ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT

San Jose Creek Bridge (51-0217) Replacement Project
Santa Barbara County, California

PREPARED FOR:

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL PLANNING
HAZARDOUS WASTE BRANCH / UNIT 403
50 HIGUERA STREET
SAN LUIS OBISPO, CALIFORNIA 93401

PREPARED BY:

GEOCON CONSULTANTS, INC.
3160 GOLD VALLEY DRIVE, SUITE 800
RANCHO CORDOVA, CALIFORNIA 95742

GEOCON PROJECT NO. S1200-01-78
TASK ORDER NO. 78, EA 05-1C360

AUGUST 2018

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S1200-01-78
August 31, 2018

Mr. Isaac Leyva, Task Order Manager
California Department of Transportation
Environmental Planning Hazardous Waste
Branch/Unit 1403
50 Higuera Street
San Luis Obispo, California 93401

Subject: ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT
SAN JOSE CREEK BRIDGE (51-0217) REPLACEMENT PROJECT
SANTA BARBARA COUNTY, CALIFORNIA
CONTRACT NO. 06A2184, TASK ORDER NO. 78, EA 05-1C360

Dear Mr. Leyva:

In accordance with California Department of Transportation (Caltrans) Contract No. 06A2184 and Task Order No. 78, we have performed an asbestos and lead-containing paint survey of the subject bridge. Our scope of services included surveying the structure for suspect asbestos-containing materials and lead-containing paint, collecting bulk samples, and submitting the samples to laboratories for analyses.

The accompanying report summarizes the services performed and laboratory analysis.

The contents of this report reflect the views of Geocon Consultants, Inc., who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

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

Sincerely,

GEOCON CONSULTANTS, INC.

Cord Dennig, CSST No. 15-5400
Staff Scientist

Chris Giuntoli, CAC No. 02-3163
Senior Project Scientist

(2 + 2 CD) Addressee

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ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT

1.0 INTRODUCTION

This asbestos and lead-containing paint (LCP) survey report was prepared by Geocon Consultants, Inc. under Caltrans Contract No. 06A2184, Task Order No. 78 (TO-78).

1.1 Project Description

The project consists of the San Jose Creek Bridge (51-0217), a reinforced concrete slab bridge, at Post Mile (PM) 1.02 on Highway 217 in Santa Barbara County, California. We performed asbestos and LCP survey activities at the project location. The project location is depicted on the Vicinity Map (Figure 1) and Site Plan (Figure 2), and shown in the attached photographs.

1.2 General Objectives

The purpose of the scope of services outlined in TO-78 was to determine the presence and quantity of asbestos and deteriorated LCP at the structure prior to bridge replacement . The information obtained from this investigation will be used by Caltrans for waste profiling, determining California Occupational Safety and Health Administration (Cal/OSHA) applicability, and coordinating asbestos and LCP disturbance activities.

> *It was <u>not</u> Geocon's intent during this inspection to conduct an evaluation of lead-based paint hazards in accordance with U.S. Department of Housing and Urban Development (HUD) guidelines.*

2.0 BACKGROUND

2.1 Asbestos

The Code of Federal Regulations (CFR), 40 CFR 61, Subpart M, NESHAP and Federal Occupational Safety and Health Administration (FED OSHA) classify asbestos-containing material (ACM) as any material or product that contains *greater than* 1% asbestos. Nonfriable ACM is classified by NESHAP as either Category I or Category II material defined as follows:

- **Category I** – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- **Category II** – all remaining types of nonfriable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated asbestos-containing material (RACM), a California hazardous waste when friable, is classified as any manufactured material that contains *greater than* 1% asbestos by dry weight *and* is:

- Friable (can be crumbled, pulverized, or reduced to powder by hand pressure); or
- Category I material that has become friable; or

- Category I material that has been subjected to sanding, grinding, cutting, or abrading; or
- Category II nonfriable material that has a high probability of becoming crumbled, pulverized, or reduced to a powder during demolition or renovation activities.

Activities that disturb materials containing *any* amount of asbestos are subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8 of the California Code of Regulations (CCR) §1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor, but associated waste labeling is not required if the material contains 1% or less asbestos. When the asbestos content of a material exceeds 1%, virtually all requirements of the standard become effective.

Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M). RACM (friable ACM and nonfriable ACM that will become friable during demolition operations) must be removed from structures prior to demolition. Certain nonfriable ACM and materials containing 1% or less asbestos may remain in structures during demolition; however, there are waste handling/disposal issues and Cal/OSHA work requirements that must be addressed. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

With respect to potential worker exposure, notification, and registration requirements, Cal/OSHA defines asbestos-containing construction material (ACCM) as construction material that contains more than 0.1% asbestos (Title 8, CCR 341.6).

2.2 Lead Paint

Construction activities (including demolition) that disturb materials or paints containing *any* amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, §1532.1. Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8, §35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a substrate. Demolition of a deteriorated LCP component would require waste characterization and appropriate disposal. Intact LCP on a component is currently accepted by most landfills and recycling facilities; however, contractors are responsible for segregating and characterizing waste streams prior to disposal.

For a solid waste containing lead, the waste is classified as California hazardous when: 1) the representative total lead content equals or exceeds the respective Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg); or 2) the representative soluble lead content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l) based on the standard Waste Extraction Test (WET). A waste has the potential for exceeding the lead STLC when the waste's total lead content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when total lead is detected at a

concentration greater than or equal to 50 mg/kg, and assuming that 100 percent of the total lead is soluble, soluble lead analysis is required. Lead-containing waste is classified as "Resource, Conservation, and Recovery Act" (RCRA) hazardous, or Federal hazardous, when the representative soluble lead content equals or exceeds the Federal regulatory level of 5 mg/l based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability; however, for the purposes of this investigation, toxicity (i.e., lead concentration) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California-hazardous or RCRA-hazardous requires management as a hazardous waste.

Potential hazards exist to workers who remove or cut through LCP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with lead-containing paint. Torching of these materials may produce lead oxide fumes. Therefore, air monitoring and/or respiratory protection may be required during the demolition of materials coated with LCP. Guidelines regarding regulatory provisions for construction work where workers may be exposed to lead are presented in Title 8, CCR, §1532.1.

2.3 Architectural Drawings and Previous Survey Activities

Architectural drawings and previous survey reports were not available for our review.

3.0 SCOPE OF SERVICES

Mr. Cord Dennig, a California-Certified Site Surveillance Technician (CSST), certification No. 15-5400 (expiration April 15, 2019), and Certified Lead Paint Inspector/Assessor with the California Department of Public Health (DPH), certification number 30024 (expiration August 31, 2018), performed the asbestos and LCP survey at the project location on August 1, 2018. Mr. Chris Giuntoli, a California-Certified Asbestos Consultant (CAC), certification No. 02-3163 (expiration June 19, 2019), and Certified Lead Paint Inspector/Assessor with the California Department of Public Health (DPH), certification number 5502 (expiration June 14, 2019) provided project supervision.

3.1 Asbestos

Suspect ACMs were grouped into homogeneous areas with representative samples randomly collected from each. In addition, each potential ACM was evaluated for friability. A total of ten bulk asbestos samples representing four suspect materials were collected.

Our procedures for inspection and sampling in accordance with TO-78 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a mist of water. The samples were then cut from the substrate and transferred to labeled containers. Note that when multiple samples were collected, the sampling locations were distributed throughout the homogeneous area (spaces where the material was observed). Due to elevated water level and thick vegetation we were not able to examine the underside of the bridge.
- Relinquished bulk asbestos samples under chain-of-custody protocol to EMSL Analytical, Inc., a California-licensed and Caltrans-approved subcontractor, for asbestos analysis in accordance with United States Environmental Protection Agency (EPA) Test Method 600/R-93/116 using polarized light microscopy (PLM). EMSL Analytical, Inc. is a laboratory accredited by the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NIST-NVLAP) for bulk asbestos fiber analysis. The laboratory analyses were requested on a turnaround period of one week.

