INFORMATION HANDOUT

For Contract No. 01-0E2104
At 01-HUM-36, 96, 101, 254-VAR

Identified by
Project ID 0114000016

AGREEMENTS

PLAC - Hoopa Valley Tribe Memorandum of Understanding (MOU) Tribal Employment Rights Ordinance (TERO)

MOU 15-04
Attachment A - Hoopa Valley Tribe TERO Provisions
Attachment B - TERO Highway Construction Permit (THCP) Application

MATERIALS INFORMATION

Asbestos and Lead-Containing Paint Survey Report Seventh Street Overcrossing (04-0054) dated December 9, 2014

Asbestos and Lead-Containing Paint Survey Report French Road Undercrossing (04-0174) dated December 5, 2014

Asbestos and Lead-Containing Paint Survey Report Sprowel Creek Road Overcrossing (04-0195) dated December 5, 2014

Asbestos and Lead-Containing Paint Survey Report Seawood Drive Overcrossing (04-0209) dated December 11, 2014

MEMORANDUM OF UNDERSTANDING
Tribal Employment Rights Ordinance
Contracts
01-0E210
0114000016
TERO MOU 15-04

The Hoopa Valley Tribe (**Tribe**) and the State of California Department of Transportation (**Caltrans**), in order to coordinate and carry out their respective functions and duties regarding Indian Employment Preference on State highway construction projects on lands within the Hoopa Valley Indian Reservation (**Tribal Lands**), do hereby enter into this Memorandum of Understanding (**MOU**).

This **MOU** constitutes a guide to the respective intentions, obligations, and policies of the **Tribe** and **Caltrans** in entering into this agreement. It is not intended to be used as a sole basis for authorizing funding, nor is it a legally binding contract upon either party.

Contract No. Project ID	Project County-Route-Postmile	Work Description	Hoopa Tribal Lands	Hoopa IRR Inventory
01-0E210 0114000016	Hum-96-R14.55	Rehab Bridge Deck Repair	Hum-96-7.80/22.75	Hum-96-0.00/22.75

I. INDIAN EMPLOYMENT PREFERENCE AND TERO FEE

A. Recitals

1. Section 122 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, Pub. L. 100-17, 23 USC ss. 140(d), recognizes the establishment of Indian Employment Preferences in the Federal Aid Highway Program.
2. The **Tribe** has enacted certain tribal employment rights policies included within the Hoopa Valley Tribe **Tribal Employment Rights Ordinance** establishing a tribal employment rights function and mandating Indian Employment Preferences on State construction projects and in other forms of employment within the Reservation.
3. The parties hereto recognize that Caltrans shall employ the services of one or more independent contractors in order to accomplish all or some of the activities necessary for State highway construction on **Tribal Lands.**
4. **Caltrans** and the **Tribe** desire to promote Indian employment by

a) applying Indian Employment Preferences to the State's contractors for highway work conducted on **Tribal Lands** or on any State highway included in the **Tribe's** Indian Reservation Road (IRR) Inventory when a portion of the project is on Tribal Lands, and

b) establishing a mechanism to ensure that the **Tribe** receives TERO Fee, of 3% of the contract award amount, for the portion of the project that is on **Tribal Lands**.

5. The parties desire to clarify the rights and obligations of the **Tribe, Caltrans**, and prospective bidders and contractors who may perform work on **Tribal Lands** for State highway construction contracts.

B. Statement Of Intent

1. **Caltrans** shall inform prospective bidders of the Tribal, State, and Federal laws with respect to Indian Employment Preferences by inserting provisions (Attachment A) in its information to prospective bidders. These provisions shall become part of the State highway construction contract. The provisions shall require

   a) submittal of TERO Highway Contract Permit (THCP) to Tribe within 5 days after Contract Approval. The prime contractor and each sub-contractor shall submit an individual TCHP to the Tribe.

   b) a 45-day delayed start to allow for Contractor submittals to and from Tribe and Contractor submittal of completed THCP to Engineer

2. **Caltrans** shall not allow the contractor to begin work until the contractor has obtained, from the **Tribe**, a TERO Highway Contract Permit (Attachment B) from The TERO officer of the **Tribe**.
3. The TERO Officer of the **Tribe** shall work with Caltrans and Caltrans' contractor to process the TCHP in a timely manner and ensure that there is no delay in either beginning work or in providing qualified candidates to meet the contractor's personnel needs. The Tribe shall return the completed THCP to the contractor within 30 days of receiving the application.

4. Immediately after Contract Approval, **Caltrans** shall provide the TERO officer of the Tribe with all documentation necessary for the Tribe to properly invoice Caltrans for the TERO Fee. The **Tribe** shall invoice **Caltrans** for the TERO Fee, 3% of the contract award amount within 15 days after issuing the THCP. Upon receipt of an invoice for the TERO Fee, Caltrans shall forward the invoice to Accounting within 7 days and make prompt payment of the TERO Fee to the Tribe.
5. **Caltrans** shall notify the **Tribe** of each change order.
6. **Caltrans** and the **Tribe** shall make a reasonable effort to conduct joint investigations and share information. Nothing in this **MOU** shall be construed to restrict the authority of the **Tribe**, either to initiate enforcement actions in the Tribal Court or to amend Tribal laws.

II. TERO PROVISIONS – Pertaining to Contracted State Highway Work

Listed below are the provisions from the Hoopa Valley Tribe TERO that pertain to State Highway work.

Hoopa Valley Tribe
Tribal Employment Rights Ordinance
Title 13
Approved: May 17, 2012

13.0 SHORT TITLE

The Short title of this ordinance shall be the Tribal Employment Rights Ordinance, or TERO.

13.1 EFFECT ON PRIOR ENACTMENTS

13.1.1 Repeal. Resolution 91-71 A, as amended March 6, 1995, Ordinance No. 2-80, as amended April, 27, 1995, the Rules for Hearings Before the TERO Commission, as amended June 10, 1998, are hereby repealed and shall be of no further force and effect as stated in Section 13.13.1 of this ordinance; provided, however, that any existing agreements or contracts authorized under these now repealed enactments shall remain in effect until such agreements or contracts expire or are terminated; and provided, further, that the TERO Commission established by this Ordinance may terminate any existing Indian preference agreement and issue a permit in conformance with this Ordinance upon notice to the affected party and opportunity for a hearing.

13.1.2 N/A

13.1.3 N/A

13.2 DEFINITIONS

13.2.1 "**Indian**" means any member of any federally recognized tribe, or any person who furnishes documentary proof that he or she is recognized as an Indian by the United States, pursuant to its trust responsibility to American Indians.

13.2.2 "**Hoopa Reservation**" or "**Reservation**" means the Hoopa Valley Indian Reservation as defined under Article III of the Constitution and Bylaws of the Hoopa Valley Tribe.

13.2.3 "**Employer**" means any person, company, contractor, subcontractor or entity located or engaging in commercial or employment activity within the exterior boundaries of the Hoopa Valley Indian Reservation, and which employs two or more persons.

13.2.4 N/A

13.2.5 "**Commission**" and "**Office**" mean the Tribal Employment Rights Commission and its Office and the Tribal Office of Employment Relations.

13.2.6 "**Council**" means the Hoopa Valley Tribal Council.

13.2.7 "**Minimum Threshold**" means a minimum level that any job applicant shall be required to meet prior to Indian Preference being applied to that job applicant. Criteria to establish a minimum threshold may be established by but are not limited to the following:

1. Job Descriptions;
2. Interview Committees;
3. Skills Tests;
4. RFP's and License Requirements;
5. Other Job Requirements.

13.3 ESTABLISHMENT OF TERO COMMISSION AND OFFICE

13.3.1 Establishment and Purpose of Commission

(A) The Hoopa Valley Tribal Council does hereby establish the Tribal Employment Rights Commission (TERO Commission) for the purposes of implementing and enforcing the Indian Preference provisions of this Ordinance, and disseminating information regarding unlawful employment discrimination by State and private employers subject to Title VII of the Civil Rights Act of 1964 who are operating on or near the Hoopa Valley Indian Reservation.

(B) TANF; Training by TERO Commission. The TERO Commission is hereby authorized to provide basic life/work skills training consistent with the needs of the community and implementation of the Tribal, state or federal TANF program; to establish a Tribal Employment Rights training center; to enter into agreements with labor unions and other persons or entities to provide work skills training and education opportunities; and to generally provide employment training to members of the Tribe and residents of the Hoopa Valley Indian Reservation through means deemed appropriate by the Tribal Council.

(C) TERO Tax. The TERO Commission shall be allocated sufficient funds as determined by the Hoopa Valley Tribal Council derived from the TERO Tax as described in Section 13.5 of this Ordinance for implementation, conduct, and fulfillment of the TERO Commission's purposes.

13.3.2 General Powers of the Commission

(A) Organizational Authority. The Commission may hire immediate TERO staff, obligate funds appropriated by the Council, and secure and obligate funding from Federal, State or other sources to carry out its duties and functions under this Ordinance. The Commission is further authorized and directed to adopt such organizational bylaws as are necessary to enable it to carry out its duties and functions under this Ordinance. The Commission shall report directly to the Council. The TERO Commission shall be subject to the Conflict-of-Interest and Nepotism Ordinance of the Hoopa Valley Tribe.

