trenching, grading, etc.). A commercial site worker (site maintenance worker) is likely to be exposed only to surface and shallow (less than 5 feet) subsurface soil during landscaping-type activities. A resident is likely to be exposed only to surface soil and this assumption is overly conservative in that the planned development will not result in uncovered/unpaved soil. However, the risk screening evaluation conservatively assumes possible exposure scenarios including: direct-contact with soil, ingestion, and inhalation of soil particulates.

We did not evaluate risk associated with exposure to COCs in groundwater or surface water as drinking water at the Site is anticipated to be supplied by the City of Davis or from other sources.

8.2.2 Chemicals of Concern and Exposure Point Concentrations

We designated OCPs, arsenic, and NOA as the COCs to be assessed at the Site based on the site use history and development as presented in the Phase I ESA and our experience with other similar properties in the site vicinity. OCPs were not detected in site soil samples at concentrations that exceed residential screening levels and arsenic concentrations were within the range of naturally occurring background arsenic; therefore, derivation of exposure point concentrations for risk calculations is not necessary.

8.2.3 Excess Cancer Risk and Hazard Index

As stated above, OCPs were not detected in soil samples collected from the Site at concentrations exceeding residential screening levels. The USEPA RSLs for residential land use are derived at a target risk level of 1×10^{-6} and a target hazard quotient value of 1. As OCP concentrations in site soil are less than their respective RSLs, the risk level or hazard quotient is therefore less than the target risk level or hazard quotient and calculation of excess cancer risk and non-cancer hazard index/quotient is not necessary.

8.2.4 Asbestos Risk to Human Health

Regulatory exposure limits and health hazard data are not currently available for asbestos (as NOA) in soil. Federal regulations governing asbestos define it as the asbestiform variety of the amphibole minerals actinolite, amosite, anthophyllite, crocidolite, and tremolite, and the asbestiform variety of serpentine, chrysotile. Asbestos fibers occurring in industrial materials are considered by the National Institute for Occupational Safety and Health (NIOSH) as potential occupational carcinogens.

As described in Section 7.6.3, two site soil samples had asbestos concentrations equaling the CARB standard of 0.25% and two were less than 0.25% (site average less than 0.25%). The 0.25% standard applies only to the definition of asbestos-containing material in soil and the need to prepare an ADMP prior to soil-disturbing construction activities and is NOT a health risk-based standard.

Although NOA in soil on the Site is not a health risk to future site users, prudence is recommended in dealing with soil containing any NOA. Engineering controls such as wet suppression should be utilized to minimize aerial dispersion of NOA fibers in planned work areas during excavation and construction activities. Further recommendations regarding NOA are provided in Section 10.

8.3 Risk Screening Evaluation Conclusions

The COCs OCPs, arsenic, and NOA do not pose an unacceptable level of health risk for future site users.

9.0 COMMUNITY PROFILE

This community profile summarizes our understanding of the level of awareness and interest in the Site by the community and provides a list of key contacts and provides recommendations for potential additional public participation efforts. Most of the basic site information required in the community profile, including a description of the Site and surrounding land uses and the proximity to residential areas, schools, daycare centers and other sensitive receptors, is provided in Sections 1.0 through 4.0.

9.1 Demographics

United States Census Bureau census 2010 data for Davis shows that Davis has a predominantly Caucasian, middle-income population with approximately 63.9% of the city population listed as Caucasian, 14.3% Hispanic, 0.1% Native American, 22.2% Asian, 2.8% African American, and 5.8% other/two or more races.

Unlike many other valley communities, Davis has somewhat unique demographics with respect to median age (25.2 years), median income ($57,683 in 2016), and median value of owner-occupied housing units ($565,700). Demographics of the city are strongly influenced by UC Davis, the student population of which contributes to the low median age. 73.2% of residents over the age of 25 have a bachelor's degree or higher, which contributes to the higher than average median income. Lack of available housing, low crime rate, the presence of UC Davis, proximity to Sacramento and the Bay Area, and a well-regarded public school system, among other factors, lead to a median home value that is higher than in surrounding communities (City of Davis, 2018).

According to California Employment Development Department 2018 data, most of the jobs in Yolo County are in the service industry (utilities, education, health, leisure and hospitality, etc.), followed by the government sector (predominately local government). The median household income of Yolo County is $49,063. Approximately 19% of the Yolo County population reportedly lives below the poverty line, which is higher than the 14.5% state average (Yolo County, 2018).

9.2 Local Awareness and Interest

On December 30, 2016, the project applicant met with the leadership of the Rosecreek Neighborhood Association. Community meetings were held with neighbors from Rosecreek, Green Terrace, Halsey Circle, and Farragut Circle, as well as with student representatives, in early 2017. On October 16, 2017, the City of Davis Social Services Commission reviewed the project during a public meeting. On December 14, 2017, the City of Davis Bicycling, Transportation, and Street Safety Commission reviewed and provided advisory input on the project during a public meeting. On August 29, 2018, the City of Davis Planning Commission held a public hearing on the project during a public meeting. The City of Davis Social Services Commission received an update on the project in a public meeting on August 27, 2018, and reviewed the project again during a public meeting on September 16, 2018. At each of these meetings, members of the public had the opportunity to comment on the project.

9.3 Key Contacts

Key contacts for the Site with respect to providing information to the public include:

- Corie Calfee, Opterra Law, Inc. – (510) 809-8001:
- John Ott, site owner – (510) 758-6700; and
- Jim Brake, Geocon Consultants, Inc. – (916) 852-9118.

9.4 Recommended Public Participation Activities

A Davis City Council meeting will be conducted to provide final approval of the project. Members of the public will be invited to attend this meeting.

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 Summary and Conclusions

OCPs, arsenic, and NOA were the potential COCs at the Site targeted by the PEA. These COCs were designated because of the past agricultural land use of the Site and regional geologic setting. We assessed the potential presence of these COCs in surface soil samples collected throughout the Site to evaluate potential health risks to future site residents and workers.

10.1.1 OCPs

The OCP concentrations detected in the surface soil samples collected from the Site did not exceed their respective screening levels. The presence of OCPs in soil is likely the result of past routine (of that era) application of pesticides to crops on the Site, but the low concentrations suggest that an uncontrolled release (i.e., a spill or leakage) did not occur on the Site.

10.1.2 Arsenic

Arsenic was detected in the site soil samples at concentrations exceeding residential screening levels, however, the reported arsenic concentrations are within the range of naturally occurring background concentrations in California soils. Arsenic is present in site soil because of it being a natural mineralogic component of soil and the soil's parent material and is not due to an anthropogenic release of an arsenic-bearing substance to the Site.

10.1.3 Asbestos

The average asbestos concentration for the Site is less than 0.25%. As with arsenic, NOA is naturally occurring in soil because of the soil's mineralogic content and is not due to an anthropogenic release of an asbestos-containing substance to the Site. Soil on the Site and in the region surrounding the Site formed in sediment that is in part derived from ultramafic (NOA-bearing) rock formations.

