GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S1090-03-26
March 23, 2017

Mr. Eric Paulantonio
Assistant Director of Project Management,
Minor Capital Projects
Design and Construction Management
University of California, Davis
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Subject: NATURALLY OCCURRING ASBESTOS SOIL SAMPLING REPORT
ORCHARD PARK PROJECT
UNIVERSITY OF CALIFORNIA- DAVIS
DAVIS, CALIFORNIA

Dear Mr. Paulantonio:

In accordance with your request, we have performed soil sampling for naturally occurring asbestos (NOA) at the Orchard Park Project at the University of California – Davis, in Davis, California. The accompanying report summarizes the services performed including advancement of 26 direct-push soil borings for the collection of soil samples for NOA analysis.

Please contact us if you have any questions concerning the contents of this report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

Chris Giuntoli, CAC
Senior Project Scientist

John C. Pfeiffer, PG, CEG
Senior Geologist

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NATURALLY OCCURRING ASBESTOS SOIL SAMPLING REPORT

1.0 INTRODUCTION

This Naturally Occurring Asbestos (NOA) Soil Sampling Report for the Orchard Park Project was prepared by Geocon Consultants, Inc., for the University of California – Davis (UC Davis).

1.1 Project Description and Proposed Improvements

The project site consists of an approximate 13-acre block (the Site) located at the northwestern corner of the UC Davis campus in Davis, Yolo County, California. Proposed improvements to the Site include demolition of former student housing units and shallow soil excavation as part of future redevelopment. The project location is depicted on the Vicinity Map, Figure 1. The approximate sample locations and site features are depicted on the Site Plan, Figure 2.

1.2 General Objectives

The purpose of the scope of services outlined herein was to evaluate the Site for the potential presence of NOA in surface and near-surface soils. The investigative results will be used by UC Davis to inform construction contractors if NOA is present in soil at levels of concern within the project boundaries for construction worker health and safety, and for soil management/disposal purposes.

2.0 BACKGROUND

The California Air Resources Board (CARB) has mitigation practices for construction, grading, quarrying, and surface mining operations that may disturb natural occurrences of asbestos outlined in the Air Toxicity Control Measure (ATCM) set forth in Title 17 CCR, §93105. NOA potentially poses a health hazard when it becomes an airborne particulate. Mitigation practices can reduce the risk of exposure to NOA-containing dust. The primary mitigation practice used for controlling exposure to potentially NOA-containing dust is the implementation of engineering controls including wetting the materials being disturbed. If engineering controls do not adequately control exposure to potentially NOA-containing dust, the use of personal protective equipment including wearing approved high efficiency particulate air filter masks is required during construction activities. Asbestos dust control methods similar to those in Title 17 CCR, §93105 are outlined in the ATCM listed in Title 17 CCR, §93106 for airborne asbestos in road surfacing applications. Using material with 0.25% or more asbestos material in surfacing applications is not permitted, and wetting of the material or the application of a surface sealant is recommended to minimize disturbance of the asbestos material. Onsite reuse or disposal of NOA-containing materials is allowed by Title 17 CCR, §93106 and Title 17 CCR, §93105 if it is buried under at least 3 inches of material that does not contain NOA.

3.0 SCOPE OF SERVICES

We performed the following scope of services as requested by UC Davis.

3.1 Pre-field Activities

- Marked proposed soil boring locations and notified Underground Service Alert (USA) at least 48-hours prior to field activities.
- Conducted an onsite field meet on December 13, 2016, with Mr. Brad Markel, UC Davis Excavation Coordinator/Utility USA Locator, to evaluate and relocate proposed soil boring locations to minimize the potential for utility impacts.
- Retained the services of EMSL Analytical Inc. (EMSL), a California-certified analytical laboratory, to perform asbestos analysis of soil samples.

3.2 Field Activities

Our field investigation was performed on December 22, 2016. We advanced 26 soil borings (B1 to B26) at locations depicted on the Site Plan (Figure 2) using direct-push sampling equipment. We collected two soil samples from each boring at approximate depth intervals of 0-0.5 foot and 3.5-4.0 feet. The borings were advanced to a maximum depth of 4.0 feet. A total of 52 soil samples were collected for subsequent laboratory preparation of 26 two-part composite samples for NOA analysis using CARB Method 435 (CARB 435). The samples were transported to EMSL for analysis under standard chain-of-custody (COC) documentation.