(B) Regulatory Authority.

(1) The Commission shall promulgate rules, regulations, interpretations of law, and guidelines for Indian preference that are necessary to implement this Ordinance. Such rules shall become effective upon Council approval of a resolution adopting said rules. Council approved rules shall be codified in the Revised Code of the Hoopa Valley Tribe, and the Commission shall take other reasonable steps to insure that the general Reservation community is on notice of all Indian preference and applicable employment related laws.

(2) The Commission shall maintain an Indian Skills Bank as a means of providing qualified Indian employees to employers, contractors, and subcontractors. The Commission shall actively recruit Indians for listing in the Skills Bank. The Commission shall also actively recruit and certify Indian firms as eligible for Indian Preference in contracting and sub-contacting.

(3) N/A

(4) The Commission may (. . . N/A . . .) issue permits to such contractors according to rules and procedures to be developed, which shall include procedures for revocation of such permits.

(5) The Commission is further authorized and directed to investigate complaints regarding any violation of the provisions of this Ordinance or any other tribal the Commission is authorized to enforce. The Commission may also investigate possible violations of this Ordinance if there is reasonable cause to believe a violation of this Ordinance has occurred or is occurring. Neither the Commission or any of its employees shall have the authority to investigate or assist any Hoopa Tribal employee in pursing any employment related claim not within its authority under this Ordinance

(C) Adjudicatory Authority

The Commission may hold hearings on and determine any matter under its authority, including but not limited to hearings necessary to the issuance, modification, and revocation of any permit, license, certification, or assessment authorized hereunder, as well as any adjudicatory hearing regarding violations of the provisions of this Ordinance. The Commission shall have no authority or jurisdiction to hear or adjudicate complaints brought by Hoopa Valley Tribal employees that are not specifically authorized under this Ordinance. The Commission shall promulgate simple and fair rules to govern its adjudications, and is authorized to issue compliance orders and impose civil penalties in the form of fines.

(D) Cooperative Agreements with Other Governments

The Commission may negotiate, and upon Council approval, enter into cooperative agreements with agencies of state and federal government in order to implement the intent of this Ordinance and eliminate unlawful discrimination against Indians.

13.3.3 Composition of the Commission

(A) The Commission shall be composed of five (5) members in good standing in the community. Three (3) members of the Commission shall be appointed by the Council in October of even numbered years, each for a term of two (2) years; and two (2) members shall be appointed in odd numbered years, each initially for a term of one (1) year, thereafter being appointed in October of odd-numbered years each for a term of two (2) years. Any member may be removed by the Council at any time for cause, subject to notice and opportunity for a hearing before Council. The Council's decision shall be final. All terms of office shall commence on October 1 of the year position becomes vacant.

(B) Decisions of the TERO Commission shall be made by a majority vote. A quorum shall consist of any two of the three Commission members.

(C) Any Commission member shall be disqualified from any involvement in decisions affecting the tribal department or entity with which he or she is employed or volunteers their time to that department.

13.3.4 Powers of the TERO Director

The TERO Director shall have those powers delegated by the Commission as it deems necessary to carry out this Ordinance. The Director shall be the investigating agent for the Commission responsible for investigating, researching, reporting and documenting any relevant information required by the Commission. The Director shall report directly to the Commission.

13.4 INDIAN EMPLOYMENT PREFERENCE POLICY AND PROCEDURES

All employers shall extend a preference to qualified Indians, as provided herein, in all aspects of employment, including but not limited to recruitment, hiring, promotion, lateral transfers, retentions, training, contracting, and subcontracting. No employer may recruit, hire, or otherwise employ any non-Indian for any employment position covered by this Ordinance; unless and until the TERO Commission has furnished written notice to such employer that no qualified Indians are available for such position.

13.4.1 Applicability

Unless clearly and expressly prohibited by federal and other tribal laws or Council action, this Ordinance shall apply to all employers, including but not limited to: The Council and all its programs, departments, and chartered entities or enterprises;

private employers and independent contractors and subcontractors~ including those performing work for the Council, the State of California, or the United States.

13.4.2 Covered Positions

The Indian Employment Preference Policy of this section shall apply to each and every job classification, skill area, or craft recognized or utilized by an employer, including administrative, supervisory, and professional classifications.

13.4.3 Qualified Indians; Employment Criteria

An Indian shall be qualified for employment in a position if he or she meets the minimum threshold requirements for such position, and such Indian shall be accorded the preferences to which he or she is entitled under this Ordinance. No employer may utilize any employment criterion that is not legitimately related to the performance of the position.

13.4.4 Eligible Indians

(A) If this section conflicts with any applicable federal laws or regulations, the Hoopa Valley Tribe and its programs, departments and chartered entities and enterprises, and private employers contracting with the Tribe shall extend Indian preferences according to the requirements of said federal laws and regulations.

(B) Private Employers Not Contracting with the Hoopa Valley Tribe: Private employers not contracting with the Hoopa Valley Tribe and doing business within the exterior boundaries of the Hoopa Valley Indian reservation shall not be subject to the priority requirements of Section 13.4.4(A), but shall extend a preference to qualified Indians residing on or near the exterior boundaries of the Hoopa Valley Indian Reservation. (. . . N/A . . .)

13.4.5 Notice of Employee Rights. All employers subject to this Ordinance shall prominently display a notice to all employees and applicants for employment of their rights under this Ordinance.

13.4.6 Employer Retaliation Prohibited. It shall be violation of this Ordinance for any employer to take any adverse personnel or hiring action, or to retaliate in any way, against any person who attempts to enforce the requirements under this Ordinance. Employers found by the Commission, pursuant to an adjudicatory hearing, to have

engaged in retaliation shall be subject to appropriate sanctions to be imposed by the Commission. The Commission may in its discretion either hold a hearing or file action in Tribal Court to review an allegation of unlawful retaliation. The Tribal Court is authorized to issue temporary injunctions for enforcement of this provision to prevent unlawful conduct.

13.5 ESTABLISHMENT OF TERO TAX AND FEES

There is hereby established a TERO Tax to be paid to the Hoopa Valley Tribal Council . . . The tax shall be equivalent to three percent (3%) . . . . The proceeds of the tax shall be used in implementing this Ordinance. The Hoopa Valley Tribal Council shall authorize the appropriate amounts of the TERO Tax to be utilized by the TERO Commission according to proof of budgetary needs provided by each department. The TERO tax shall be governed under guidelines approved by the Tribal Fiscal Department. (. . . N/A . . .) The Hoopa Valley Tribal Council when it is determined to be in the interests of the Hoopa Valley Tribe reserves the right to waive TERO Taxes and Fees for any contract or contracts, and further, may approve a waiver schedule consistent with the objectives of this Ordinance, that is implemented directly by the TERO Office and that establishes tax adjustments to not less than one percent (1%).

13.6 SPECIAL REQUIREMENTS FOR CONTRACTORS AND SUBCONTRACTORS

The requirements of this Section apply to all employers engaging in commercial or employment activities within the Reservation pursuant to public or private contract. If this section's contracting requirements conflict with applicable federal law or regulations, the applicable federal laws or regulations shall supersede this section.

13.6.1 N/A

13.6.2 N/A

13.6.3 N/A

13.6.4 N/A . . . the contractor may not deviate from the plan or add or delete any existing new subcontracts or subcontractors without the written consent of the Contracting Officer or his designee and notice to the Commission. Any amendments to the Indian Preference Plan must be in writing and approved prior to the date of implementation.

13.6.5 N/A

13.7 N/A

13.7.1 Identification of Regular, Permanent Employees

(A) Contractors/employers shall be required to hire and maintain as many TERO Native American preference employees as apply for and are qualified for each craft or skill.

(B) Notwithstanding subsection A, above, Contractors/employers may hire key employees to fill not more than 25% of the workforce.

(1) Prior to commencing work on the Hoopa Valley Indian Reservation the prospective employer, contractor and sub-contractors shall identify key regular and permanent employees. The TERO Office and contractor/employer in possession of past employment records documenting employment of past supervisors or foreman shall coordinate on certifying eligibility for treatment of employees as key employee.

(2) A key employee is one who is in a top supervisory position or performs a critical function such that an employer would risk likely financial damage or loss if that task were assigned to a person unknown to the employer. A key employee has been on the employers' or contractors' annual payroll for a period of one year continuously in a supervisory capacity, or is an owner of the firm. An employee who is hired on a project-by-project basis shall not be considered a key employee.

13.7.2 Lay-Offs

No Indian Worker shall be laid off as long as a non-Indian worker in the same craft is still employed, not as long as the Indian meets threshold qualifications for the job, unless such non-Indian has been employed for more than 90 days longer than such Indian. If the contractor lays off by crews, qualified Indians shall be transferred to any crew that will be retained, as long as there are non-Indians in the same craft employed elsewhere on the Reservation under the same contract.