In summary, this PEA has revealed no evidence of a release of a hazardous substances to the Site and no unacceptable health risks for future site users including residents or site workers.

10.2 Recommendations

Under California Code of Regulations (CCR) Title 8 §5208, disturbance of asbestos-containing materials requires wet working methods and possible respiratory protection and air monitoring. The CARB has established protocols outlined in CCR Title 17, §93105 for the implementation of worker health and safety for excavation, grading and transport of NOA-containing soil. Contractors working in areas identified as containing or likely to contain NOA should consult CCR Title 17, §93105 and contact Cal-OSHA to establish the appropriate regulatory protocol and actions necessary for excavation and/or disturbance of asbestos-containing soil. Because the area to be

disturbed within the Site is greater than one acre, an ADMP should be prepared and implemented for construction excavation activities. Asbestos dust control measures should be implemented in accordance with:

- CCR § 93105 – Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (ATCM 93105);
- CCR § 93106 – Asbestos Airborne Toxic Control Measure for Surfacing Applications (ATCM 93106); and
- Yolo – Solano Air Quality Management District (AQMD) rules and guidelines.

Asbestos dust control measures consist of simple, managed and documented moisturizing of soil in accordance with an ADMP prior to and during soil-disturbing construction activities. Air monitoring for asbestos to demonstrate the effectiveness of the dust control measures can also be performed and documented. Implementation of these measures would mitigate potential site hazards to a level of insignificance in compliance with local, state, and federal requirements.

11.0 LIMITATIONS

This PEA report has been prepared solely for John Ott (the Client), in consideration of the Client's requirements. Other parties may rely on the findings and conclusions of the report for informational purposes only. However, the Client and other parties who may rely on the findings and conclusions of the report should recognize that this report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein.

The information contained herein is only valid as of the date of the report, and will require an update to reflect future site visits. Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee of the results of the study is implied within the intent of this report or any subsequent report, correspondence or consultation, either express or implied. The services performed were conducted in accordance with the local standard of care in the geographic region at the time the services were rendered.

12.0 REFERENCES

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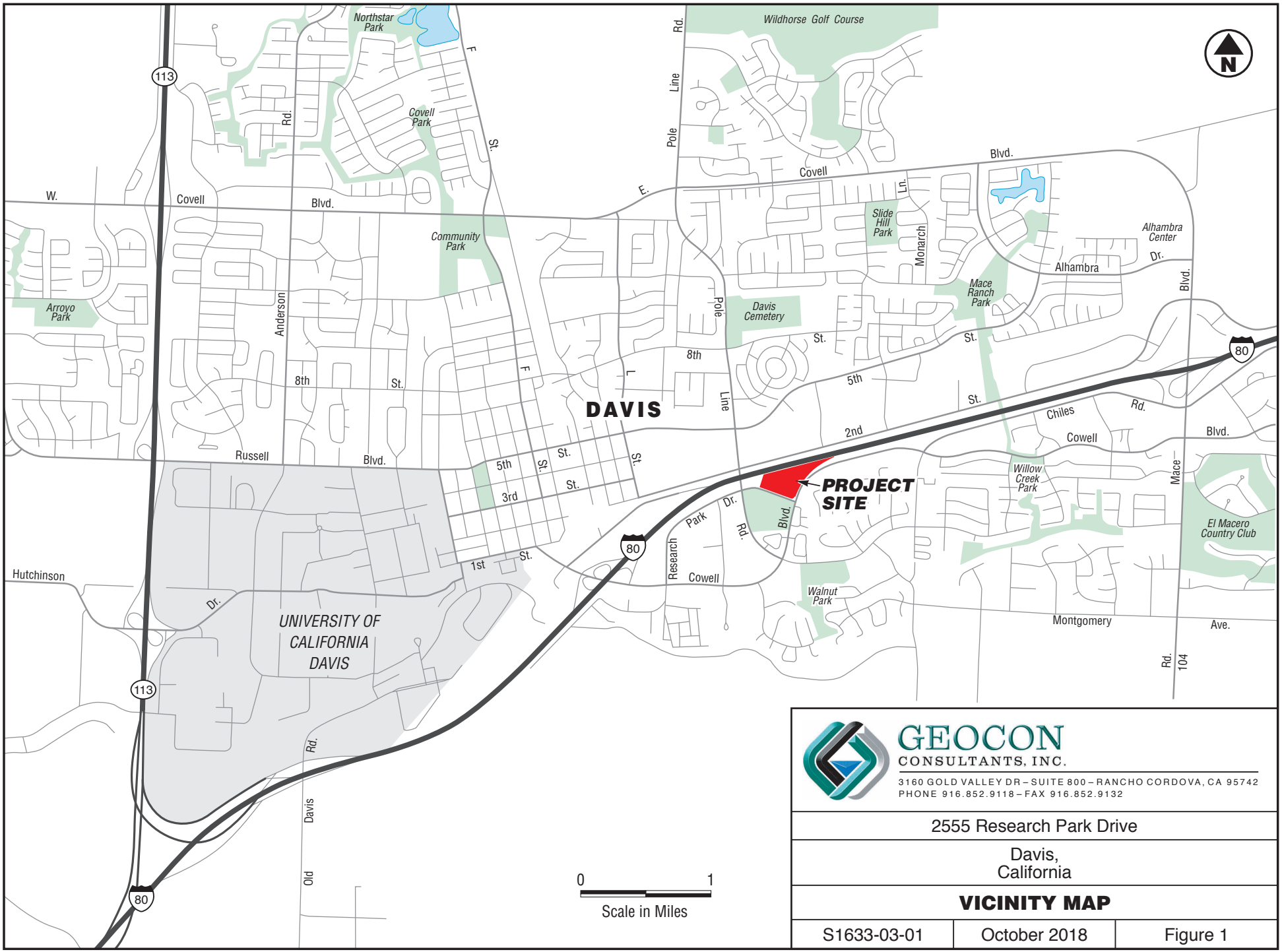

GEOCON
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3160 GOLD VALLEY DR – SUITE 800 – RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 – FAX 916.852.9132

2555 Research Park Drive

Davis,
California

VICINITY MAP

S1633-03-01	October 2018	Figure 1

LEGEND:

Q1A ⊗ Approximate Soil Sample Location

N

0 100

Scale in Feet

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SITE PLAN

S1633-03-01	October 2018	Figure 2

TABLE 1
SUMMARY OF LABORATORY ANALYSIS RESULTS - SOIL
ORGANOCHLORINE PESTICIDES BY USEPA METHOD 8081A
2555 RESEARCH PARK DRIVE
DAVIS, CALIFORNIA