The boring locations were selected to provide spatial coverage of the Site at an approximate distribution of two borings per acre. Locations were selected at unpaved locations that were not in conflict with identified site utilities. Details of the field activities are presented in the following sections.

4.0 INVESTIGATIVE METHODS

We collected a total of 52 soil samples for asbestos analysis from 26 direct-push borings advanced at the Site. The approximate latitude and longitude of the boring locations were obtained from Google Earth™ and are presented in Table 1. The approximate soil boring locations were documented in the field on a building layout plan of the Site provided by UC Davis (see Figure 2).

Soil samples were obtained by hydraulically advancing a two-inch-diameter, four-foot-long stainless steel core-barrel sampler lined with an acetate sample tube into undisturbed soil. Soil samples were collected for laboratory analysis by cutting approximately six-inch-long sections of the acetate tube from the target sample depths, and capping the ends with Teflon® tape and plastic end caps. Following sample collection, the borings were backfilled with surrounding soil. General soil characteristics were recorded on a daily field log.

4.1 NOA Investigation

Soil in the project area consisted predominately of moist, dark brown clayey silt from the surface to an approximate depth of 2 inches and was underlain by brown clayey silt to an approximate depth of 4.0 feet, the maximum depth explored.

Samples were collected from the borings as described in Section 4.0. The samples were labeled with sample identification for asbestos analysis and delivered to EMSL for asbestos analysis under COC protocol.

4.2 Quality Assurance/Quality Control Procedures

QA/QC procedures were performed during the field exploration activities. These procedures included the decontamination of sampling equipment before each sample was collected and providing COC documentation for each sample submitted to the laboratory. The soil sampling equipment was cleansed between borings by washing the equipment with an Alconox® solution followed by a double rinse with purified water. The decontamination water was discharged to the ground surface away from storm drain inlets.

4.3 Laboratory Analyses

4.3.1 NOA Samples

EMSL performed asbestos fiber analysis on the 26 soil samples under a two-week turnaround time. EMSL analyzed the samples for asbestos by CARB 435 using polarized light microscopy (PLM). The CARB 435 preparation includes milling the sample to a -200 mesh size which also homogenizes the sample. The analytical sensitivity of the PLM analysis was 0.25% by area.

4.3.2 Laboratory QA/QC Procedures

Prior to submitting the samples to the laboratory, the COC documentation was reviewed for accuracy and completeness. Copies of the laboratory report and COC documentation are in Appendix A.

5.0 GEOLOGIC MAP REVIEW AND LABORATORY ANALYTICAL RESULTS

5.1 Geologic Map Review

We reviewed the following resources pertaining to the geologic setting of the Site and surrounding area:

1. Web soil survey, United States Department of Agriculture, Natural Resources Conservation Service website (https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/), accessed January 2017.
2. *Preliminary Geologic Map of the Sacramento 30' by 60' Quadrangle, California,* California Geological Survey, map scale 1:100,000, 2011.
3. *Geologic Map of the Santa Rosa Quadrangle, 1:250,000,* California Department of Conservation, California Division of Mines and Geology, 1982.

Reference No. 1 indicates that soil at the Site is Reiff very fine sandy loam, which consists of with very fine sandy loam from the surface to an approximate depth of 16 inches and stratified sandy loam to loam at approximate depths of 16 to 60 inches.

Reference No. 2 depicts the Site located in an area mapped as Quaternary-aged (Holocene) alluvial fan deposits. These deposits consist of sediment transported eastward from the coastal range and deposited by Putah Creek.

Reference No. 3 depicts the nearest ultramafic rock outcroppings along the western portion of Lake Berryessa (nearest geographic ultramafic rock unit) located approximately 25 miles west of the Site.

5.2 NOA Results

Chrysotile asbestos was reported in the 26 composite soil samples at concentrations ranging from less than (<) the laboratory reporting limit of 0.25% to 0.75%.