13.7.3 Existing Contracts, Employers

Any existing contracts or other work presently operating under an agreement with the Tribal Employment Rights Office will continue under the same written guidelines and

rules. Each employer shall provide to the Commission a list of employees and their Indian affiliation, if any, as part of the implementation of this Ordinance.

313.7.4 Reporting Requirements
Each employer shall submit monthly reports to the Commission on a form provided indicating the number of employees, including a separate tally of Indians, it has on its work force, monthly hires and fires, and other information as may be identified on the form. An employer who fails to submit monthly reports shall be subject to sanctions provided under this Ordinance.

13.8 IMPLEMENTATION

In implementing the requirements of this Ordinance, the Commission may:

13.8.1 Numerical Hiring Goal

Impose numerical hiring goals and timetables that specify the minimum number of Indians an employer must hire.

13.8.2 N/A

13.8.3 Attend and monitor all job interviews as a non-voting participant.

13.8.4 Prohibit an employer from establishing extraneous qualification criteria or other requirements that serve as barriers to Indian employment.

13.8.5 Enter into agreements, subject to approval by the Hoopa Tribal Council, with unions and other employers to insure compliance with this Ordinance.

13.8.6 N/A

13.8.7 Establish programs to provide counseling and support to Indian Workers to assist them to retain employment. Employers may be required to participate in and/or cooperate with such support and counseling programs.

13.8.8 Issue Permits

Issue permits for implementation and provisions of this Ordinance and other agreements entered into under the authority of this Ordinance.

13.9 ENFORCEMENT BY TERO COMMISSION

In implementing this Ordinance the Commission shall have the following powers of enforcement;

13.9.1 Investigation. Monitoring

To investigate and monitor complaints, concern, and inquiries regarding Indian preference.

13.9.2 Issue Notices of Non-Compliance and Compliance Orders

To issue notices of non-compliance and compliance orders with the Indian preference provisions of this Ordinance and other applicable provisions of this Ordinance.

13.9.3 Citations, Subpoenas and Penalties

To issue citations and subpoenas to employers regarding violations of the Indian preference provisions of this Ordinance, and to impose such civil penalties, including fines, as may be reasonably necessary to remedy the consequences of a violation of the Indian preference provisions this Ordinance or to deter future violations.

13.9.4 Hearings

To hold such hearings as may be necessary to resolve complaints, enforce the provisions of this Ordinance, and hear concerns regarding issues pursuant to the Commission's authority under this Ordinance.

13.9.5 File and Defend Cases in Tribal Court

To bring or defend a complaint or other pleading in Tribal Court for enforcement of the Indian preference provisions of this Ordinance, against any employer within the exterior boundaries of the Hoopa Reservation.

13.10 TRIBAL COURT

Appeals of decisions of the TERO Commission may be filed under the rules of the Tribal Court. The Tribal Court is hereby authorized to hear and dispose of appeals from final decisions from TERO Commission hearings. Any appeal from a final decision of the TERO Commission must be filed within twenty (20) calendar days after the date of receipt of the TERO Commission's decision. Any decision not appealed within the required time frame shall become final and the Tribal Court shall have no

jurisdiction to hear the appeal.

13.11 LEGAL REPRESENTATION

In carrying out its responsibilities under this Title, the Commission shall consult a legal counsel of its choosing subject to the approval of the Council. Any legal counsel chosen must be admitted in good standing to practice law in the state of California and the Hoopa Valley Tribal Court bar.

13.12 PRINCIPLES OF CONSTRUCTION; SEVERABILITY; SOVEREIGN IMMUNITY PRESERVED

13.12.1 This Ordinance is remedial legislation intended to rectify the long-standing problem of severe under-employment of Hoopa tribal members and other Indians living in the Reservation community. Accordingly, it is to be construed liberally to achieve its purposes. Doubtful issues are to be resolved in favor of a right of any party to obtain administrative review.

13.12.2 If any part of this Ordinance is found to be invalid for any reason, it is the intent of the Council that the remaining provisions remain in force to the maximum extent possible, and that they continue to be construed according to the provisions of this Section.

13.12.3 Nothing in this Ordinance is to be construed as a waiver of the Tribe's sovereign immunity from unconsented lawsuit, nor as consent by the Tribe to bring an action against the Tribe, its officers, or any of its departments or entities.

13.13 EFFECT OF AMENDMENTS ON PRIOR TERO LEGISLATION AND PENDING CASES

13.13.1 Prior TERO Enactments or Rules: Resolution 91-71A, as amended March 6, 1995, Ordinance No. 2-80, as amended April 27, 1995 are repealed and shall have no further force and effect. The Rules for Hearings before the TERO Commission, as amended June 10, 1998 shall be permitted to be used where they are consistent with the language of this statute by providing uniform rules for hearings when they are authorized under this ordinance. Under no circumstances shall those present rules be considered authority for the TERO Commission to hear employment related grievances other than which is authorized under this statute. The TERO Commission under the authority granted by §13.3 .2(C) shall draft new Rules Before Hearings to effect the most recent amendments to this Ordinance.

13.13.2 All current employee grievances that are not related to termination where the TERO Commission has not issued a final decision shall be dismissed. An employee termination case that has been appealed to tile TERO Commission prior to the date of the Tribal Council transferring employee termination grievances to the Tribal Court shall be heard by the TERO Commission. However, all employee termination cases regardless of whether they are pending before the TERO Commission or before the Tribal Court shall be subject to the requirements of 1 H.V.T.C § 1.1.04(f) as it relates to the Hoopa Valley Tribe's limited waiver of sovereign immunity.

MEMORANDUM OF UNDERSTANDING
Tribal Employment Rights Ordinance
Contracts
01-0E210
0114000016
TERO MOU 15-04

This **MOU** may be amended by written agreement of the parties, or terminated by either party upon reasonable written notice. In the event of termination, unless otherwise mutually agreed by the parties, the provisions of this **MOU** will remain in force with respect to any contract covered hereunder which has already been awarded or for which contractor performance has already commenced.

The parties hereto have agreed to the objectives, principles, and recitations cited in this document and have further approved this **MOU** for signature by their duly authorized representatives.

for the Hoopa Valley Tribe

By: _____
DANIELLE VIGIL-MASTEN
Chairperson

Date: 3/26/2015

for the CALIFORNIA DEPARTMENT OF TRANSPORTATION

By: _____
CHARLES C. FIELDER
District Director, District 1

Date: 3/27/2015

State Contract 01-0E2104
Project ID 0114000016

ATTACHMENT A

Project-Specific Special Provisions for Hoopa Valley Tribe TERO 2014-2015 MOU

SPECIAL NOTICE:

- This project includes Tribal Employment Rights Ordinance (TERO) requirements. See section 5-1.20E and 8-1.04C for TERO submittal requirements.

SSP 2-1.06B SUPPLEMENTAL PROJECT INFORMATION

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Included in *Information Handout*	Hoopa Valley Tribe TERO Memorandum of Understanding (MOU) with TERO Highway Construction Permit (THCP) Application

INFORMATION HANDOUT:
Hoopa Valley Tribe TERO Requirements Information Handout contains:

1. Signed one-time MOU between the Hoopa Tribe and the Department.
2. Attachment A project-specificTERO special provisions.
3. Attachment B TERO Highway Construction Permit Application (THCP).

SSP 5-1.20G Tribal Employment Rights Ordinance Requirements:

Complete the Hoopa Valley Tribe TERO Highway Construction Permit (THCP) Application included in the *Information Handout*. Within 5 days after Contract approval, submit the completed application to the tribe and a copy of the submitted application to the Engineer.

Submit the executed THCP to the Engineer within 10 days after you receive it from the tribe.

SSP 8-1.04C:

Use a minimum 45-day delayed start after contract approval.
Do not start job site activities until the Department authorizes or accepts your submittal for:

Signed Hoopa Valley Tribe TERO Highway Construction Permit (THCP)

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

Copy of the Hoopa Valley Tribe TERO Highway Construction Permit (THCP) Application submitted to the tribe.

Hoopa Valley Tribal Council
TRIBAL EMPLOYMENT RIGHTS OFFICE/H.R.

71 Willow St. ~ PO Box 1467 ~ Hoopa, CA 95546
Phone (530) 625-9200 Ext. 14 ~ Fax (530) 625-4269

State Contract # 01-0E210
0114000016

ATTACHMENT B
TERO Highway Construction Permit (THCP)

February 21, 2014

TO: **ALL EMPLOYERS, CONTRACTORS AND/OR SUB-CONTRACTORS**

FROM: Penny L. Cordova, TERO Director

RE: **TERO HIGHWAY CONSTRUCTION PERMIT (THCP) COMPLYING WITH TRIBAL AND FEDERAL EMPLOYMENT LAWS**

The Tribal Employment Rights Office (hereafter "TERO"), on the Hoopa Valley Indian Reservation, has been implemented to assist employers, contractors and/or sub-contractors (hereinafter called "**Employer**") towards meeting the required rules and regulations of the Hoopa Valley Tribal Council, also the employment laws of the U.S. Government.