SAMPLE ID	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
	(µg/kg)																					
Q1-0	<2.0	16	3.6	<1.0	<1.0	<1.0	<1.0	<8.5	<1.0	4.8	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5.0	<50
Q2-0	<2.0	16	3.8	<1.0	<1.0	<1.0	<1.0	<8.5	<1.0	9.5	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5.0	<50
Q3-0	<2.0	15	3.0	<1.0	<1.0	<1.0	<1.0	<8.5	<1.0	6.9	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5.0	<50
Q4-0	<2.0	17	3.1	<1.0	<1.0	<1.0	<1.0	<8.5	<1.0	7.8	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5.0	<50
RSLs (µg/kg)	1,900	2,000	1,900	39	86	1,700	300	1,700	---	34	470,000	470,000	---	19,000	---	---	570	---	130	70	320,000	490
HERO Note 3 SLs (µg/kg)	---	---	---	---	---	440	---	440	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
µg/kg = micrograms per kilogram
< = Less than the laboratory reporting limit
RSLs = United States Environmental Protection Agency Regional Screening Levels for residential land use (May 2018)
HERO Note 3 SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office Note 3 screening levels for residential land use (June 2018)

TABLE 2
SUMMARY OF LABORATORY ANALYSIS RESULTS - SOIL
ARSENIC BY USEPA METHOD 6010B
2555 RESEARCH PARK DRIVE
DAVIS, CALIFORNIA

Sample ID	Arsenic (mg/kg)
Q1A-0	4.7
Q2A-0	6.1
Q3A-0	5.1
Q4A-0	5.4
RSLs (mg/kg)	0.68 [c]
HERO Note 3 SLs (mg/kg)	0.11 [c]

Notes:

mg/kg = milligrams per kilogram

RSLs = United States Environmental Protection Agency Regional Screening Levels for residential land use (May 2018)

HERO Note 3 SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office Note 3 screening levels for residential land use (June 2018)

[c] = carcinogen

TABLE 3
SUMMARY OF LABORATORY ANALYSIS RESULTS - SOIL
ASBESTOS BY USEPA METHOD 600/R-93-116 AND CARB 435
2555 RESEARCH PARK DRIVE
DAVIS, CALIFORNIA

SAMPLE ID	SAMPLE DATE	ANALYTICAL METHOD	ASBESTOS %	ASBESTOS TYPE
Q1-0	9/12/2018	PLM	<0.25	Chrysotile
Q2-0	9/12/2018	PLM	<0.25	Chrysotile
Q3-0	9/12/2018	PLM	0.25	Chrysotile
Q4-0	9/12/2018	PLM	0.25	Chrysotile

Notes:
PLM = Polarized Light Microscopy
% = Percent of total sample as asbestos
< = Less than the laboratory reporting limit

APPENDIX A

ADVANCED TECHNOLOGY LABORATORIES

September 14, 2018

Rebecca Silva
Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, CA 95742
Tel: (916) 852-9118
Fax:(916) 852-9132

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1803419
Client Reference : 2555 Research Park Drive, S1633-03-01

Enclosed are the results for sample(s) received on September 13, 2018 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Q1-0	1803419-01	Soil	9/12/18 10:25	9/13/18 9:33
Q2-0	1803419-03	Soil	9/12/18 11:00	9/13/18 9:33
Q3-0	1803419-05	Soil	9/12/18 11:30	9/13/18 9:33
Q4-0	1803419-07	Soil	9/12/18 12:05	9/13/18 9:33
Q1a-0	1803419-09	Soil	9/12/18 10:15	9/13/18 9:33
Q2a-0	1803419-11	Soil	9/12/18 10:50	9/13/18 9:33
Q3a-0	1803419-13	Soil	9/12/18 11:40	9/13/18 9:33
Q4a-0	1803419-15	Soil	9/12/18 11:55	9/13/18 9:33

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q1-0

Lab ID: 1803419-01

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
4,4´-DDE	**16**	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
4,4´-DDT	**3.6**	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Aldrin	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
alpha-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
alpha-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
beta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Chlordane	ND	8.5	1	B8I0342	09/13/2018	09/14/18 13:00	
delta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Dieldrin	**4.8**	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endosulfan I	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endosulfan II	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endosulfan sulfate	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endrin	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endrin aldehyde	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Endrin ketone	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:00	
gamma-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
gamma-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Heptachlor	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Heptachlor epoxide	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Methoxychlor	ND	5.0	1	B8I0342	09/13/2018	09/14/18 13:00	
Toxaphene	ND	50	1	B8I0342	09/13/2018	09/14/18 13:00	
Surrogate: Decachlorobiphenyl	*70.5 %*	*15 - 100*		B8I0342	09/13/2018	*09/14/18 13:00*	
Surrogate: Tetrachloro-m-xylene	*91.1 %*	*16 - 100*		B8I0342	09/13/2018	*09/14/18 13:00*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q2-0

Lab ID: 1803419-03

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
4,4´-DDE	**16**	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
4,4´-DDT	**3.8**	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Aldrin	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
alpha-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
alpha-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
beta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Chlordane	ND	8.5	1	B8I0342	09/13/2018	09/14/18 13:10	
delta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Dieldrin [2C]	**9.5**	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endosulfan I	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endosulfan II	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endosulfan sulfate	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endrin	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endrin aldehyde	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Endrin ketone	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:10	
gamma-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
gamma-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Heptachlor	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Heptachlor epoxide	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Methoxychlor	ND	5.0	1	B8I0342	09/13/2018	09/14/18 13:10	
Toxaphene	ND	50	1	B8I0342	09/13/2018	09/14/18 13:10	
Surrogate: Decachlorobiphenyl	*57.2 %*	*15 - 100*		B8I0342	09/13/2018	*09/14/18 13:10*	
Surrogate: Tetrachloro-m-xylene	*88.6 %*	*16 - 100*		B8I0342	09/13/2018	*09/14/18 13:10*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q3-0

Lab ID: 1803419-05

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
4,4´-DDE	**15**	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
4,4´-DDT [2C]	**3.0**	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Aldrin	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
alpha-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
alpha-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
beta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Chlordane	ND	8.5	1	B8I0342	09/13/2018	09/14/18 13:21	
delta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Dieldrin [2C]	**6.9**	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endosulfan I	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endosulfan II	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endosulfan sulfate	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endrin	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endrin aldehyde	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Endrin ketone	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:21	
gamma-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
gamma-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Heptachlor	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Heptachlor epoxide	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Methoxychlor	ND	5.0	1	B8I0342	09/13/2018	09/14/18 13:21	
Toxaphene	ND	50	1	B8I0342	09/13/2018	09/14/18 13:21	
Surrogate: Decachlorobiphenyl	*56.0 %*	*15 - 100*		B8I0342	09/13/2018	*09/14/18 13:21*	
Surrogate: Tetrachloro-m-xylene	*89.2 %*	*16 - 100*		B8I0342	09/13/2018	*09/14/18 13:21*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q4-0