Sample group identification numbers, material descriptions, approximate quantities, friability assessments, and photo references are summarized in Table 1. Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

3.2 Lead Paint

We collected a total of two bulk paint samples from suspect LCP observed at the project location. Our sampling procedures in accordance with TO-78 are discussed below:

- Collected bulk samples of suspect LCP using techniques presented in HUD guidelines. In addition, the painted areas were evaluated for evidence of deterioration such as flaking or cracking.
- Relinquished bulk LCP samples under chain-of-custody protocol to Advanced Technology Laboratories, a California-licensed and Caltrans-approved subcontractor, for total and soluble lead analysis in accordance with EPA Test Method 6010B. Advanced Technology Laboratories is accredited by the DPH for lead analysis. The laboratory analyses were requested on a turnaround period of five days.

Paint sample identification numbers, descriptions, peeling and flaking quantities, and photo references are summarized in Table 2. Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

4.0 INVESTIGATIVE RESULTS

4.1 Asbestos

Chrysotile asbestos at concentrations of 15-20% was detected in samples representing approximately 20 square feet of nonfriable sheet packing used as guardrail shims on the bridge. Asbestos was not detected in samples of other suspect materials collected during our survey. A summary of the analytical

laboratory test results for asbestos is presented in Table 1. Reproductions of the laboratory report and chain-of-custody documentation are presented in the report appendix.

4.2 Lead Paint

Our sample representing intact yellow traffic striping exhibited a total lead concentration of 2,400 mg/kg and a soluble TCLP lead concentration of 0.34 mg/l.

Lead was not detected at levels that would be classified as California or Federal hazardous in the sample of white traffic striping collected during our survey. A summary of the analytical laboratory test results for paint is presented in Table 2. Reproductions of the laboratory reports and chain-of-custody documentation are presented in the report appendix.

5.0 RECOMMENDATIONS

Based on our findings, we recommend the following:

5.1 Asbestos

NESHAP regulations do not require that asbestos-containing sheet packing (a Category I nonfriable/nonhazardous material) identified during our survey be removed prior to renovation/demolition or be treated as a hazardous waste. The sheet packing may also be reused or stored. However, *disturbance* of the material (cutting, abrading, sanding, grinding, etc.) would require compliance with the Cal/OSHA asbestos standard (Title 8, CCR §1529).

We also recommend that contractors who will be conducting demolition, renovation, or related activities be notified of the presence of asbestos in their work areas (i.e., provide the contractor[s] with a copy of this report and a list of asbestos removed during subsequent activities). Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Contractors are responsible for informing landfills and recycling facilities of the contractor's intent to dispose of asbestos waste. Landfills and recycling facilities may require additional waste characterization. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

Written notification to the Santa Barbara County Air Pollution Control District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

5.2 Lead Paint

Yellow traffic striping represented by samples collected during our survey would be considered a California waste based on lead content if stripped, blasted, or otherwise separated from the substrate.

We recommend that all paints at the project location be treated as lead-containing for purpose of determining the applicability of the Cal/OSHA lead standard during maintenance, renovation, and demolition activities. This recommendation is based on LCP sample results and the fact that lead was a common ingredient of paints manufactured before 1978 and is still an ingredient of some paints. In accordance with Title 8, CCR, §1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work. Compliance and training requirements regarding construction activities where workers may be exposed to lead are presented in Title 8, CCR, §1532.1, subsections (e) and (l), respectively. The removal, transportation, placement, handling, and disposal of LCP must result in no visible dust.