TERO Highway Construction Permit (THCP): This form is an agreement between the State of California's Contractor (and its Sub-Contractors) / Employer and the Hoopa Valley Tribal Council allowing you and your company to conduct employment activity on the Hoopa Valley Indian Reservation and for providing equal employment opportunity. A TERO Highway Construction Permit (THCP) must be completed for each contract your company is awarded within five (5) days after state of California contract approval.

SKILLS BANK: The TERO Office maintains a Indian Skills Bank to assist **Employer** to meet the Indian Preference requirements as identified under the of the TITLE 13 TERO Ordinance, As Amended May 17, 2012 of the Hoopa Valley Tribal Council. Please note: Under Section 13.7.1 Identification of Key Employees; Hiring Requirements (A) Contractors/employers shall be required to hire and maintain as many TERO / Native Americans preference employees as apply for and are qualified for each craft or skill. (B) Notwithstanding subsection A, above, Contractors/employers may hire key employees to fill not more than 25% of the workforce (2) "KEY EMPLOYEES" A key employee is one who is in a top supervisory position or performs a critical function such as that an employer would risk likely financial damage or loss if that task were assigned to a person unknown to the employer. A key employee has been on the employer's or contractors' annual payroll for a period of one year continuously in a supervisory capacity, or is an owner of the firm. An employee who is hired on a project by project basis shall not be considered a key employee. (Possessing records of past employment as proof as a supervisor or foreman).

Recruitment of non-Indians shall not take place until the firm receives a written waiver notifying your company that TERO has no "qualified" Native Americans to perform that position or task. A waiver will only be issued for that position/task and the employee cannot be transferred to another position once, that job is done.

By following the above procedures, you and your company can expect an uninterrupted trouble-free contract conclusion. **PLEASE RETURN COMPLETED TERO HIGHWAY CONSTRUCTION PERMIT BEFORE COMMENCING WORK ON THE HOOPA VALLEY INDIAN RESERVATION TO:**

Penny L. Cordova, Director
Tribal Employment Rights Office
Post Office Box 1467
Hoopa, California 95546

Phone: (530) 625-9200 ext. 14
Fax: (530) 625-4269
Email: hvtero@gmail.com

TERO HIGHWAY CONSTRUCTION PERMIT (TCHP)

Employer/Contractor's Name:_____
Mailing Address:_____
City, State and Zip Code: _____

Contact Person:_____ **Phone Number:** _____

EMAIL: _____ **FAX #:** _____

Contracting with Entity/Department: _____
Contract Number #_____ **Amount of Contract $**_____

THIS IS AN AGREEMENT BETWEEN TERO AND EMPLOYER FOR CONDUCTING COMMERCE AND EMPLOYMENT ACTIVITY WITHIN THE EXTERIOR BOUNDARIES OF THE HOOPA VALLEY INDIAN RESERVATION AND HOOPA TRIBAL "LANDS." BETWEEN THE HOOPA VALLEY TRIBAL COUNCIL AND _____**(EMPLOYER/CONTRACTOR. (Hereafter "EMPLOYER").**

Whereas, this agreement is entered into on this ___day of _____, 2014; Between TERO and _____**(Employer).**

1. **EMPLOYER**: We hereby agree to comply with the requirements and procedures for the selection of contractors, sub-contractors and recruitment of viable Indian applicants, through TERO.

   TERO shall receive notice, in the form of copies of bid forms by awarded prime **Employer** seeking bids of all sub-contract work to be conducted on the Hoopa Valley Indian Reservation. Notice shall be made reasonably in advance of any award, but not later than five (5) days in advance of an award.

   The above-named **Employer** understands that they are required to comply with the Hoopa Valley Tribal Council's Title 13 TERO Ordinance, As Amended May 17, 2012. **(All of the parameters regarding "Indian Preference." as per Section 13.4.4(B).**

2. **EMPLOYMENT PRIORITY:** Hiring preferences shall be as follows per Section 13.4.4 (B) Private Employers Not Contracting with the Hoopa Valley Tribe: Private employers not contracting with the Hoopa Valley Tribe and doing business within the exterior boundaries of the Hoopa Valley Indian Reservation shall not be subject to the priority requirements of Section 13.4.4 (a), but shall extend preference to qualified Indians residing on or near the exterior boundaries of the Hoopa Valley Indian Reservation. Private employers operating under contracts with the Hoopa Valley Tribe shall be required to provide Indian Preference according to the requirements of § 13.4 (A)

   For those claiming "Indian Preference" that are not Hoopa Tribal Members, the burden of proof to show verification of their enrollment in a Federally Recognized Tribe is upon them.

   A "non-Indian" will not be allowed to be recruited, until the TERO Skills Bank has been totally exhausted, or a job description presented to TERO by the **Employer** cannot be met through the Skills Bank. **(See Section 13.4 of the TERO Ordinance.)** A "non-Indian" shall not be hired until that **Employer** has been issued a written waiver from TERO stating that there are no qualified Native Americans available, therefore authorizing them to hire a "non-Indian" for that specific position. (Note: The waiver does not authorize the "non-Indian" to be transferred to other positions that become available unless a new "waiver" has been obtained by the Employer from TERO.) An **Employer** failing to abide with the TERO Ordinance could be charged with alleged discrimination.

   For purposes of this agreement, pre-employment standards are those directly job related, standards toward fairness and ability which express with a reasonable amount of job training an individual would be capable of satisfactorily performing an entry level job; moreover, could progress with reasonable further guidance and training. This provision would apply to those persons who at the time of application for employment, are not fully experienced for the available position, but does possess those threshold requirements and general potential for becoming qualified through reasonable training.

3. **PRE-EMPLOYMENT STANDARDS:** Employer may not use qualification criterion or other personnel requirements which serve as barriers to local Indians or Indian employment, except only where such criteria is a requirement by business necessity. However, employer and/or contractor/sub-contractor shall have the responsibility and burden to show proof that such a criterion or requirement is truly a business necessity. (B.F.O.Q., must be a Bonafide Occupational Qualification).

4. **TRAINING: Employer** agrees that all local Indians and Indian employees will be adequately trained for the position for which they were hired. All Indian employees shall be evaluated and receive identical treatment as company/firm compensates other hires. **(See Section 13.8. of the TERO Ordinance)**

5. **DISCRIMINATION:** There shall be no discrimination in any aspect of employment related activity, equitability shall prevail; discrimination in the workplace on the basis of race, creed, color, age, sex, national origin or religion is totally unlawful.

6. **EMPLOYMENT GOALS:** (Entire issue depends on TERO Skills Bank)

   A. **Employer** agrees that 75 % of all employees in its workforce shall be filled by local Indians as per Section 13.4.4 (B) of the Title 13 TERO Ordinance. At the end of one (1) year from the date of this agreement; this provision shall be reviewed and renegotiated and/or a new THCP has been obtained for a new contract.

   B. If **Employer** is unable to reach the 75% employment goal as set forth above (A), it shall have the burden of justifying the rejection of every Indian applicant for any positions which became available to substantiate that criterion utilized in the recruitment process toward validity and being relevant to tasks performed, specifically the precise good faith efforts which the **Employer** had taken for pursuing the required goal.

   C. **Monthly reports** are required for monitoring purposes; the data is not only a TERO compliance issue but coincides with federal employment statutes (EEOC-OFCCP). (Monthly Report Forms available at TERO Office.)

7. **TERO TAX FEE**: Caltrans will pay the required TERO tax to the TERO Commission for each **Prime Contractor**, and/or by each **Employer** operating within the exterior boundaries of the Hoopa Valley Indian Reservation whose total contract and/or annual gross revenues is $1,000.00 or more. The tax shall be equivalent to three percent (3%) of the total gross value of any contract performed within the Reservation.. **(See Caltrans TERO Policy and Section 13.5 of the Title 13 TERO Ordinance, as Amended May 17, 2012.)**

8. **COMPLIANCE INSPECTIONS:** The Director of TERO or staff shall make periodic or site visitations for assurance to all involved parties that employment rules are adhered to. **(See Section 13.9 of the TERO Ordinance)**

9. **MAINTAINING EMPLOYMENT RECORDS: Employer** shall maintain accurate employment records on all employees and all applicants for employment; regardless of length and category of employment, hired, fired, or laid-off. The files shall reflect: name, address and employment category for which applicant performed or applied to perform. If applicant was contacted but not hired, hired and fired, all data should reflect action taken by that firm. Such informational records shall be made available to the Director of TERO, upon reasonable notice.

10. **ASSISTANCE:** If an **Employer** deems that an Indian employee's performance is such that he or she is jeopardizing and endangering job loss, suspension, termination. **Employer** may contact TERO to provide assistance toward resolving of that issue.
11. **UNIONS:**

    A. Pursuant to congressional intent of the Indian Self-Determination and Education Assistance Act [P.L. (93-638) at Section 7(b)] Indian preference in employment and training shall prevail in all employment activity, within the boundaries of the Hoopa Valley Indian Reservation.
    B. Therefore **Employer** hereby agree to request all involved affiliated firms, mirror Indian preference priority, in all aspects of employment.