Lab ID: 1803419-07

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
4,4´-DDE	**17**	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
4,4´-DDT	**3.1**	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Aldrin	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
alpha-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
alpha-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
beta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Chlordane	ND	8.5	1	B8I0342	09/13/2018	09/14/18 13:31	
delta-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Dieldrin [2C]	**7.8**	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endosulfan I	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endosulfan II	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endosulfan sulfate	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endrin	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endrin aldehyde	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Endrin ketone	ND	2.0	1	B8I0342	09/13/2018	09/14/18 13:31	
gamma-BHC	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
gamma-Chlordane	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Heptachlor	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Heptachlor epoxide	ND	1.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Methoxychlor	ND	5.0	1	B8I0342	09/13/2018	09/14/18 13:31	
Toxaphene	ND	50	1	B8I0342	09/13/2018	09/14/18 13:31	
Surrogate: Decachlorobiphenyl	*49.5 %*	*15 - 100*		B8I0342	09/13/2018	*09/14/18 13:31*	
Surrogate: Tetrachloro-m-xylene	*86.7 %*	*16 - 100*		B8I0342	09/13/2018	*09/14/18 13:31*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q1a-0

Lab ID: 1803419-09

Total Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	**4.7**	1.0	1	B8I0314	09/14/2018	09/14/18 13:18	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q2a-0

Lab ID: 1803419-11

Total Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	**6.1**	1.0	1	B8I0314	09/14/2018	09/14/18 13:19	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	09/14/2018

Client Sample ID Q3a-0

Lab ID: 1803419-13

Total Metals by ICP-AES EPA 6010B **Analyst: GO**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	**5.1**	1.0	1	B8I0314	09/14/2018	09/14/18 13:23	

Certificate of Analysis

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Rancho Cordova , CA 95742	Reported : 09/14/2018

Client Sample ID Q4a-0

Lab ID: 1803419-15

Total Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Arsenic	**5.4**	1.0	1	B8I0314	09/14/2018	09/14/18 13:24	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0314 - EPA 3050B_S										
Blank (B8I0314-BLK1)					Prepared: 9/14/2018 Analyzed: 9/14/2018					
Arsenic	ND	1.0	0.12							
LCS (B8I0314-BS1)					Prepared: 9/14/2018 Analyzed: 9/14/2018					
Arsenic	42.4576	1.0	0.12	50.0000		84.9	80 - 120			
Matrix Spike (B8I0314-MS1)			**Source: 1803358-01**		Prepared: 9/14/2018 Analyzed: 9/14/2018					
Arsenic	90.6336	1.0	0.12	125.000	1.53382	71.3	49 - 99			
Matrix Spike Dup (B8I0314-MSD1)			**Source: 1803358-01**		Prepared: 9/14/2018 Analyzed: 9/14/2018					
Arsenic	85.4490	1.0	0.12	125.000	1.53382	67.1	49 - 99	5.89	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S										
Blank (B8I0342-BLK1)							Prepared: 9/13/2018 Analyzed: 9/14/2018			
4,4´-DDD	ND	2.0	0.10							
4,4´-DDD [2C]	ND	2.0	0.10							
4,4´-DDE	ND	2.0	0.07							
4,4´-DDE [2C]	ND	2.0	0.07							
4,4´-DDT	ND	2.0	0.14							
4,4´-DDT [2C]	ND	2.0	0.14							
Aldrin	ND	1.0	0.08							
Aldrin [2C]	ND	1.0	0.08							
alpha-BHC	ND	1.0	0.04							
alpha-BHC [2C]	ND	1.0	0.04							
alpha-Chlordane	ND	1.0	0.04							
alpha-Chlordane [2C]	ND	1.0	0.04							
beta-BHC	ND	1.0	0.04							
beta-BHC [2C]	ND	1.0	0.04							
Chlordane	ND	8.5	0.90							
Chlordane [2C]	ND	8.5	0.90							
delta-BHC	ND	1.0	0.04							
delta-BHC [2C]	ND	1.0	0.04							
Dieldrin	ND	2.0	0.05							
Dieldrin [2C]	ND	2.0	0.05							
Endosulfan I	ND	1.0	0.04							
Endosulfan I [2C]	ND	1.0	0.04							
Endosulfan II	ND	2.0	0.10							
Endosulfan II [2C]	ND	2.0	0.10							
Endosulfan sulfate	ND	2.0	0.06							
Endosulfan Sulfate [2C]	ND	2.0	0.06							
Endrin	ND	2.0	0.08							
Endrin [2C]	ND	2.0	0.08							
Endrin aldehyde	ND	2.0	0.09							
Endrin aldehyde [2C]	ND	2.0	0.09							
Endrin ketone	ND	2.0	0.07							
Endrin ketone [2C]	ND	2.0	0.07							
gamma-BHC	ND	1.0	0.05							
gamma-BHC [2C]	ND	1.0	0.05							
gamma-Chlordane	ND	1.0	0.04							
gamma-Chlordane [2C]	ND	1.0	0.04							
Heptachlor	ND	1.0	0.07							
Heptachlor [2C]	ND	1.0	0.07							
Heptachlor epoxide	ND	1.0	0.04							
Heptachlor epoxide [2C]	ND	1.0	0.04							
Methoxychlor	ND	5.0	0.10							