The NOA analytical results are summarized in Table 2. A copy of the EMSL laboratory report and COC documentation is in Appendix A.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 NOA

Based on published geologic information and soil sampling activities, the site soil appears to be sandy loam to loam derived from and underlain by alluvium. Although outcroppings of geographic ultramafic rock units were not identified at or in proximity to the Site, these rock units are present adjacent to Lake Berryessa, located approximately 25 miles west of the Site, at the headwaters of Putah Creek. Onsite NOA-containing soil may be associated with alluvium generated from regional geographic ultramafic rock units.

Laboratory analysis of composite soil samples collected from borings B1 through B26 identified chrysotile asbestos at concentrations ranging from <0.25% to 0.75%. Since NOA was detected in samples at concentrations above the CARB regulatory limit of 0.25%, material excavated on the Site may be reused on- or offsite provided that it is not used in such a way as to fall under the definition of surfacing (Title 17 CCR, §93106(i)(26) and Title 17 CCR, §93105(e)(4)(G)) which requires that disturbed asbestos-containing soil (0.25% asbestos or greater) must be stabilized via options that include paving or covering with at least 3 inches of non-asbestos-containing material (less than 0.25% asbestos). Offsite management of NOA-containing soil for reuse or disposal must be accompanied by a disclosure per, Title 17 CCR, §93106(d)(3), that includes the following warning statement be provided to the recipient(s) of Restricted Material:

"WARNING!
This material may contain asbestos.
It is unlawful to use this material for surfacing or any application in which it would remain exposed and subject to possible disturbance.
Extreme care should be taken when handling this material to minimize the generation of dust."

We recommend that asbestos mitigation measures be implemented for the project in accordance with Yolo-Solano Air Quality Management District (YSAQMD) guidelines and/or requirements.

6.2 Asbestos Worker Protection

NOA is a State of California regulated substance and was identified in soil samples collected from the Site. Based on the presence of NOA at the Site, we recommend that engineering controls be implemented to minimize the potential aerial dispersion of NOA as described in CCR 93105. The contractor(s) should prepare and implement an Asbestos Dust Mitigation Plan (ADMP) that describes measures that will be taken to control the potential release of asbestos-containing dust from the Site as a result of onsite construction excavation activities. Asbestos dust control activities to be implemented shall be in compliance with the following:

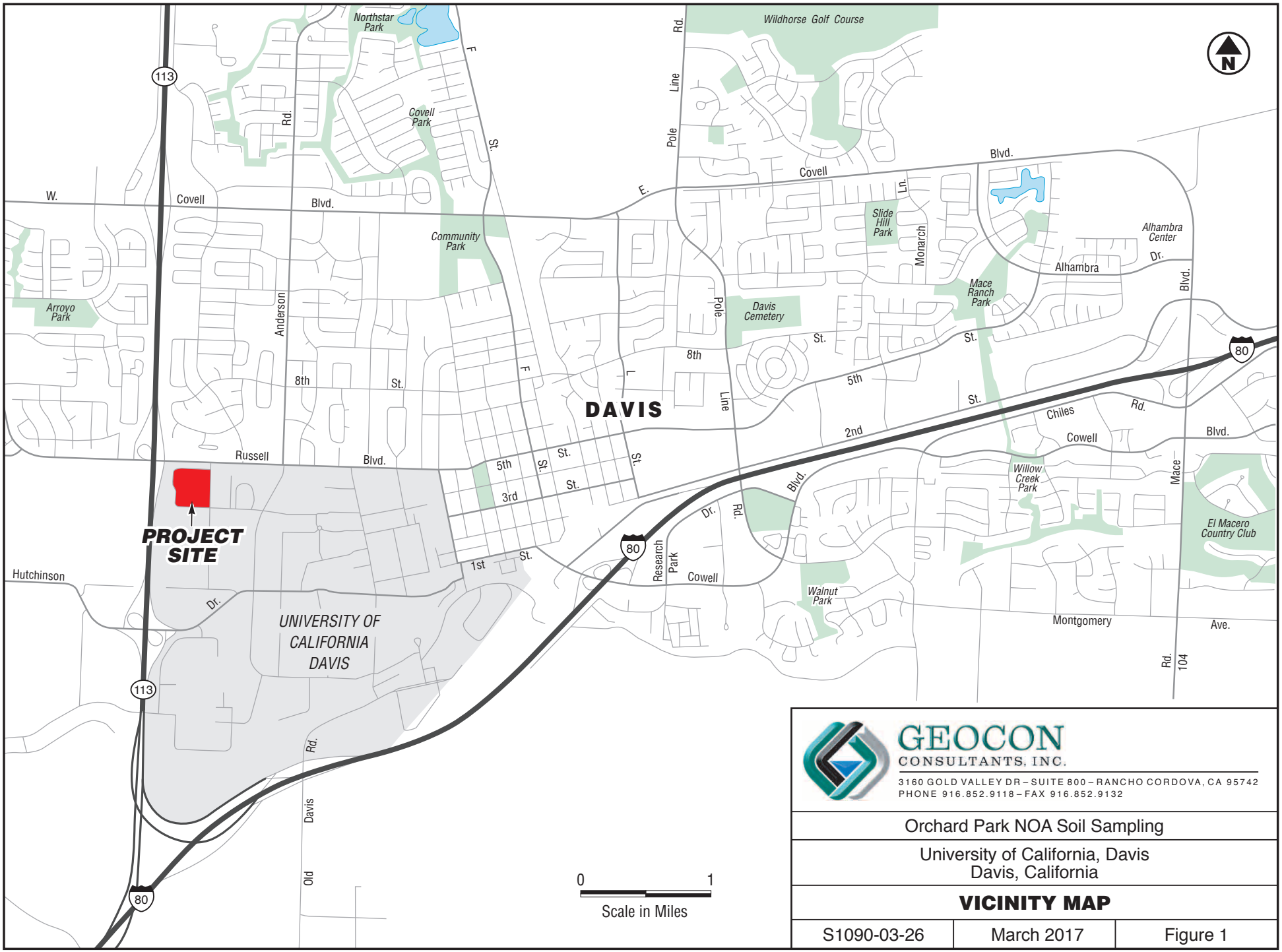
- CCR Section 93105 – Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (ATCM 93105);
- CCR Section 93106 – Asbestos Airborne Toxic Control Measure for Surfacing Applications (ATCM 93106); and
- YSAQMD guidelines and/or requirements.

Additionally, contractors should prepare a project-specific Asbestos Compliance Plan (CCR Title 8, §1529, the Cal/OSHA "Asbestos in Construction" standard) to minimize potential worker exposure to asbestos-containing soil at the project area. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of NOA in soil.

7.0 REPORT LIMITATIONS

This report has been prepared exclusively for the University of California, Davis. The information contained herein is only valid as of the date of the report and will require an update to reflect additional information obtained.

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 limited 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. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty with respect to the content of this report or any subsequent reports, correspondence or consultation. We strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.