12. **EMPLOYMENT POLICIES AND PROCEDURES:** It is further understood that **Employer** recognizes that its operations are taking place within a unique cultural setting on the Hoopa Valley Indian Reservation. Accordingly, all firms in conjunction with the Director of TERO, consider seriously Tribal Holidays, and ceremonial customs; and to accommodate those Indian employees requesting certain leave of absences for religious purposes.

13. **CURTAILMENT**: Curtailment regarding Indian preference, local Indians and Indians shall be the last employees to be laid-off. This reference is made outside of core crew positions, this is to say where Indians meet threshold requirements for a given position.

14. **PRE-AWARD LABOR FORCE PROJECTION**

Contractor and/or Sub-Contractor (Firm Name) _____ Telephone Number _____

Name of Project: _____

Contract Number

Briefly describe the basic tasks and type of work to be performed:

_____

_____

_____

_____

Please list types of skills and categories which will be required towards performing said contract.

1. _____ 7. _____
2. _____ 8. _____
3. _____ 9. _____
4. _____ 10. _____
5. _____ 11. _____
6. _____ 12. _____

Indian preference shall be accorded at every Tier Level. Please list the names and positions of your Key Staff per Section 13.7.1 of Title 13 TERO Ordinance, As Amended May 17, 2013. The key employee is one who is in a top supervisory position or performs a critical function such that an employer would risk likely financial damage or loss if that task were assigned to one person unknown to the employer.

NAME	JOB TITLE
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

(Please utilize as many sheets necessary for expressing your on-site employment related projection.)

15. DURATION: This agreement shall remain in effect for a period of one year from the date signed by TERO Director below:

_____ _____

Date Owner/Representative's Signature

_____ _____

EFFECTIVE DATE Signature of TERO Director

INFORMATION HANDOUT

For Contract No. 01-0E2104
At 01-HUM-36, 96, 101, 254-VAR

Identified by
Project ID 0114000016

AGREEMENTS

PLAC - Hoopa Valley Tribe Memorandum of Understanding (MOU) Tribal Employment Rights Ordinance (TERO)

MOU 15-04
Attachment A - Hoopa Valley Tribe TERO Provisions
Attachment B - TERO Highway Construction Permit (THCP) Application

MATERIALS INFORMATION

Asbestos and Lead-Containing Paint Survey Report Seventh Street Overcrossing (04-0054) dated December 9, 2014

Asbestos and Lead-Containing Paint Survey Report French Road Undercrossing (04-0174) dated December 5, 2014

Asbestos and Lead-Containing Paint Survey Report Sprowel Creek Road Overcrossing (04-0195) dated December 5, 2014

Asbestos and Lead-Containing Paint Survey Report Seawood Drive Overcrossing (04-0209) dated December 11, 2014

Project No. S9805-01-28
December 9, 2014

Steve Werner, Task Order Manager
Caltrans District 1
Environmental Engineering Office
1656 Union Street
Eureka, California 95501

Subject: ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT
SEVENTH STREET OVERCROSSING (04-0054)
HUMBOLDT COUNTY, CALIFORNIA
CONTRACT NO. 03A2132, E-FIS 01 1400 0016 (EA 01-0E2100)
TASK ORDER NO. 28, 01-HUM-101, POST MILE 86.1

Dear Mr. Werner:

In accordance with California Department of Transportation Contract No. 03A2132 and Task Order No. 28, we have performed an asbestos and lead-containing paint survey of the subject overcrossing (OC) in Humboldt County, California. 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.

PROJECT DESCRIPTION

The project consists of the Seventh Street OC (04-0054) at Post Mile (PM) 86.1 on Highway 101 in Humboldt 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.

GENERAL OBJECTIVES

The scope of services outlined in TO-28 included the determination of the presence and quantity of asbestos and LCP at the project location prior to various improvements. Assuming that no asbestos is added during future operations, our survey would satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. 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.

BACKGROUND

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 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, 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).

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.

Architectural Drawings and Previous Survey Activities

We reviewed structure as-built plans provided by Caltrans prior to field activities. We did not observe specifications or notes regarding the use of asbestos-containing materials or lead paint in the architectural plans provided. Previous asbestos survey reports were not available for our review.

SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2015), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2015), performed the asbestos and LCP survey at the project location on October 14, 2014.

Asbestos

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

Our procedures for inspection and sampling in accordance with TO-28 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a light mist of water. The samples were then cut from the substrate and transferred to labeled containers.
- Relinquished bulk asbestos samples 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) under chain-of-custody protocol. 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

Lead Paint

A total of four bulk paint samples were collected from suspect LCP observed at the project location. Mr. Watts field-composited the suspect LCP samples into two paint schemes prior to submittal to the laboratory. We did not observe deteriorated LCP during our survey. Our sampling procedures in accordance with TO-28 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 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

INVESTIGATIVE RESULTS

Asbestos

Chrysotile asbestos at concentrations of 65 and 70% was detected in samples representing sheet packing used as shims in the bridge barrier rail systems. No asbestos was detected in samples of the remaining suspect materials collected during our survey. Sample identification numbers, material descriptions, approximate quantities, friability assessments, and a summary of the analytical laboratory test results for asbestos are summarized below. Reproductions of the laboratory report and chain-of-custody documentation are attached.

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116				
Sample No.	**Description of Material**	**Approximate Quantity**	**Friable**	**Asbestos Content**
0054-1A and B	Concrete	NA	NA	ND
0054-2A and B	**Asbestos sheet packing (shims)**	**5 square feet**	**No**	**65 and 70%**

NA = Not applicable (no asbestos detected)
ND = Not detected

Lead Paint

A sample representing intact white traffic striping exhibited a representative total lead concentration of 50 mg/kg. Representative WET lead was not detected at or above the laboratory reporting limit (RL) of 1.0 mg/l.

A sample representing intact yellow traffic striping exhibited a representative total lead concentration of 1,400 mg/kg and a representative TCLP lead concentration of 0.26 mg/l.

Sample identification numbers, descriptions, peeling and flaking quantities, and a summary of the analytical laboratory test results for paint are summarized below. Reproductions of the laboratory reports and chain-of-custody documentation are attached.

Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)
0054-P1A/B	White traffic striping	Intact	50	<1.0	---
0054-P2A/B	Yellow traffic striping	Intact	1,400	---	0.26

WET = Waste Extraction Test
TCLP = Toxicity Characteristic Leaching Procedure (EPA Test Method 1311)
mg/kg = milligrams per kilogram (EPA Test Method 6010B)
mg/l = milligrams per liter (EPA Test Method 6010B)
< = not detected at or above the indicated laboratory reporting limit
--- = not analyzed

RECOMMENDATIONS

Asbestos

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

We also recommend the notification of contractors (that will be conducting demolition, renovation, or related activities) 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 by contractor[s] during subsequent activities. Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Written notification to the North Coast Unified Air Quality Management District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Lead Paint

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

White traffic striping sampled during our survey would not be considered a California or Federal hazardous waste based on lead content

We recommend that all paints at the project location (graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes 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. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

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 above. 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, express or implied, 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.