Certificate of Analysis

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Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
Blank (B8I0342-BLK1) - Continued					Prepared: 9/13/2018 Analyzed: 9/14/2018					
Methoxychlor [2C]	ND	5.0	0.10							
Toxaphene	ND	50	8.2							
Toxaphene [2C]	ND	50	8.2							
Surrogate: Decachlorobiphenyl	*8.787*			*16.6667*		*52.7*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*10.62*			*16.6667*		*63.7*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.63*			*16.6667*		*81.8*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.15*			*16.6667*		*78.9*	*16 - 100*			
LCS (B8I0342-BS1)					Prepared: 9/13/2018 Analyzed: 9/14/2018					
4,4´-DDD	14.2347	2.0	0.10	16.6667		85.4	62 - 129			
4,4´-DDD [2C]	13.1628	2.0	0.10	16.6667		79.0	62 - 129			
4,4´-DDE	14.9432	2.0	0.07	16.6667		89.7	65 - 117			
4,4´-DDE [2C]	13.0623	2.0	0.07	16.6667		78.4	65 - 117			
4,4´-DDT	14.8488	2.0	0.14	16.6667		89.1	35 - 136			
4,4´-DDT [2C]	13.7898	2.0	0.14	16.6667		82.7	35 - 136			
Aldrin	14.4063	1.0	0.08	16.6667		86.4	67 - 110			
Aldrin [2C]	12.7963	1.0	0.08	16.6667		76.8	67 - 110			
alpha-BHC	14.4888	1.0	0.04	16.6667		86.9	69 - 110			
alpha-BHC [2C]	14.3978	1.0	0.04	16.6667		86.4	69 - 110			
alpha-Chlordane	14.3572	1.0	0.04	16.6667		86.1	65 - 114			
alpha-Chlordane [2C]	12.7097	1.0	0.04	16.6667		76.3	65 - 114			
beta-BHC	13.7978	1.0	0.04	16.6667		82.8	64 - 108			
beta-BHC [2C]	13.4018	1.0	0.04	16.6667		80.4	64 - 108			
delta-BHC	14.8953	1.0	0.04	16.6667		89.4	44 - 110			
delta-BHC [2C]	13.5990	1.0	0.04	16.6667		81.6	44 - 110			
Dieldrin	13.4868	2.0	0.05	16.6667		80.9	63 - 107			
Dieldrin [2C]	12.0992	2.0	0.05	16.6667		72.6	63 - 107			
Endosulfan I	13.5970	1.0	0.04	16.6667		81.6	63 - 103			
Endosulfan I [2C]	12.0847	1.0	0.04	16.6667		72.5	63 - 103			
Endosulfan II	14.4147	2.0	0.10	16.6667		86.5	62 - 122			
Endosulfan II [2C]	13.1132	2.0	0.10	16.6667		78.7	62 - 122			
Endosulfan sulfate	13.4435	2.0	0.06	16.6667		80.7	53 - 127			
Endosulfan Sulfate [2C]	12.2282	2.0	0.06	16.6667		73.4	53 - 127			
Endrin	15.3788	2.0	0.08	16.6667		92.3	66 - 120			
Endrin [2C]	13.3648	2.0	0.08	16.6667		80.2	66 - 120			
Endrin aldehyde	14.8193	2.0	0.09	16.6667		88.9	67 - 121			
Endrin aldehyde [2C]	13.7400	2.0	0.09	16.6667		82.4	67 - 121			
Endrin ketone	13.6502	2.0	0.07	16.6667		81.9	41 - 146			
Endrin ketone [2C]	11.7935	2.0	0.07	16.6667		70.8	41 - 146			
gamma-BHC	13.9185	1.0	0.05	16.6667		83.5	67 - 109			
gamma-BHC [2C]	12.8937	1.0	0.05	16.6667		77.4	67 - 109			

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
LCS (B8I0342-BS1) - Continued						Prepared: 9/13/2018 Analyzed: 9/14/2018				
gamma-Chlordane	13.9118	1.0	0.04	16.6667		83.5	63 - 110			
gamma-Chlordane [2C]	12.4067	1.0	0.04	16.6667		74.4	63 - 110			
Heptachlor	14.7085	1.0	0.07	16.6667		88.3	67 - 120			
Heptachlor [2C]	13.5057	1.0	0.07	16.6667		81.0	67 - 120			
Heptachlor epoxide	13.4083	1.0	0.04	16.6667		80.4	62 - 108			
Heptachlor epoxide [2C]	11.9667	1.0	0.04	16.6667		71.8	62 - 108			
Methoxychlor	14.5265	5.0	0.10	16.6667		87.2	47 - 152			
Methoxychlor [2C]	14.4183	5.0	0.10	16.6667		86.5	47 - 152			
Surrogate: Decachlorobiphenyl	*11.20*			*16.6667*		*67.2*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*10.46*			*16.6667*		*62.8*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*14.72*			*16.6667*		*88.3*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.03*			*16.6667*		*78.2*	*16 - 100*			
Matrix Spike (B8I0342-MS1)			**Source: 1803391-37**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
4,4´-DDD	14.9650	2.0	0.10	16.6667	ND	89.8	0 - 127			
4,4´-DDD [2C]	11.1038	2.0	0.10	16.6667	ND	66.6	0 - 127			
4,4´-DDE	13.9600	2.0	0.07	16.6667	ND	83.8	0 - 125			
4,4´-DDE [2C]	11.4408	2.0	0.07	16.6667	ND	68.6	0 - 125			
4,4´-DDT	14.3622	2.0	0.14	16.6667	ND	86.2	0 - 103			
4,4´-DDT [2C]	13.3357	2.0	0.14	16.6667	ND	80.0	0 - 103			
Aldrin	13.3688	1.0	0.08	16.6667	ND	80.2	6 - 104			
Aldrin [2C]	10.8107	1.0	0.08	16.6667	ND	64.9	6 - 104			
alpha-BHC	14.2448	1.0	0.04	16.6667	ND	85.5	0 - 114			
alpha-BHC [2C]	11.2962	1.0	0.04	16.6667	ND	67.8	0 - 114			
alpha-Chlordane	13.9818	1.0	0.04	16.6667	ND	83.9	0 - 110			
alpha-Chlordane [2C]	10.8150	1.0	0.04	16.6667	ND	64.9	0 - 110			
beta-BHC	14.3965	1.0	0.04	16.6667	ND	86.4	0 - 129			
beta-BHC [2C]	11.4478	1.0	0.04	16.6667	ND	68.7	0 - 129			
delta-BHC	14.1083	1.0	0.04	16.6667	ND	84.6	18 - 99			
delta-BHC [2C]	11.9403	1.0	0.04	16.6667	ND	71.6	18 - 99			
Dieldrin	13.2670	2.0	0.05	16.6667	ND	79.6	0 - 124			
Dieldrin [2C]	10.7877	2.0	0.05	16.6667	ND	64.7	0 - 124			
Endosulfan I	12.7960	1.0	0.04	16.6667	ND	76.8	0 - 106			
Endosulfan I [2C]	10.0035	1.0	0.04	16.6667	ND	60.0	0 - 106			
Endosulfan II	14.2292	2.0	0.10	16.6667	ND	85.4	20 - 130			
Endosulfan II [2C]	11.4958	2.0	0.10	16.6667	ND	69.0	20 - 130			
Endosulfan sulfate	13.4243	2.0	0.06	16.6667	ND	80.5	24 - 119			
Endosulfan Sulfate [2C]	11.2997	2.0	0.06	16.6667	ND	67.8	24 - 119			
Endrin	15.0587	2.0	0.08	16.6667	ND	90.4	0 - 135			
Endrin [2C]	11.8783	2.0	0.08	16.6667	ND	71.3	0 - 135			
Endrin aldehyde	14.4858	2.0	0.09	16.6667	ND	86.9	19 - 132			