6.0 REPORT LIMITATIONS

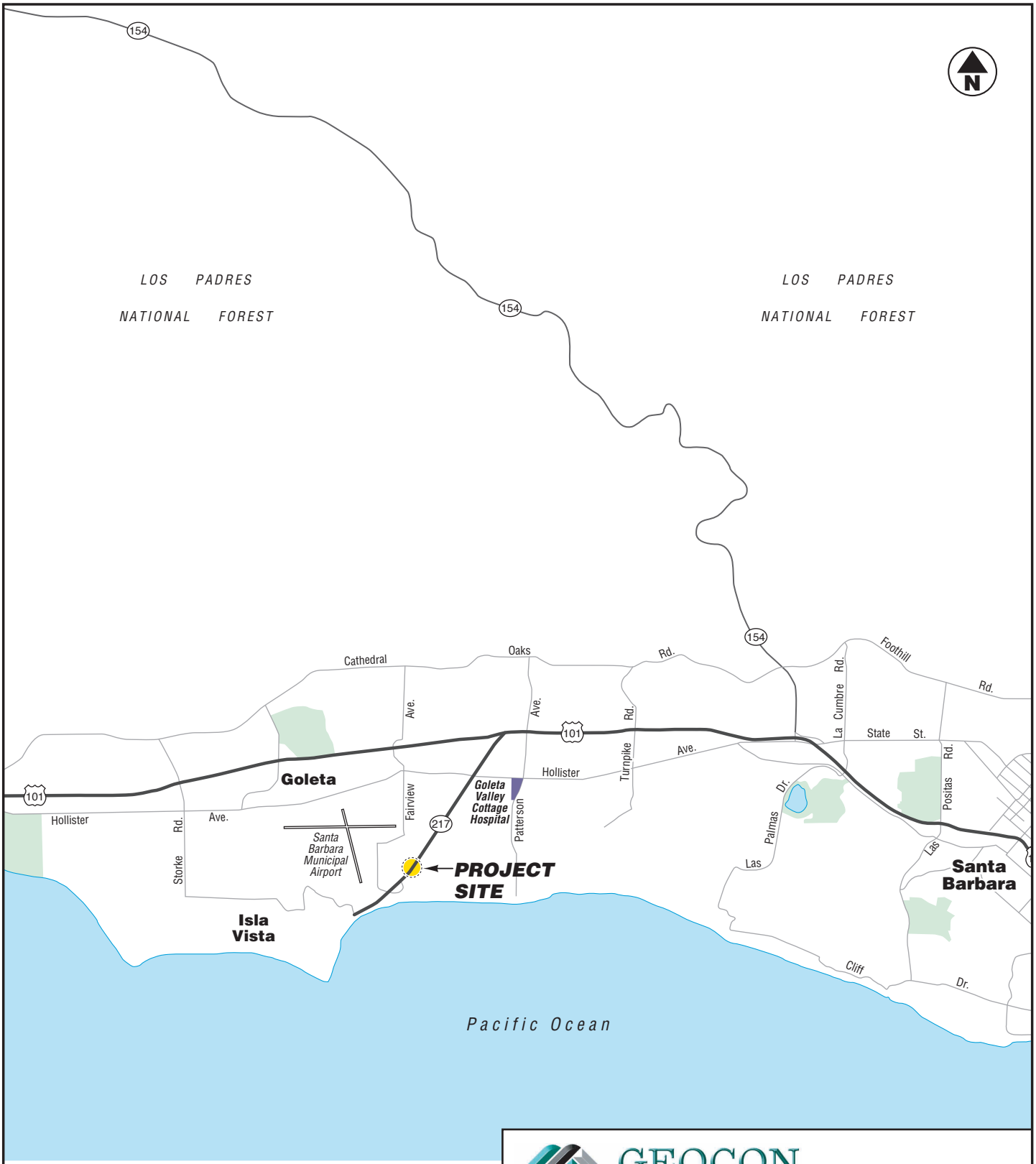
The asbestos and LCP survey was conducted in conformance with generally accepted standards of practice for identifying and evaluating asbestos and LCP in structures. The survey addressed only the structure identified in Section 1.1. Due to the nature of structure surveys, asbestos and LCP use, and laboratory analytical limitations, some ACM or LCP at the project location may not have been identified. Spaces such as cavities, voids, crawlspaces, and pipe chases may have been concealed to our investigator. Previous renovation work may have concealed or covered spaces or materials or may have partially demolished materials and left debris in inaccessible areas. Additionally, renovation activities may have partially replaced ACM with indistinguishable non-ACM. Asbestos and/or LCP may exist in areas of the structure that were not accessible or sampled in conjunction with this TO.

During renovation or demolition operations, suspect materials may be uncovered which are different from those accessible for sampling during this assessment. Personnel in charge of renovation/demolition should be alerted to note materials uncovered during such activities that differ substantially from those included in this or previous assessment reports. If suspect ACM and/or LCP are found, additional sampling and analysis should be performed to determine if the materials contain asbestos or lead.

This report has been prepared exclusively for Caltrans. 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. Geocon 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.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.