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

Sincerely,

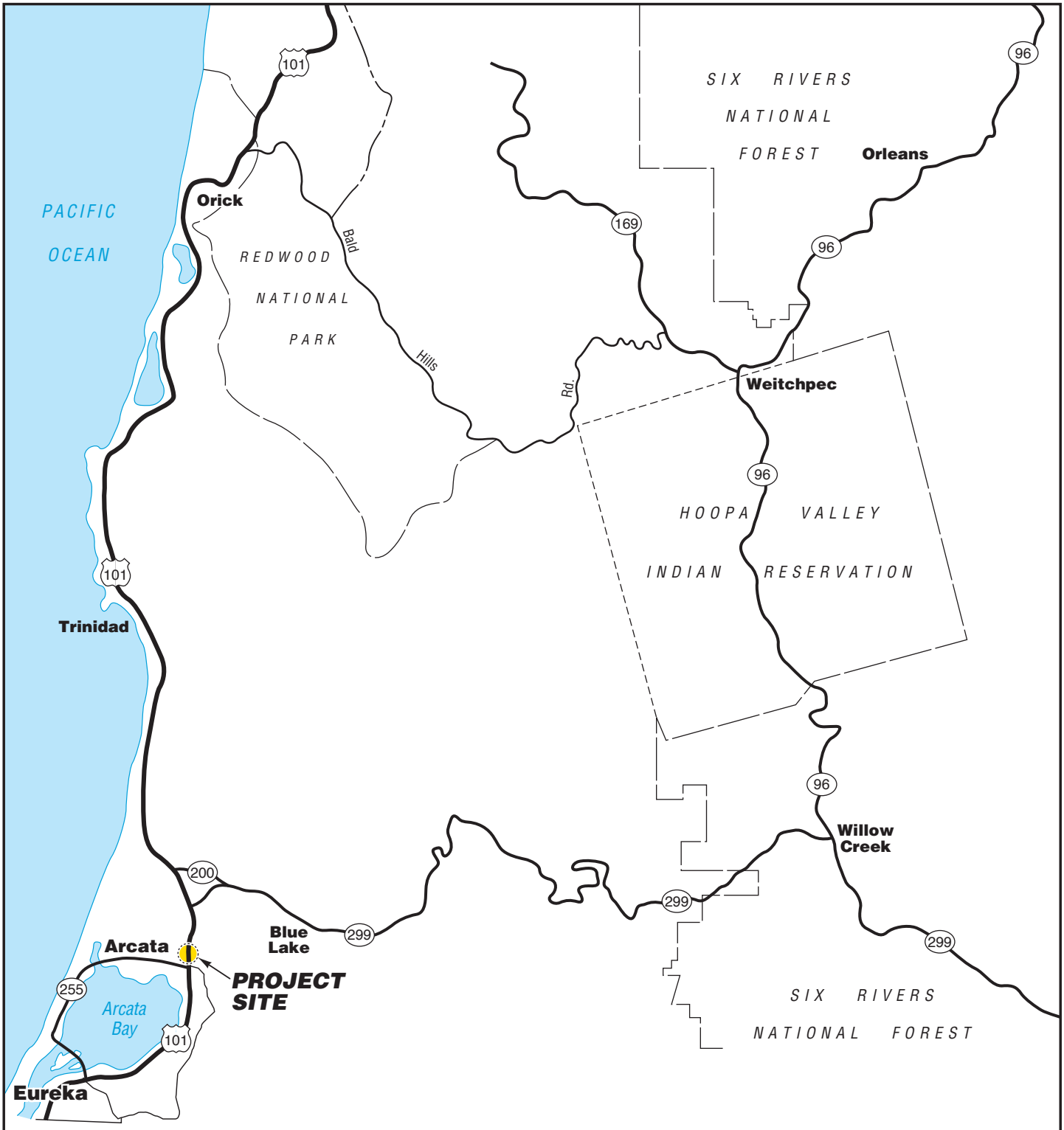
GEOCON CONSULTANTS INC.

David A. Watts, CAC
Senior Project Scientist

John E. Juhrend, PE, CEG
Project Manager

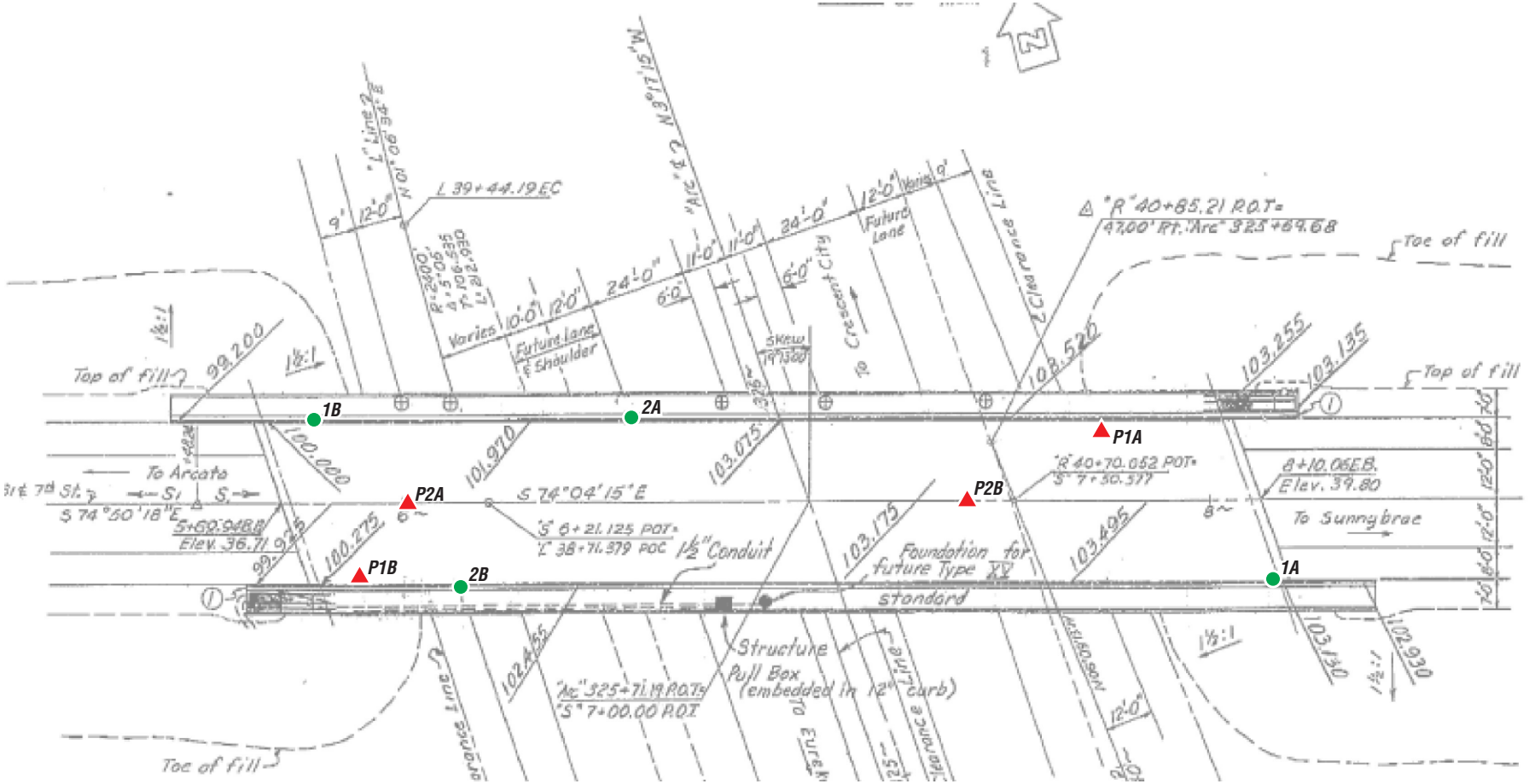
(2 + 2 CD) Addressee

Attachments: Figure 1, Vicinity Map
Figure 2, Site Plan
Site Photographs (1 through 3)
Analytical Laboratory Reports and Chain-of-custody Documentation



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

Seventh Street OC		
Humboldt County, California	**VICINITY MAP**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 1



SEVENTH STREET OC (04-0054)

LEGEND:

- ● Approximate Asbestos Sample Location
- ▲ Approximate Paint Sample Location

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

Seventh Street OC		
Humboldt County, California	**SITE PLAN**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 2

Photo 1 – Seventh Street OC (04-0054) at PM 86.1 on Highway 101 in Humboldt County, California

Photo 2 – Bridge barriers (shims are asbestos sheet packing)

Photo 3 – Concrete box girders and abutment

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

PHOTOGRAPHS 1, 2, & 3		
Seventh Street OC (04-0054) Humboldt County, California		
S9805-01-28		December 2014

ADVANCED TECHNOLOGY LABORATORIES

October 24, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403114
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0054-P1A/B	1403114-01	Paint	10/14/14 0:00	10/17/14 9:50
0054-P2A/B	1403114-02	Paint	10/14/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0054-P1A/B

Lab ID: 1403114-01

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**50**	4.0	2	B4J0639	10/23/2014	10/24/14 12:34	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0054-P2A/B

Lab ID: 1403114-02

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**1400**	100	50	B4J0639	10/23/2014	10/23/14 17:53	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0639 - EPA 3050B									
Blank (B4J0639-BLK1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	ND	1.0			NR				
LCS (B4J0639-BS1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	48.0262	1.0	50.0000		96.1	80 - 120			
Duplicate (B4J0639-DUP1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	4.95660	20		6.21083	NR		22.5	20	R
Matrix Spike (B4J0639-MS1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	243.070	20	250.000	6.21083	94.7	33 - 134			
Matrix Spike Dup (B4J0639-MSD1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	248.313	20	250.000	6.21083	96.8	33 - 134	2.13	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

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)
TX1	TX-NELAP (TCEQ)

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.

CALTRANS CONTRACT # 03A2132

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(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: GSO

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

Client: GEOCON	Address: 6671 BRISA ST.		TEL: (925) 371-5900
Attn: D. WATTS	City LIVERMORE	State CA Zip Code 94550	FAX: (") " - 5915

Project Name: D1/D2 BRIDGES Project #: 59805-01-28 Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature]	Date: 10/16/14	Time: 1800	Received by: (Signature and Printed Name) GSO	Date: 10/16/14	Time: 1800
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) C. Agtk	Date: 10/17/14	Time: 930
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:
D. WATTS (Print Name) _____ (Date)
[signature] (Signature)

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

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

Special Instructions/Comments:
ANTIMONATE SOLUBLE REQUESTS
17th St.