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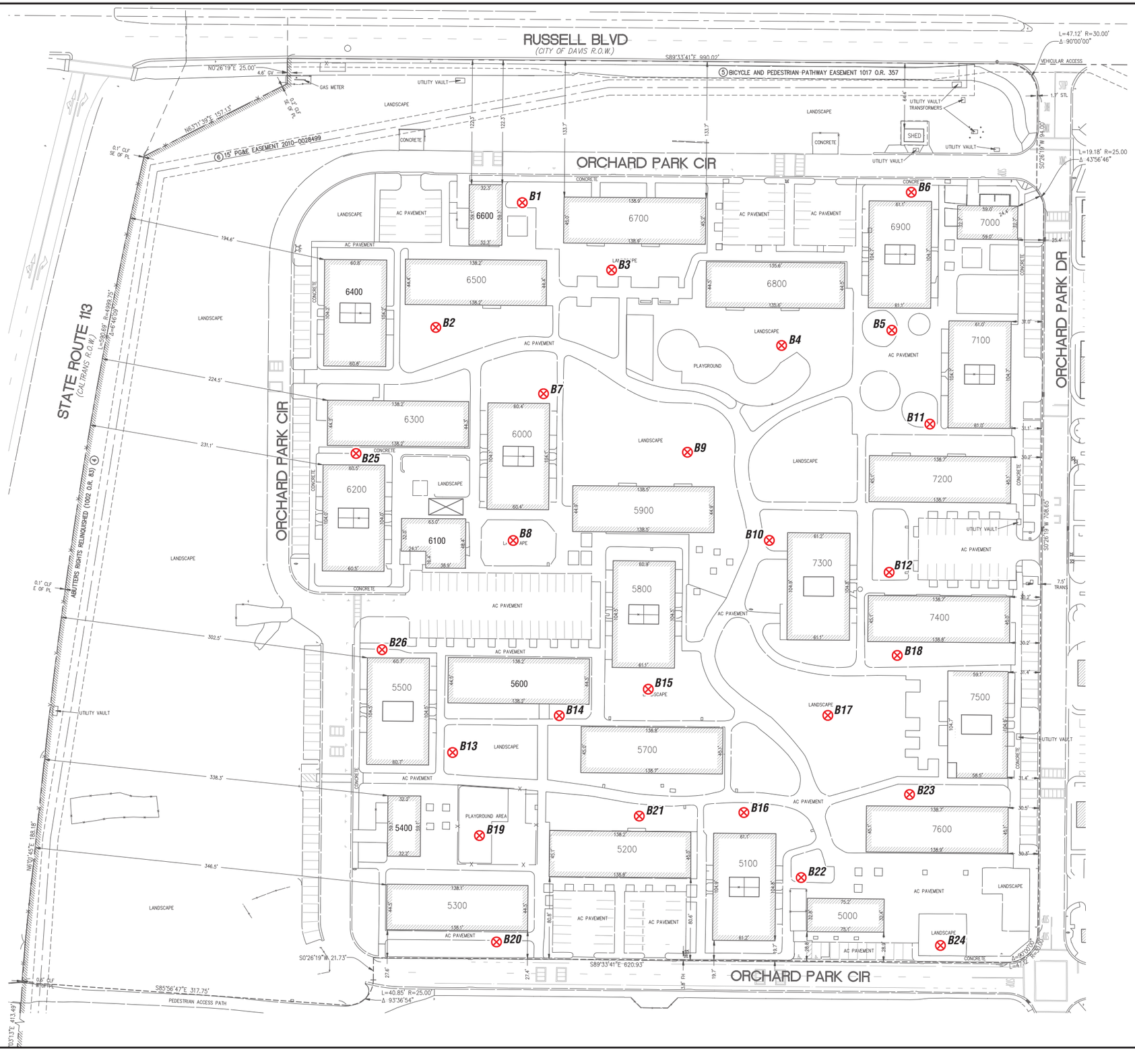
Orchard Park NOA Soil Sampling

University of California, Davis
Davis, California

VICINITY MAP

S1090-03-26	March 2017	Figure 1



LEGEND:

B26 ⊗ Approximate Soil Boring Location

0 100

Scale in Feet

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Orchard Park NOA Soil Sampling

University of California, Davis
Davis, California

SITE PLAN

S1090-03-26	March 2017	Figure 2

TABLE 1
SUMMARY OF SOIL BORING COORDINATES
UNIVERSITY OF CALIFORNIA, DAVIS - ORCHARD PARK PROJECT
DAVIS, CALIFORNIA
DECEMBER 22, 2016

SOIL BORING ID	LATITUDE	LONGITUDE
B1	38.545896°	-121.765899°
B2	38.545559°	-121.766034°
B3	38.545711°	-121.765630°
B4	38.545512°	-121.765017°
B5	38.545516°	-121.764635°
B6	38.545942°	-121.764440°
B7	38.545388°	-121.765836°
B8	38.544972°	-121.765860°
B9	38.545154°	-121.765223°
B10	38.545014°	-121.765034°
B11	38.545316°	-121.764486°
B12	38.544880°	-121.764646°
B13	38.544418°	-121.766079°
B14	38.544471°	-121.765826°
B15	38.544584°	-121.765476°
B16	38.544245°	-121.765167°
B17	38.544523°	-121.764808°
B18	38.544671°	-121.764551°
B19	38.544219°	-121.765886°
B20	38.543891°	-121.765916°
B21	38.544243°	-121.765410°
B22	38.544090°	-121.764946°
B23	38.544292°	-121.764630°
B24	38.543935°	-121.764432°
B25	38.545209°	-121.766456°
B26	38.544330°	-121.766374°