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Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B8I0342-MS1) - Continued			**Source: 1803391-37**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
Endrin aldehyde [2C]	8.97067	2.0	0.09	16.6667	ND	53.8	19 - 132			
Endrin ketone	13.0820	2.0	0.07	16.6667	ND	78.5	7 - 141			
Endrin ketone [2C]	11.0018	2.0	0.07	16.6667	ND	66.0	7 - 141			
gamma-BHC	13.6660	1.0	0.05	16.6667	ND	82.0	0 - 117			
gamma-BHC [2C]	10.8533	1.0	0.05	16.6667	ND	65.1	0 - 117			
gamma-Chlordane	13.8220	1.0	0.04	16.6667	ND	82.9	0 - 156			
gamma-Chlordane [2C]	9.90867	1.0	0.04	16.6667	ND	59.5	0 - 156			
Heptachlor	13.5575	1.0	0.07	16.6667	ND	81.3	3 - 112			
Heptachlor [2C]	11.0823	1.0	0.07	16.6667	ND	66.5	3 - 112			
Heptachlor epoxide	12.2920	1.0	0.04	16.6667	ND	73.8	0 - 118			
Heptachlor epoxide [2C]	10.6423	1.0	0.04	16.6667	ND	63.9	0 - 118			
Methoxychlor	15.3980	5.0	0.10	16.6667	ND	92.4	0 - 161			
Methoxychlor [2C]	13.3327	5.0	0.10	16.6667	ND	80.0	0 - 161			
Surrogate: Decachlorobiphenyl	*9.881*			*16.6667*		*59.3*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*7.819*			*16.6667*		*46.9*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*11.55*			*16.6667*		*69.3*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*8.990*			*16.6667*		*53.9*	*16 - 100*			
Matrix Spike (B8I0342-MS2)			**Source: 1803419-03**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
4,4´-DDD	12.7758	2.0	0.10	16.6667	ND	76.7	0 - 127			
4,4´-DDD [2C]	10.6850	2.0	0.10	16.6667	ND	64.1	0 - 127			
4,4´-DDE	31.2523	2.0	0.07	16.6667	16.3167	89.6	0 - 125			
4,4´-DDE [2C]	27.1757	2.0	0.07	16.6667	16.2705	65.4	0 - 125			
4,4´-DDT	16.0950	2.0	0.14	16.6667	3.83333	73.6	0 - 103			
4,4´-DDT [2C]	16.8642	2.0	0.14	16.6667	3.43933	80.5	0 - 103			
Aldrin	10.5643	1.0	0.08	16.6667	ND	63.4	6 - 104			
Aldrin [2C]	9.88583	1.0	0.08	16.6667	ND	59.3	6 - 104			
alpha-BHC	12.2530	1.0	0.04	16.6667	ND	73.5	0 - 114			
alpha-BHC [2C]	10.7607	1.0	0.04	16.6667	ND	64.6	0 - 114			
alpha-Chlordane	11.0810	1.0	0.04	16.6667	ND	66.5	0 - 110			
alpha-Chlordane [2C]	9.85117	1.0	0.04	16.6667	ND	59.1	0 - 110			
beta-BHC	12.2460	1.0	0.04	16.6667	ND	73.5	0 - 129			
beta-BHC [2C]	11.3720	1.0	0.04	16.6667	ND	68.2	0 - 129			
delta-BHC	11.9688	1.0	0.04	16.6667	ND	71.8	18 - 99			
delta-BHC [2C]	11.2153	1.0	0.04	16.6667	ND	67.3	18 - 99			
Dieldrin	22.6175	2.0	0.05	16.6667	8.42750	85.1	0 - 124			
Dieldrin [2C]	20.1917	2.0	0.05	16.6667	9.52050	64.0	0 - 124			
Endosulfan I	10.3275	1.0	0.04	16.6667	ND	62.0	0 - 106			
Endosulfan I [2C]	9.53750	1.0	0.04	16.6667	ND	57.2	0 - 106			
Endosulfan II	11.8853	2.0	0.10	16.6667	ND	71.3	20 - 130			
Endosulfan II [2C]	11.2247	2.0	0.10	16.6667	ND	67.3	20 - 130			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B8I0342-MS2) - Continued			**Source: 1803419-03**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
Endosulfan sulfate	11.6770	2.0	0.06	16.6667	ND	70.1	24 - 119			
Endosulfan Sulfate [2C]	10.7850	2.0	0.06	16.6667	ND	64.7	24 - 119			
Endrin	12.3405	2.0	0.08	16.6667	ND	74.0	0 - 135			
Endrin [2C]	11.1383	2.0	0.08	16.6667	ND	66.8	0 - 135			
Endrin aldehyde	12.8722	2.0	0.09	16.6667	ND	77.2	19 - 132			
Endrin aldehyde [2C]	9.11233	2.0	0.09	16.6667	ND	54.7	19 - 132			
Endrin ketone	11.6248	2.0	0.07	16.6667	ND	69.7	7 - 141			
Endrin ketone [2C]	11.8660	2.0	0.07	16.6667	ND	71.2	7 - 141			
gamma-BHC	11.3357	1.0	0.05	16.6667	ND	68.0	0 - 117			
gamma-BHC [2C]	11.2318	1.0	0.05	16.6667	ND	67.4	0 - 117			
gamma-Chlordane	12.9973	1.0	0.04	16.6667	ND	78.0	0 - 156			
gamma-Chlordane [2C]	9.26400	1.0	0.04	16.6667	ND	55.6	0 - 156			
Heptachlor	11.3130	1.0	0.07	16.6667	ND	67.9	3 - 112			
Heptachlor [2C]	10.2252	1.0	0.07	16.6667	ND	61.4	3 - 112			
Heptachlor epoxide	9.67417	1.0	0.04	16.6667	ND	58.0	0 - 118			
Heptachlor epoxide [2C]	9.65433	1.0	0.04	16.6667	ND	57.9	0 - 118			
Methoxychlor	16.4705	5.0	0.10	16.6667	ND	98.8	0 - 161			
Methoxychlor [2C]	12.9018	5.0	0.10	16.6667	ND	77.4	0 - 161			
Surrogate: Decachlorobiphenyl	*7.031*			*16.6667*		*42.2*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*9.257*			*16.6667*		*55.5*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.34*			*16.6667*		*80.1*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*11.01*			*16.6667*		*66.1*	*16 - 100*			
Matrix Spike Dup (B8I0342-MSD1)			**Source: 1803391-37**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
4,4´-DDD	14.6038	2.0	0.10	16.6667	ND	87.6	0 - 127	2.44	20	
4,4´-DDD [2C]	10.9073	2.0	0.10	16.6667	ND	65.4	0 - 127	1.79	20	
4,4´-DDE	13.6145	2.0	0.07	16.6667	ND	81.7	0 - 125	2.51	20	
4,4´-DDE [2C]	11.5195	2.0	0.07	16.6667	ND	69.1	0 - 125	0.685	20	
4,4´-DDT	14.5937	2.0	0.14	16.6667	ND	87.6	0 - 103	1.60	20	
4,4´-DDT [2C]	12.2365	2.0	0.14	16.6667	ND	73.4	0 - 103	8.60	20	
Aldrin	12.9620	1.0	0.08	16.6667	ND	77.8	6 - 104	3.09	20	
Aldrin [2C]	11.0195	1.0	0.08	16.6667	ND	66.1	6 - 104	1.91	20	
alpha-BHC	13.9315	1.0	0.04	16.6667	ND	83.6	0 - 114	2.22	20	
alpha-BHC [2C]	11.2105	1.0	0.04	16.6667	ND	67.3	0 - 114	0.761	20	
alpha-Chlordane	13.8768	1.0	0.04	16.6667	ND	83.3	0 - 110	0.754	20	
alpha-Chlordane [2C]	10.9312	1.0	0.04	16.6667	ND	65.6	0 - 110	1.07	20	
beta-BHC	13.9413	1.0	0.04	16.6667	ND	83.6	0 - 129	3.21	20	
beta-BHC [2C]	11.7137	1.0	0.04	16.6667	ND	70.3	0 - 129	2.30	20	
delta-BHC	13.8102	1.0	0.04	16.6667	ND	82.9	18 - 99	2.14	20	
delta-BHC [2C]	11.9720	1.0	0.04	16.6667	ND	71.8	18 - 99	0.265	20	