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

State Route 217 San Jose Creek Bridge Replacement

Santa Barbara County, California

VICINITY MAP

GEOCON Proj. No. S1200-01-78

Task Order No. 78 | August 2018 | Figure 1

LEGEND:

- Approximate Asbestos Sample Location
- Approximate Paint Sample Location

0 50

Scale in Feet

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

State Route 217 San Jose Creek Bridge Replacement

Santa Barbara County, California	**SITE PLAN**	
GEOCON Proj. No. S1200-01-78		
Task Order No. 78	August 2018	Figure 2

Photo No. 1 Bridge

Photo No. 2 Bridge number

PHOTO NOS. 1 & 2

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

State Route 217 San Jose Creek Bridge Replacement		
GEOCON Proj. No. S1200-01-78	Santa Barbara County, California	
Task Order No. 78	August 2018	

Photo No. 3 Deck concrete and center K-rail

Photo No. 4 Guardrail shims

PHOTO NOS. 3 & 4

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PHONE 916.852.9118 – FAX 916.852.9132

State Route 217 San Jose Creek Bridge Replacement		
GEOCON Proj. No. S1200-01-78	Santa Barbara County, California	
Task Order No. 78	August 2018	

Photo No. 5 Expansion joint styrene fill

Photo No. 6 Expansion joint spray foam fill

PHOTO NOS. 5 & 6

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PHONE 916.852.9118 – FAX 916.852.9132

State Route 217 San Jose Creek Bridge Replacement		
GEOCON Proj. No. S1200-01-78	Santa Barbara County, California	
Task Order No. 78	August 2018	

TABLE 1
SUMMARY OF ASBESTOS ANALYTICAL RESULTS
SAN JOSE CREEK BRIDGE (51-0217) REPLACEMENT PROJECT
CALTRANS CONTRACT 06A2184, TASK ORDER NO. 78, 05-1200-0134-0 (EA 05-1C360)
SANTA BARBARA COUNTY, CALIFORNIA

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116

Sample Group No.	Description of Material	Approximate Quantity	Friable	Site Photos	Asbestos Content
1	Concrete	NA	NA	1 through 6	ND
2	Bike Path Concrete	NA	NA	5	ND
3	Asphalt (approaches)	NA	NA	1 through 3	ND
4	**Guardrail Shims**	**20 Square Feet**	**No**	**2 and 4**	**15-20% Chrysotile**

Notes:

NA = Not applicable (asbestos not detected)

ND = Not detected

TABLE 2

SUMMARY OF PAINT SAMPLE ANALYTICAL RESULTS
SAN JOSE CREEK BRIDGE (51-0217) REPLACEMENT PROJECT
CALTRANS CONTRACT 06A2184, TASK ORDER NO. 78, 05-1200-0134-0 (EA 05-1C360)
SANTA BARBARA COUNTY, CALIFORNIA

SAMPLE I.D.	PAINT COLOR	PAINT TYPE	TOTAL LEAD (mg/kg)	TCLP LEAD (mg/l)
0217-P1	White	Traffic Stripe	7.3	---
0217-P2	Yellow	Traffic Stripe	2,400	0.34

Notes:
TCLP = Toxicity Characteristic Leaching Procedure
mg/kg = Milligrams per kilogram
mg/l = Milligrams per liter
--- = Not analyzed

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order:	041823744
Customer ID:	GECN80
Customer PO:	0642184
Project ID:	

Attention:	Chris Giuntoli	**Phone:**	(775) 685-6116
	Geocon Consultants, Inc.	**Fax:**	(916) 852-9132
	3160 Gold Valley Drive	**Received Date:**	08/06/2018 9:00 AM
	Suite 800	**Analysis Date:**	08/09/2018 - 08/14/2018
	Rancho Cordova, CA 95742	**Collected Date:**	08/01/2018
Project:	51200-01-78 / San Jose Creek Bridge		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
0217-01A *041823744-0001*	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-01B *041823744-0002*	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-01C *041823744-0003*	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-01D *041823744-0004*	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-02A *041823744-0005*	Bike Path Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-02B *041823744-0006*	Bike Path Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-03A *041823744-0007*	Asphalt	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-03B *041823744-0008*	Asphalt	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
0217-04A *041823744-0009*	Guard Rail Shims	Gray Non-Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
0217-04B *041823744-0010*	Guard Rail Shims	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile