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - ASBESTOS
UNIVERSITY OF CALIFORNIA, DAVIS - ORCHARD PARK PROJECT
DAVIS, CALIFORNIA
DECEMBER 22, 2016
CARB 435 METHOD

SAMPLE I.D.	SAMPLE DEPTH (FEET)	ASBESTOS %	ASBESTOS TYPE
B1-0 - B2-0	0-0.5	0.50%	Chrysotile
B1-3.5 - B2-3.5	3.5-4.0	0.50%	Chrysotile
B3-0 - B4-0	0-0.5	<0.25%	Chrysotile
B3-3.5 - B4-3.5	3.5-4.0	<0.25%	Chrysotile
B5-0 - B6-0	0-0.5	0.25%	Chrysotile
B5-3.5 - B6-3.5	3.5-4.0	<0.25%	Chrysotile
B7-0 - B8-0	0-0.5	0.25%	Chrysotile
B7-3.5 - B8-3.5	3.5-4.0	0.25%	Chrysotile
B9-0 - B10-0	0-0.5	<0.25%	Chrysotile
B9-3.5 - B10-3.5	3.5-4.0	0.25%	Chrysotile
B11-0 - B12-0	0-0.5	0.25%	Chrysotile
B11-3.5 - B12-3.5	3.5-4.0	0.50%	Chrysotile
B13-0 - B14-0	0-0.5	<0.25%	Chrysotile
B13-3.5 - B14-3.5	3.5-4.0	0.25%	Chrysotile
B15-0 - B16-0	0-0.5	0.25%	Chrysotile
B15-3.5 - B16-3.5	3.5-4.0	0.50%	Chrysotile
B17-0 - B18-0	0-0.5	0.50%	Chrysotile
B17-3.5 - B18-3.5	3.5-4.0	0.75%	Chrysotile
B19-0 - B20-0	0-0.5	0.50%	Chrysotile
B19-3.5 - B20-3.5	3.5-4.0	0.50%	Chrysotile
B21-0 - B22-0	0-0.5	0.75%	Chrysotile
B21-3.5 - B22-3.5	3.5-4.0	0.50%	Chrysotile
B23-0 - B24-0	0-0.5	0.50%	Chrysotile
B23-3.5 - B24-3.5	3.5-4.0	0.50%	Chrysotile
B25-0 - B26-0	0-0.5	0.75%	Chrysotile
B25-3.5 - B26-3.5	3.5-4.0	0.25%	Chrysotile

Notes:

CARB Method 435 = California Air Resources Board Method 435

PLM = Polarized Light Microscopy

< = Less than

APPENDIX A

EMSL Analytical, Inc.
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EMSL Order: 091624824
Customer ID: GECN21
Customer PO: 51090-03-26
Project ID:

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Livermore, CA 94550

Project: 51090-03-26

Phone: (775) 685-6116
Fax: (925) 371-5915
Received: 12/29/2016 10:30 AM
Analysis Date: 01/10/2017
Collected: 12/22/2016

Test Report: PLM Analysis of Soils 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**
B1-0 - B2-0 *091624824-0001*	SOIL	Brown Fibrous Homogeneous		99.5% Non-fibrous (Other)	**.5% Chrysotile**
B1-3.5 - B2-3.5 *091624824-0002*	SOIL	Brown Fibrous Homogeneous		99.5% Non-fibrous (Other)	**.5% Chrysotile**
B3-0 - B4-0 *091624824-0003*	SOIL	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
B3-3.5 - B4-3.5 *091624824-0004*	SOIL	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
B5-0 - B6-0 *091624824-0005*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B5-3.5 - B6-3.5 *091624824-0006*	SOIL	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
B7-0 - B8-0 *091624824-0007*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B7-3.5 - B8-3.5 *091624824-0008*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B9-0 - B10-0 *091624824-0009*	SOIL	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
B9-3.5 - B10-3.5 *091624824-0010*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 01/10/2017 13:29:32