Dieldrin	13.0018	2.0	0.05	16.6667	ND	78.0	0 - 124	2.02	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B8I0342-MSD1) - Continued			**Source: 1803391-37**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
Dieldrin [2C]	10.7847	2.0	0.05	16.6667	ND	64.7	0 - 124	0.0278	20	
Endosulfan I	12.7688	1.0	0.04	16.6667	ND	76.6	0 - 106	0.213	20	
Endosulfan I [2C]	10.0137	1.0	0.04	16.6667	ND	60.1	0 - 106	0.102	20	
Endosulfan II	14.1990	2.0	0.10	16.6667	ND	85.2	20 - 130	0.212	20	
Endosulfan II [2C]	11.1388	2.0	0.10	16.6667	ND	66.8	20 - 130	3.15	20	
Endosulfan sulfate	13.5737	2.0	0.06	16.6667	ND	81.4	24 - 119	1.11	20	
Endosulfan Sulfate [2C]	10.6117	2.0	0.06	16.6667	ND	63.7	24 - 119	6.28	20	
Endrin	14.7322	2.0	0.08	16.6667	ND	88.4	0 - 135	2.19	20	
Endrin [2C]	11.7943	2.0	0.08	16.6667	ND	70.8	0 - 135	0.710	20	
Endrin aldehyde	14.1650	2.0	0.09	16.6667	ND	85.0	19 - 132	2.24	20	
Endrin aldehyde [2C]	8.69783	2.0	0.09	16.6667	ND	52.2	19 - 132	3.09	20	
Endrin ketone	13.1747	2.0	0.07	16.6667	ND	79.0	7 - 141	0.706	20	
Endrin ketone [2C]	11.0855	2.0	0.07	16.6667	ND	66.5	7 - 141	0.758	20	
gamma-BHC	13.3860	1.0	0.05	16.6667	ND	80.3	0 - 117	2.07	20	
gamma-BHC [2C]	10.8052	1.0	0.05	16.6667	ND	64.8	0 - 117	0.445	20	
gamma-Chlordane	13.7285	1.0	0.04	16.6667	ND	82.4	0 - 156	0.679	20	
gamma-Chlordane [2C]	10.2307	1.0	0.04	16.6667	ND	61.4	0 - 156	3.20	20	
Heptachlor	13.2082	1.0	0.07	16.6667	ND	79.2	3 - 112	2.61	20	
Heptachlor [2C]	11.1797	1.0	0.07	16.6667	ND	67.1	3 - 112	0.874	20	
Heptachlor epoxide	11.8837	1.0	0.04	16.6667	ND	71.3	0 - 118	3.38	20	
Heptachlor epoxide [2C]	10.9802	1.0	0.04	16.6667	ND	65.9	0 - 118	3.12	20	
Methoxychlor	15.8538	5.0	0.10	16.6667	ND	95.1	0 - 161	2.92	20	
Methoxychlor [2C]	13.4272	5.0	0.10	16.6667	ND	80.6	0 - 161	0.706	20	
Surrogate: Decachlorobiphenyl	*7.551*			*16.6667*		*45.3*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*7.912*			*16.6667*		*47.5*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*11.28*			*16.6667*		*67.7*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*8.976*			*16.6667*		*53.9*	*16 - 100*			
Matrix Spike Dup (B8I0342-MSD2)			**Source: 1803419-03**			Prepared: 9/13/2018 Analyzed: 9/14/2018				
4,4´-DDD	10.7303	2.0	0.10	16.6667	ND	64.4	0 - 127	17.4	20	
4,4´-DDD [2C]	9.89000	2.0	0.10	16.6667	ND	59.3	0 - 127	7.73	20	
4,4´-DDE	29.2805	2.0	0.07	16.6667	16.3167	77.8	0 - 125	6.51	20	
4,4´-DDE [2C]	25.8083	2.0	0.07	16.6667	16.2705	57.2	0 - 125	5.16	20	
4,4´-DDT	14.4160	2.0	0.14	16.6667	3.83333	63.5	0 - 103	11.0	20	
4,4´-DDT [2C]	15.0060	2.0	0.14	16.6667	3.43933	69.4	0 - 103	11.7	20	
Aldrin	10.7405	1.0	0.08	16.6667	ND	64.4	6 - 104	1.65	20	
Aldrin [2C]	9.56250	1.0	0.08	16.6667	ND	57.4	6 - 104	3.33	20	
alpha-BHC	12.1422	1.0	0.04	16.6667	ND	72.9	0 - 114	0.909	20	
alpha-BHC [2C]	10.8235	1.0	0.04	16.6667	ND	64.9	0 - 114	0.582	20	
alpha-Chlordane	11.1018	1.0	0.04	16.6667	ND	66.6	0 - 110	0.188	20	
alpha-Chlordane [2C]	9.09383	1.0	0.04	16.6667	ND	54.6	0 - 110	8.00	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : 2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 09/14/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8I0342 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B8I0342-MSD2) - Continued			**Source: 1803419-03**		Prepared: 9/13/2018 Analyzed: 9/14/2018					
beta-BHC	11.8397	1.0	0.04	16.6667	ND	71.0	0 - 129	3.37	20	
beta-BHC [2C]	11.2955	1.0	0.04	16.6667	ND	67.8	0 - 129	0.675	20	
delta-BHC	12.1643	1.0	0.04	16.6667	ND	73.0	18 - 99	1.62	20	
delta-BHC [2C]	11.1202	1.0	0.04	16.6667	ND	66.7	18 - 99	0.852	20	
Dieldrin	18.2935	2.0	0.05	16.6667	8.42750	59.2	0 - 124	21.1	20	R3
Dieldrin [2C]	19.7520	2.0	0.05	16.6667	9.52050	61.4	0 - 124	2.20	20	
Endosulfan I	10.2633	1.0	0.04	16.6667	ND	61.6	0 - 106	0.623	20	
Endosulfan I [2C]	8.62683	1.0	0.04	16.6667	ND	51.8	0 - 106	10.0	20	
Endosulfan II	10.8438	2.0	0.10	16.6667	ND	65.1	20 - 130	9.16	20	
Endosulfan II [2C]	9.88683	2.0	0.10	16.6667	ND	59.3	20 - 130	12.7	20	
Endosulfan sulfate	9.50283	2.0	0.06	16.6667	ND	57.0	24 - 119	20.5	20	R3
Endosulfan Sulfate [2C]	11.1810	2.0	0.06	16.6667	ND	67.1	24 - 119	3.61	20	
Endrin	11.1573	2.0	0.08	16.6667	ND	66.9	0 - 135	10.1	20	
Endrin [2C]	10.4457	2.0	0.08	16.6667	ND	62.7	0 - 135	6.42	20	
Endrin aldehyde	10.9915	2.0	0.09	16.6667	ND	65.9	19 - 132	15.8	20	
Endrin aldehyde [2C]	8.54533	2.0	0.09	16.6667	ND	51.3	19 - 132	6.42	20	
Endrin ketone	11.8023	2.0	0.07	16.6667	ND	70.8	7 - 141	1.52	20	
Endrin ketone [2C]	10.8440	2.0	0.07	16.6667	ND	65.1	7 - 141	9.00	20	
gamma-BHC	11.0318	1.0	0.05	16.6667	ND	66.2	0 - 117	2.72	20	
gamma-BHC [2C]	10.7580	1.0	0.05	16.6667	ND	64.5	0 - 117	4.31	20	
gamma-Chlordane	13.0432	1.0	0.04	16.6667	ND	78.3	0 - 156	0.352	20	
gamma-Chlordane [2C]	8.66900	1.0	0.04	16.6667	ND	52.0	0 - 156	6.64	20	
Heptachlor	11.4222	1.0	0.07	16.6667	ND	68.5	3 - 112	0.960	20	
Heptachlor [2C]	10.0148	1.0	0.07	16.6667	ND	60.1	3 - 112	2.08	20	
Heptachlor epoxide	10.0033	1.0	0.04	16.6667	ND	60.0	0 - 118	3.35	20	
Heptachlor epoxide [2C]	9.05917	1.0	0.04	16.6667	ND	54.4	0 - 118	6.36	20	
Methoxychlor	15.9720	5.0	0.10	16.6667	ND	95.8	0 - 161	3.07	20	
Methoxychlor [2C]	10.4773	5.0	0.10	16.6667	ND	62.9	0 - 161	20.7	20	R3
Surrogate: Decachlorobiphenyl	*7.791*			*16.6667*		*46.7*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*8.992*			*16.6667*		*54.0*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.53*			*16.6667*		*81.2*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*11.04*			*16.6667*		*66.2*	*16 - 100*			