Analyst(s)

Alexis Kum (5)

Ian Kulis (5)

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

Initial report from: 08/14/2018 08:01:07

OrderID: 041823744

P. 1 of 2

Chain of Custody

EMSL Order Number (*Lab Use Only*): 041823744

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

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

RECEIVED
CINNAMINSON, NJ
18 AUG -6 AM 10:29

Company: Geocon Consultants, Inc.		**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments**	
Street: 3160 Gold Valley Dr. #800		Third Party Billing requires written authorization from third party	
City: Rancho Cordova	**State/Province:** CA	**Zip/Postal Code:** 95742	**Country:** USA
Report To (Name): giuntoli@geoconinc.com		**Fax #:**	
Telephone #: 916 852-9118		**Email Address:** giuntoli@geoconinc.com, silva@geoconinc.com	
Project Name/Number: S1200-01-72 San Jose Creek Bridge			
Please Provide Results: ☐ Fax ☒ Email	**Purchase Order:** 064281	**U.S. State Samples Taken:** CA	

Turnaround Time (TAT) Options* - Please Check

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

**For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)*

Asbestos

PCM - Air
☐ NIOSH 7400
☐ w/ 8hr. TWA

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

TEM - Water
Fibers ≥10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

PLM - Bulk
☒ PLM EPA 600/R-93/116
☐ PLM EPA NOB (<1%)
☐ NYS 198.1 (friable-NY)
☐ NYS 198.6 (non-friable-NY)
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

TEM - Dust
☐ Microvac – ASTM D 5755
☐ Wipe-ASTM D6480

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP

Soil/Rock/Vermiculite
☐ PLM CARB 435 – A (0.25% sensitivity)
☐ PLM CARB 435 – B (0.1% sensitivity)
☐ TEM CARB 435 – B (0.1% sensitivity)
☐ EPA Reg. 1 Screening Protocol (Qualitative)

Other:

Lead (Pb)

Flame Atomic Absorption
☐ Chips SW846-7000B or AOAC 974.02
☐ Soil SW846-7000B/7420
☐ Air NIOSH 7082
☐ Wastewater SM3111B or SW846-7000B/7420
☐ ASTM Wipe SW846-7000B/7420
☐ non ASTM Wipe SW846-7000B/7420
☐ TCLP SW846-1311/7420/SM 3111B

ICP
☐ Air NIOSH 7300 Modified
☐ non ASTM Wipe SW846-6010B or C
☐ ASTM Wipe SW846-6010B or C
☐ Soil SW846-6010 B or C
☐ Waste Water SW846-6010B or C
☐ TCLP SW846-6010B or C

Graphite Furnace Atomic Absorption
☐ Soil SW846-7421 ☐ Wastewater EPA 200.9
☐ Air NIOSH 7105 ☐ Drinking Water EPA 200.9

Other: ☐

Microbiology

Wipe and Bulk Samples
☐ Mold & Fungi – Direct Examination
☐ Mold & Fungi Culture (Genus Only)
☐ *Mold & Fungi Culture (Genus & Species)*
☐ Bacterial Count & ID (Up to Three Types)
☐ Bacterial Count & ID (Up to Five Types)
☐ MRSA
☐ *Pseudomonas aeruginosa*

Water Samples
☐ Total Coliform & E.coli (P/A)
☐ Fecal Coliform (SM 9222D)
☐ Sewage Screen
☐ Heterotrophic Plate Count (SM 9215)

Air Samples
☐ Mold & Fungi (Spore Trap)
☐ Mold & Fungi Culture (Genus Only)
☐ *Mold & Fungi (Genus & Species)*
☐ Bacterial Culture & ID (Up to Three Types)
☐ Bacterial Culture & ID (Up to Five Types)
☐ Endotoxin Testing

Real Time Q-PCR (See Analytical Guide for Code)
Code:

Legionella
☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4

Other: ☐

Materials Science

☐ Common Particle ID (large particles)
☐ Fine Particle ID (environmental dust)
☐ Basic Material ID (solids)
☐ Advanced Material ID
☐ Physical Testing (Tensile, Compression)
☐ Combustion-by-products (soot, char, etc.)
☐ X-Ray Fluorescence (elem. analysis)
☐ X-Ray Diffraction (Crystalline Part.)
☐ MMVF's (Fibrous glass, RCF's)
☐ Particle Size (sieve/microscopy/laser)
☐ Combustible Dust
☐ Petrographic Examination
Other: ☐

IAQ

Nuisance Dust NIOSH ☐ 0500 ☐ 0600
Airborne Dust ☐ PM10 ☐ TSP
Silica Analysis: ☐ All Species
Silica Analysis – Single Species
☐ Alpha Quartz ☐ Cristobalite ☐ Tridymite
☐ HVAC Efficiency
☐ Carbon Black
☐ Airborne Oil Mist
Radon Testing: Call for Kit and COC
Other: ☐

****Comments/Special Instructions:**

Client Sample #'s	0217-1A through 0217-415	**Total # of Samples:**	100
Relinquished (Client):	**Date:** 8/3/18	**Time:**	1500
Received (Lab):	**Date:** 8-6-18	**Time:**	9:10

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

OrderID: 041823744

P. 2 of 2

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Chain of Custody

EMSL Order Number (*Lab Use Only*): 041823744

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

RECEIVED
EMSL
CINNAMINSON, NJ
18 AUG -6 AM 10:29

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
0217-01A/B	Concrete	NA	8/1/18
0217-02A/B	Bike Path Concrete		
0217-03A/B	Asphalt		
0217-04A/B	Guard rail shims		

***Comments/Special Instructions:**

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

ADVANCED TECHNOLOGY LABORATORIES

August 13, 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 : 1802840
Client Reference : San Jose Creek Bridge Replacement, S1200-01-78

Enclosed are the results for sample(s) received on August 04, 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 :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/13/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0217-P1	1802840-01	Paint Chip	8/01/18 15:30	8/04/18 10:06
0217-P2	1802840-02	Paint Chip	8/01/18 16:00	8/04/18 10:06

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/13/2018

Total Metals by ICP-AES EPA 6010B

Analyte: Lead **Analyst: GO**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1802840-01	0217-P1	**7.3**	mg/kg	2.3	1	B8H0148	08/06/2018	08/07/18 12:00	
1802840-02	0217-P2	**2400**	mg/kg	2.7	1	B8H0148	08/06/2018	08/07/18 12:04	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 08/13/2018

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 B8H0148 - EPA 3050B_S										
Blank (B8H0148-BLK1)						Prepared: 8/6/2018 Analyzed: 8/7/2018				
Lead	ND	1.0	0.18							
LCS (B8H0148-BS1)						Prepared: 8/6/2018 Analyzed: 8/7/2018				
Lead	43.1613	1.0	0.18	50.0000		86.3	80 - 120			
Duplicate (B8H0148-DUP1)			**Source: 1802840-01**			Prepared: 8/6/2018 Analyzed: 8/7/2018				
Lead	9.13717	2.2	0.41		7.27090			22.7	20	R
Matrix Spike (B8H0148-MS1)			**Source: 1802840-01**			Prepared: 8/6/2018 Analyzed: 8/7/2018				
Lead	234.954	2.3	0.41	281.658	7.27090	80.8	36 - 121			
Matrix Spike Dup (B8H0148-MSD1)			**Source: 1802840-01**			Prepared: 8/6/2018 Analyzed: 8/7/2018				
Lead	220.003	2.3	0.41	282.167	7.27090	75.4	36 - 121	6.57	20	

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/13/2018

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
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: Ontrac

Sample Condition Upon Receipt
1. CHILLED 5.7 Y ☑ N ☐ 4. SEALED Y ☐ N ☑
2. HEADSPACE (VOA) Y ☐ N ☐ 5. # OF SPLS MATCH COC Y ☑ N ☐
3. CONTAINER INTACT Y ☑ N ☐ 6. PRESERVED Y ☐ N ☑