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Collected: 12/22/2016

Test Report: PLM Analysis of Soils 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**
B11-0 - B12-0 *091624824-0011*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B11-3.5 - B12-3.5 *091624824-0012*	SOIL	Brown Fibrous Homogeneous		99.50% Non-fibrous (Other)	**.50% Chrysotile**
B13-0 - B14-0 *091624824-0013*	SOIL	Brown Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
B13-3.5 - B14-3.5 *091624824-0014*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B15-0 - B16-0 *091624824-0015*	SOIL	Brown Fibrous Homogeneous		99.75% Non-fibrous (Other)	**.25% Chrysotile**
B15-3.5 - B16-3.5 *091624824-0016*	SOIL	Brown Fibrous Homogeneous		99.50% Non-fibrous (Other)	**.50% Chrysotile**
B17-0 - B18-0 *091624824-0017*	SOIL	Brown Non-Fibrous Homogeneous		99.50% Non-fibrous (Other)	**0.5% Chrysotile**
B17-3.5 - B18-3.5 *091624824-0018*	SOIL	Brown Non-Fibrous Homogeneous		99.25% Non-fibrous (Other)	**0.75% Chrysotile**
B19-0 - B20-0 *091624824-0019*	SOIL	Brown Non-Fibrous Homogeneous		99.50% Non-fibrous (Other)	**0.5% Chrysotile**
B19-3.5 - B20-3.5 *091624824-0020*	SOIL	Brown Non-Fibrous Homogeneous		99.5% Non-fibrous (Other)	**0.5% Chrysotile**

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 01/10/2017 13:29:32

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Fax: (925) 371-5915
Received: 12/29/2016 10:30 AM
Analysis Date: 01/10/2017
Collected: 12/22/2016

Test Report: PLM Analysis of Soils 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**
B21-0 - B22-0 *091624824-0021*	SOIL	Brown Non-Fibrous Homogeneous		99.25% Non-fibrous (Other)	**0.75% Chrysotile**
B21-3.5 - B22-3.5 *091624824-0022*	SOIL	Brown Non-Fibrous Homogeneous		99.5% Non-fibrous (Other)	**0.5% Chrysotile**
B23-0 - B24-0 *091624824-0023*	SOIL	Brown Non-Fibrous Homogeneous		99.50% Non-fibrous (Other)	**0.50% Chrysotile**
B23-3.5 - B24-3.5 *091624824-0024*	SOIL	Brown Non-Fibrous Homogeneous		99.50% Non-fibrous (Other)	**0.5% Chrysotile**
B25-0 - B26-0 *091624824-0025*	SOIL	Brown Non-Fibrous Homogeneous		99.25% Non-fibrous (Other)	**0.75% Chrysotile**
B25-3.5 - B26-3.5 *091624824-0026*	SOIL	Brown Non-Fibrous Homogeneous		99.75% Non-fibrous (Other)	**0.25% Chrysotile**

Analyst(s)

Cecilia Yu (10)
Christie Villanueva (7)
Raphael Feliciano (9)

Matthew Batongbacal
or other approved signatory

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 01/10/2017 13:29:32

OrderID: 091624824

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 091624824

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Zip/Postal Code: 95742	Country: US	Telephone #: 775-685-6114	Fax #:
Report To (Name): CHRIS GIUNTOLI		Please Provide Results: ☐ Fax ☒ Email	
Email Address: GIUNTOLI@GEOCONINC.COM		Purchase Order:	
Project Name/Number: S1090-03-26		EMSL Project ID *(Internal Use Only)*:	
U.S. State Samples Taken:		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

EMSL-Bill to: ☒ Same ☐ Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☒ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PCM - Air ☐ Check if samples are from NY
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NYS 198.8 SOF-V
- ☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM EPA 600/R-93/116 with milling prep (<1%)
- ☒ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep
- ☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name: CHRIS GIUNTOLI

Samplers Signature: [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B1-0 }	SAMPLE GROUP* SOIL		12/22/16
B2-0 }			
B1-3.5 }	SAMPLE GROUP*		
B2-3.5 }			

Client Sample # (s): Total # of Samples: 52

Relinquished (Client): [signature] Date: 12/23/16 Time: 1034

Received (Lab): [signature] Date: 12.23.16 Time: 1030am

Comments/Special Instructions: * COMPOSITE THE 2 SOIL SAMPLES IN EACH SAMPLE GROUP AND ANALYZE AS ONE 2-PART COMPOSITE SAMPLE

WF

Page 1 of 6 pages

OrderID: 091624824

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 091624824

EMSL ANALYTICAL, INC.0
464 MCCORMICK STREET
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (858) 230-3537