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 : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☒ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal) — Pb	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	SOIL	WATER	GROUND WATER	WASTEWATER	AIR	TAT	Container(s) #	Container(s) Type	REMARKS
	1403114-01	0054-P1A/B	10/14/14	RAIL				X									X		10-DAY	1	Pint P	WTS
	↓ -02	↓ - P2 ↓	↓	↓				↓									↓		↓	↓	↓	YTS

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 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=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

ADVANCED TECHNOLOGY LABORATORIES

November 04, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403114
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0054-P1A/B	1403114-01	Paint	10/14/14 0:00	10/17/14 9:50
0054-P2A/B	1403114-02	Paint	10/14/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Client Sample ID 0054-P1A/B

Lab ID: 1403114-01

STLC Metals by ICP-AES by EPA 6010B **Analyst: CB**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	ND	1.0	20	B4K0006	11/02/2014	11/03/14 15:47	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Client Sample ID 0054-P2A/B

Lab ID: 1403114-02

TCLP Metals by ICP-AES EPA 6010B **Analyst: CB**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**0.26**	0.050	1	B4J0850	10/31/2014	10/31/14 18:02	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

QUALITY CONTROL SECTION

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

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0850 - EPA 3010A_SOIL									
Blank (B4J0850-BLK1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
Blank (B4J0850-BLK2)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
LCS (B4J0850-BS1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	0.963356	0.050	1.00000		96.3	80 - 120			
Duplicate (B4J0850-DUP1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	1.26539	0.050		1.16267	NR		8.46	20	
Duplicate (B4J0850-DUP2)		**Source: 1402990-27**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050		ND	NR			20	
Matrix Spike (B4J0850-MS1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.45325	0.050	2.50000	1.16267	91.6	77 - 121			
Matrix Spike Dup (B4J0850-MSD1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.54586	0.050	2.50000	1.16267	95.3	77 - 121	2.65	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

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

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4K0006 - STLC Extraction									
Blank (B4K0006-BLK1)				Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	ND	1.0			NR				
LCS (B4K0006-BS1)				Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	1.97922	1.0	2.00000		99.0	80 - 120			
Duplicate (B4K0006-DUP1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	0.987683	1.0		1.02374	NR		3.59	20	
Matrix Spike (B4K0006-MS1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	3.27089	1.0	2.50000	1.02374	89.9	44 - 130			
Matrix Spike Dup (B4K0006-MSD1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	3.34220	1.0	2.50000	1.02374	92.7	44 - 130	2.16	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Notes and Definitions

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)
TX1	TX-NELAP (TCEQ)

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.

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Tuesday, October 28, 2014 1:50 PM
To: Diane Galvan
Subject: Re: D1/D2 BRIDGES

Same tat

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

On Oct 28, 2014, at 1:49 PM, "Dave Watts, CAC" <watts@geoconinc.com> wrote:

S9805-01-28

For all, please run:

TCLPs on results >1000 ppm
WETs on results 50-999 ppm

Run TCLPs on WET fails if TTLC at or above 100 ppm.

Thanks.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091415711
CustomerID:	GECN21
CustomerPO:	
ProjectID:	03A2132

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	10/17/14 9:45 AM
Analysis Date:	10/29/2014
Collected:	10/14/2014

Project: **D1/D2 BRIDGES S9805-01-28**

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**
0054-1A Concrete *091415711-0001*		Gray Non-Fibrous Homogeneous			30% Quartz 25% Matrix 45% Non-fibrous (other)		**None Detected**
0054-1B Concrete *091415711-0002*		Gray Non-Fibrous Homogeneous			30% Quartz 25% Matrix 45% Non-fibrous (other)		**None Detected**
0054-2A Shims *091415711-0003*		Black Fibrous Homogeneous	10% Cellulose		20% Non-fibrous (other)	**70%**	**Chrysotile**
0054-2B Shims *091415711-0004*		Black Fibrous Homogeneous	8% Cellulose		27% Non-fibrous (other)	**65%**	**Chrysotile**

Analyst(s)

Beheshta Ahadi (4)

Derrick Tanner, Laboratory Manager
or other approved signatory

Initial report from 10/29/2014 15:54:26

OrderID: 091415711

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only)

#091415711

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR, STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

CALTRANS CONTRACT # 03A2132

Company: GEOCON		EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 6671 BRISA ST.			
City: LIVERMORE	State/Province: CA	Zip/Postal Code: 94550	Country: USA
Report To (Name): D. WATTS		Fax #: 925-371-5915	
Telephone #: 925-371-5900		Email Address: WATTS@GEOCONINC.COM	
Project Name/Number: D1/D2 BRIDGES		59805-01-28	
Please Provide Results: ☐ Fax ☒ Email	Purchase Order:	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 TEM Air 3 hours/6 hours, 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
- ☐ 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)
- ☐ 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 CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Samplers Name: D. WATTS Samplers Signature: Watt

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
0054-1A/B	Concrete	NA	10/14/14
1 -2	5 Items	1	1

Client Sample # (s): Watt Total # of Samples: 4

Relinquished (Client): Watt Date: 10/17/14 Time: 0945

Received (Lab): RCOLON Date: 10-17-14 Time: 9:45am

Comments/Special Instructions: 7th St

Project No. S9805-01-28
December 5, 2014

Steve Werner, Task Order Manager
Caltrans District 1
Environmental Engineering Office
1656 Union Street
Eureka, California 95501

Subject: ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT
FRENCH ROAD UNDERCROSSING (04-0174)
HUMBOLDT COUNTY, CALIFORNIA
CONTRACT NO. 03A2132, E-FIS 01 1400 0016 (EA 01-0E2100)
TASK ORDER NO. 28, 01-HUM-101, POST MILE 22.4

Dear Mr. Werner:

In accordance with California Department of Transportation Contract No. 03A2132 and Task Order No. 28, we have performed an asbestos and lead-containing paint survey of the subject undercrossing (UC) in Humboldt County, California. 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.

PROJECT DESCRIPTION

The project consists of the French Road UC (04-0174) at Post Mile (PM) 22.4 on Highway 101 in Humboldt 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.

GENERAL OBJECTIVES

The scope of services outlined in TO-28 included the determination of the presence and quantity of asbestos and LCP at the project location prior to various improvements. Assuming that no asbestos is added during future operations, our survey would satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. 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.

BACKGROUND

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 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, 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).

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.

Architectural Drawings and Previous Survey Activities

We reviewed structure as-built plans provided by Caltrans prior to field activities. We observed evidence of the use of "asbestos sheet packing" in the bridge barrier rail systems. We did not observe additional specifications or notes regarding the use of asbestos-containing materials or lead paint in the architectural plans provided. Previous asbestos survey reports were not available for our review.

SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2015), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2015), performed the asbestos and LCP survey at the project location on October 15, 2014.

Asbestos

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

Our procedures for inspection and sampling in accordance with TO-28 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a light mist of water. The samples were then cut from the substrate and transferred to labeled containers.
- Relinquished bulk asbestos samples 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) under chain-of-custody protocol. 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

Lead Paint

A total of four bulk paint samples were collected from suspect LCP observed at the project location. Mr. Watts field-composited the suspect LCP samples into two paint schemes prior to submittal to the laboratory. We did not observe deteriorated LCP during our survey. Our sampling procedures in accordance with TO-28 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 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

INVESTIGATIVE RESULTS

Asbestos

Chrysotile asbestos at a concentration of 40% was detected in samples representing sheet packing used as shims in the bridge barrier rail systems. No asbestos was detected in samples of the remaining suspect materials collected during our survey. Sample identification numbers, material descriptions, approximate quantities, friability assessments, and a summary of the analytical laboratory test results for asbestos are summarized below. Reproductions of the laboratory report and chain-of-custody documentation are attached.

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116				
Sample No.	**Description of Material**	**Approximate Quantity**	**Friable**	**Asbestos Content**
0174-1A and B	Concrete	NA	NA	ND
0174-2A and B	**Asbestos sheet packing (shims)**	**5 square feet**	**No**	**40%**

NA = Not applicable (no asbestos detected)
ND = Not detected

Lead Paint

A sample representing intact white traffic striping exhibited a representative total lead concentration of 12 mg/kg.

A sample representing intact yellow traffic striping exhibited a representative total lead concentration of 1,500 mg/kg and a representative TCLP lead concentration of 0.71 mg/l.

Sample identification numbers, descriptions, peeling and flaking quantities, and a summary of the analytical laboratory test results for paint are summarized below. Reproductions of the laboratory reports and chain-of-custody documentation are attached.

Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Total Lead (mg/kg)	TCLP Lead (mg/l)
0174-P1A/B	White traffic striping	Intact	12	---
0174-P2A/B	Yellow traffic striping	Intact	1,500	0.71

TCLP = Toxicity Characteristic Leaching Procedure (EPA Test Method 1311)
mg/kg = milligrams per kilogram (EPA Test Method 6010B)
mg/l = milligrams per liter (EPA Test Method 6010B)
--- = not analyzed

RECOMMENDATIONS

Asbestos

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

We also recommend the notification of contractors (that will be conducting demolition, renovation, or related activities) 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 by contractor[s] during subsequent activities. Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Written notification to the North Coast Unified Air Quality Management District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Lead Paint

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

White traffic striping sampled during our survey would not be considered a California or Federal hazardous waste based on lead content.