Client: Geocon
Address: 3160 Gold Valley Drive, Suite 800
Tel: 916-852-9118
Attention: Rebecca Silva
City: Rancho Cordova State: CA Zip Code: 95742
Fax: 916-852-9132
Project Name: San Jose Creek Bridge Replacement Project #: S1200-01-78
Sampler: C. Dennis (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
C. Dennis	8/3/18	1500	Ontrac	8/3/18	1500
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date: 8/4/18	Time: 1000
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 8/3/18
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans Contract 06A2184
Provide EDD

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)

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	Circle or Add Analysis(es) Requested: Total lead	SPECIFY APPROPRIATE MATRIX: SOIL	WATER	GROUND WATER	WASTEWATER	PAINT CHIP	TAT	Container(s): #	Type	PRESERVATION	REMARKS
	1802840-01	0217-P1	8/1	1530	X					X	5	1	Baggie		
	1 -02	0217-P2	↓	1600	↓					↓	↓	↓	↓		

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

- 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 = CT Routine 5 Workdays

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=$Na_2S_2O_3$

ADVANCED TECHNOLOGY LABORATORIES

August 21, 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 : 1802840
Client Reference : San Jose Creek Bridge Replacement, S1200-01-78

Enclosed are the results for sample(s) received on August 04, 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 :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/21/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0217-P2	1802840-02	Paint Chip	8/01/18 16:00	8/04/18 10:06

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/21/2018

TCLP Metals by ICP-AES EPA 6010B

Analyte: Lead **Analyst: GO**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1802840-02	0217-P2	**0.34**	mg/L	0.25	5	B8H0546	08/18/2018	08/20/18 11:57	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 08/21/2018

QUALITY CONTROL SECTION

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

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0546 - EPA 3010A_S										
Blank (B8H0546-BLK1)						Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	ND	0.050	0.0047							
Blank (B8H0546-BLK2)						Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	ND	0.050	0.0047							
Blank (B8H0546-BLK3)						Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	ND	0.050	0.0047			NR				
LCS (B8H0546-BS1)						Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	0.947495	0.050	0.0047	1.00000		94.7	80 - 120			
Duplicate (B8H0546-DUP1)			**Source: 1802839-43**			Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	ND	0.25	0.024		ND			NR	20	
Duplicate (B8H0546-DUP2)			**Source: 1802839-13**			Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	ND	0.25	0.024		ND			NR	20	
Matrix Spike (B8H0546-MS1)			**Source: 1802839-43**			Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	2.22964	0.25	0.024	2.50000	ND	89.2	76 - 108			
Matrix Spike (B8H0546-MS2)			**Source: 1802839-13**			Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	2.24122	0.25	0.024	2.50000	ND	89.6	76 - 108			
Matrix Spike Dup (B8H0546-MSD1)			**Source: 1802839-43**			Prepared: 8/18/2018 Analyzed: 8/20/2018				
Lead	2.58431	0.25	0.024	2.50000	ND	103	76 - 108	14.7	20	

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	San Jose Creek Bridge Replacement, S1200-01-78
3160 Gold Valley Drive, Suite 800		Report To :	Rebecca Silva
Rancho Cordova , CA 95742		Reported :	08/21/2018

Notes and Definitions

D1	Sample required dilution due to possible matrix interference.
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.

Dominic Mata

From: Rebecca Silva [silva@geoconinc.com]
Sent: Tuesday, August 14, 2018 8:20 AM
To: Dominic Mata
Cc: customer.relations@atlglobal.com
Subject: RE: Results/Invoice - San Jose Creek Bridge Replacement, S1200-01-78 (ATL# 1802840)

Hi Dominic – Please run TCLP lead on sample 0217-P2 on standard TAT. Thanks.

From: Dominic Mata [mailto:dominic@atlglobal.com]
Sent: Monday, August 13, 2018 4:47 PM
To: Rebecca Silva
Cc: Gemma Reblando; customer.relations@atlglobal.com
Subject: Results/Invoice - San Jose Creek Bridge Replacement, S1200-01-78 (ATL# 1802840)

Good afternoon Rebecca,

Please find your results and invoice for the above project attached. If I can further assist, please let me know.

Thanks,

Dominic Mata | Project Coordinator
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755
O: 562.989.4045 ext. 238 | http://www.atlglobal.com
Laboratory Excellence Defined