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B3-0	SOIL		12/22/16
B4-0	SAMPLE GROUP*		
B3-3.5			
B4-3.5	SAMPLE GROUP*		
B5-0			
B6-0	SAMPLE GROUP*		
B5-3.5	SAMPLE GROUP*		
B6-3.5			
B7-0	SAMPLE GROUP*		
B8-0			
B7-3.5	SAMPLE GROUP*		
B8-3.5			
B9-0	SAMPLE GROUP*		
B10-0			
B9-3.5	SAMPLE GROUP*		
B10-3.5			

*Comments/Special Instructions:

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EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company Name: GEOCON CONSULTANTS, INC.		EMSL Customer ID:	
Street: 3160 GOLD VALLEY DRIVE, SUITE 800		City: RANCHO CORDOVA	State/Province: CA
Zip/Postal Code: 95742	Country: US	Telephone #: 775-685-6114	Fax #:
Report To (Name): CHRIS GIUNTOLI		Please Provide Results: ☐ Fax ☒ Email	
Email Address: GIUNTOLI@GEOCONINC.COM		Purchase Order:	
Project Name/Number: S 1090-03-26		EMSL Project ID (*Internal Use Only*):	
U.S. State Samples Taken:		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

EMSL-Bill to: ☒ Same ☐ Different - If Bill to is Different note instructions in Comments**
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- ☐ EPA Level II
- ☐ ISO 10312

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- ☐ NYS NOB 198.4 (non-friable-NY)
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Samplers Name: CHRIS GIUNTOLI

Samplers Signature: [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B11-0	SAMPLE GROUP* SOIL		12/22/16
B12-0			
B11-3,5	SAMPLE GROUP*		
B12-3,5			

Client Sample # (s): Total # of Samples:

Relinquished (Client): [signature] Date: 12/23/16 Time: 1034

Received (Lab): Date: Time:

Comments/Special Instructions: * COMPOSITE THE 2 SOIL SAMPLES IN EACH SAMPLE GROUP AND ANALYZE AS ONE 2-PART COMPOSITE SAMPLE

EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

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FAX: (858) 230-3537

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Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B13-0	SOIL		12/22/16
B14-0	SAMPLE GROUP*		
B13-3.5	SAMPLE GROUP*		
B14-3.5			
B15-0	SAMPLE GROUP*		
B16-0			
B15-3.5	SAMPLE GROUP*		
B16-3.5			
B17-0	SAMPLE GROUP*		
B18-0			
B17-3.5	SAMPLE GROUP*		
B18-3.5			
B19-0	SAMPLE GROUP*		
B20-0			
B19-3.5	SAMPLE GROUP*		
B20-3.5			

*Comments/Special Instructions:

Page 4 of 6 pages

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PHONE: (800) 220-3675
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Zip/Postal Code: 95742	Country: US	Telephone #: 775-685-6114	Fax #:
Report To (Name): CHRIS GIUNTOLI		Please Provide Results: ☐ Fax ☒ Email	
Email Address: GIUNTOLI@GEOCONINC.COM		Purchase Order:	
Project Name/Number: S1090-03-26		EMSL Project ID (*Internal Use Only*):	
U.S. State Samples Taken:		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

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Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name: CHRIS GIUNTOLI

Samplers Signature: Chris Giuntoli

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B21-0 }	SAMPLE GROUP* SOIL		12/22/16
B22-0 }			
B21-3.5 }	SAMPLE GROUP*		
B22-3.5 }			

Client Sample # (s): - Total # of Samples:

Relinquished (Client): Chris Giuntoli Date: 12/23/16 Time: 1034

Received (Lab): Date: Time:

Comments/Special Instructions: * COMPOSITE THE 2 SOIL SAMPLES IN EACH SAMPLE GROUP AND ANALYZE AS ONE 2-PART COMPOSITE SAMPLE

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Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B23-0	SOIL		12/22/16
B24-0	SAMPLE GROUP*		
B23-3.5	SAMPLE GROUP*		
B24-3.5			
B25-0	SAMPLE GROUP*		
B26-0			
B25-3.5	SAMPLE GROUP*		
B26-3.5			

*Comments/Special Instructions:

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