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	2555 Research Park Drive, S1633-03-01
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	09/14/2018

Notes and Definitions

R3	RPD value outside acceptance criteria. Calculation is based on raw values. The analytical batch was validated by the Laboratory Control Sample (LCS).
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☑ FedEx ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED 2.1 D Y ☑ N ☐ (ICE) | 2. HEADSPACE (VOA) Y ☐ N ☐ | 3. CONTAINER INTACT Y ☐ N ☐ | 4. SEALED Y ☐ N ☐ | 5. # OF SPLS MATCH COC Y ☐ N ☐ | 6. PRESERVED Y ☐ N ☐

Client: Geocon
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916-852-9118
Fax: 916-852-9132

Project Name: 2555 Research Park Drive Project #: S1633-03-01 Sampler: C. Dennis (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
C. Dennis	9/12/18	1500	ONTRAC	9/12/18	1500
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date: 9/13/18	Time: 0933
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Rebecca Silva 9/12/18
Print Name Date
Signature

Send Report To: Attn: Co: Addr: City: State: Zip:

Bill To: Attn: Co: Addr: City: State: Zip:

Special Instructions/Comments:
Q1 through Q4 are field composites
Q1a through Q4a are discrete samples
Hold - 2ft samples pending initial results.

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested: OCPs (8081A), Arsenic (6010B)

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

QA/QC: RTNE ☑ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

PRESERVATION

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	OCPs	Arsenic	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	1803419-01	Q1-0	9/12/2018	1025	x		x				B				
	-02	Q1-2	9/12/2018	1030			x								Hold
	-03	Q2-0	9/12/2018	1100	x		x				B				
	-04	Q2-2	9/12/2018	1105			x								Hold
	-05	Q3-0	9/12/2018	1130	x		x				B				
	-06	Q3-2	9/12/2018	1135			x								Hold
	-07	Q4-0	9/12/2018	1205	x		x				B				
	-08	Q4-2	9/12/2018	1210			x								Hold
	1803419-09	Q1a-0	9/12/2018	1015		x	x				B				
	-10	Q1a-2	9/12/2018	1020			x								Hold
	-11	Q2a-0	9/12/2018	1050		x	x				B				
	-12	Q2a-2	9/12/2018	1055			x								Hold
	-13	Q3a-0	9/12/2018	1140		x	x				B				
	-14	Q3a-2	9/12/2018	1145			x								Hold
	-15	Q4a-0	9/12/2018	1155		x	x				B				
	-16	Q4a-2	9/12/2018	1200			x								Hold

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☑ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☐ E = Standard TAT

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl $N=HNO_3$ $S=H_2SO_4$ C=4°C $Z=Zn(AC)_2$ O=NaOH $T=Na_2S_2O_3$

EMSL Analytical, Inc.
464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091819861
Customer ID: GECN80
Customer PO: S1633-03-01
Project ID:

Attention: Rebecca Silva
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742
Project: 2555 RESEARCH PARK DR - S1633-03-01

Phone: (916) 852-9118
Fax: (916) 852-9132
Received: 09/13/2018 8:45 AM
Analysis Date: 09/13/2018
Collected: 09/12/2018

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
Q1-0 *091819861-0001*		Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
Q1-2 *091819861-0002*	HOLD	Hold sample			**Not Analyzed**
Q2-0 *091819861-0003*		Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
Q2-2 *091819861-0004*	HOLD	Hold sample			**Not Analyzed**
Q3-0 *091819861-0005*		Brown Non-Fibrous Homogeneous		99.75% Non-fibrous (Other)	**0.25% Chrysotile**
Q3-2 *091819861-0006*	HOLD	Hold sample			**Not Analyzed**
Q4-0 *091819861-0007*		Brown Non-Fibrous Homogeneous		99.75% Non-fibrous (Other)	**0.25% Chrysotile**
Q4-2 *091819861-0008*	HOLD	Hold sample			**Not Analyzed**

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 09/13/2018 17:09:31

EMSL Analytical, Inc.
464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	091819861
Customer ID:	GECN80
Customer PO:	S1633-03-01
Project ID:	

Attention:	Rebecca Silva Geocon Consultants, Inc. 3160 Gold Valley Drive Suite 800 Rancho Cordova, CA 95742	**Phone:**	(916) 852-9118
		Fax:	(916) 852-9132
		Received:	09/13/2018 8:45 AM
		Analysis Date:	09/13/2018
		Collected:	09/12/2018
Project:	2555 RESEARCH PARK DR - S1633-03-01		

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**

Analyst(s)

Cecilia Yu (4)

Matthew Batongbacal
or other approved signatory

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 09/13/2018 17:09:31