We recommend that all paints at the project location (graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes 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. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

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 above. 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, express or implied, 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.

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

Sincerely,

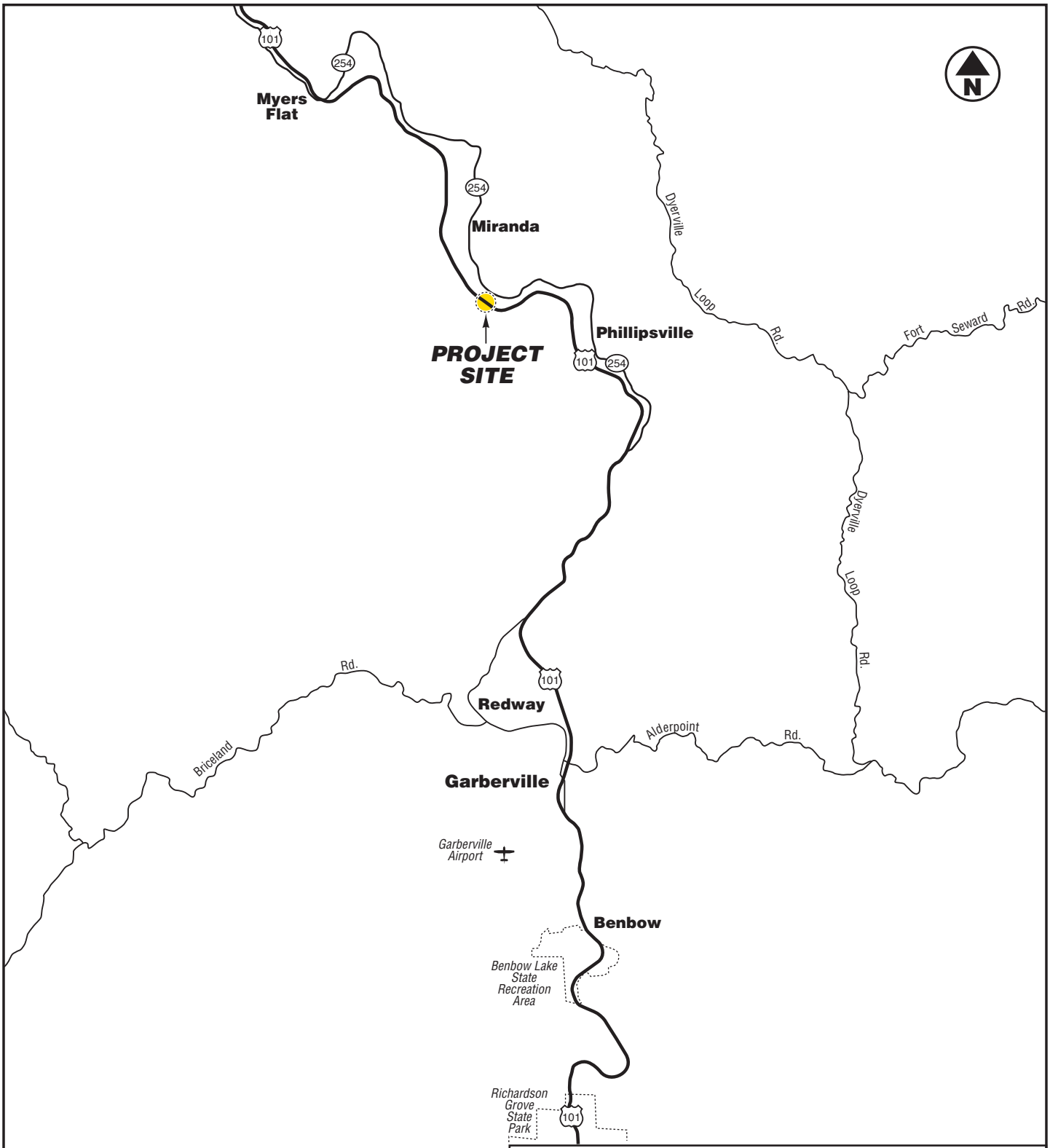
GEOCON CONSULTANTS INC.

David A. Watts, CAC
Senior Project Scientist

John E. Juhrend, PE, CEG
Project Manager

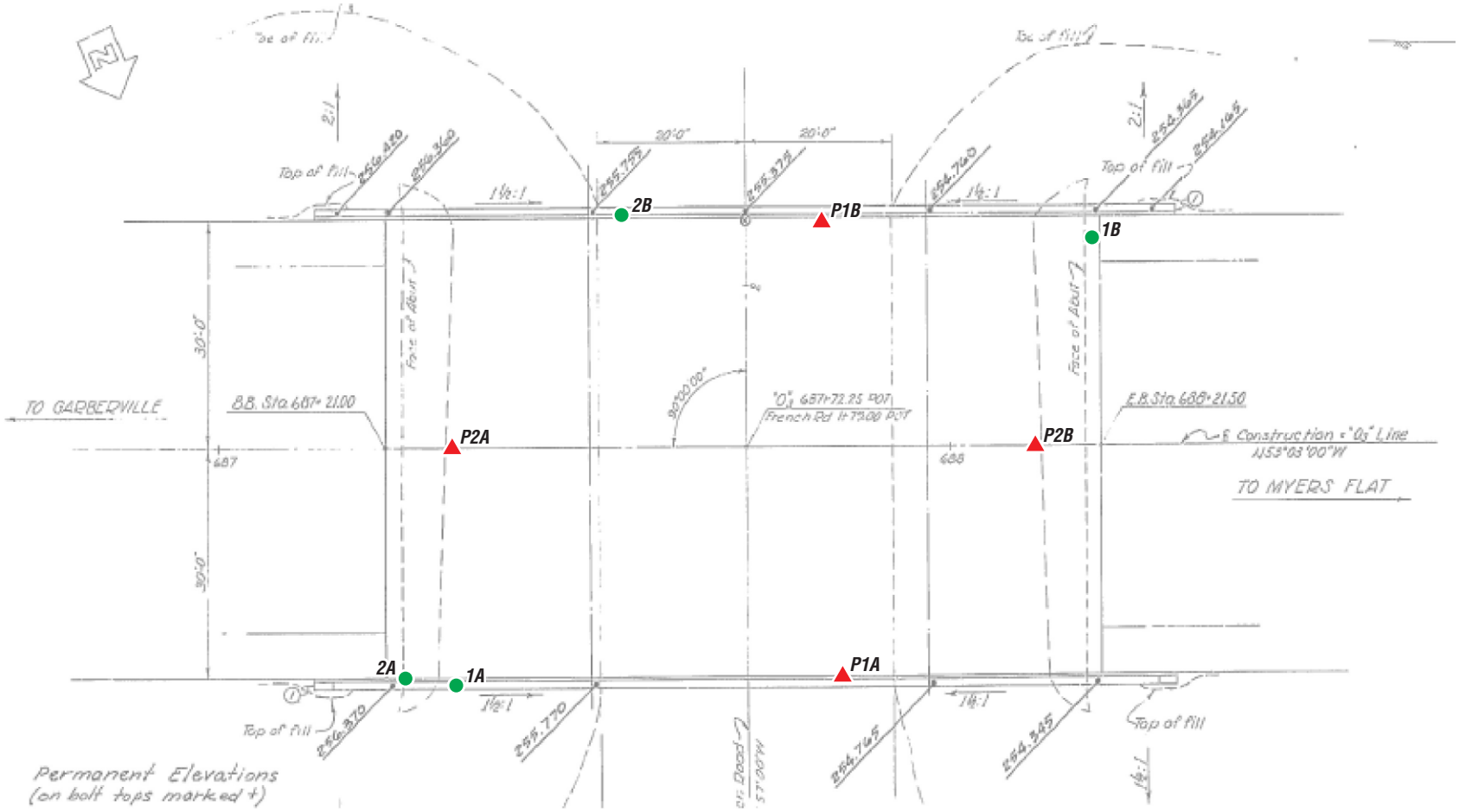
(2 + 2 CD) Addressee

Attachments: Figure 1, Vicinity Map
Figure 2, Site Plan
Site Photographs (1 through 3)
Analytical Laboratory Reports and Chain-of-custody Documentation



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

French Road UC		
Humboldt County, California	**VICINITY MAP**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 1



FRENCH ROAD UC

LEGEND:

- ● Approximate Asbestos Sample Location
- ▲ Approximate Paint Sample Location

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

French Road UC		
Humboldt County, California	**SITE PLAN**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 2

Photo 1 – French Road UC (04-0174) at PM 22.4 on Highway 101 in Humboldt County, California

Photo 2 – Bridge deck and barriers (shims are asbestos sheet packing)

Photo 3 – Abutment and girders

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

PHOTOGRAPHS 1, 2, & 3		
French Road UC (04-0174) Humboldt County, California		
S9805-01-28		December 2014

ADVANCED TECHNOLOGY LABORATORIES

October 24, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403117
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0174-P1A/B	1403117-01	Paint	10/15/14 0:00	10/17/14 9:50
0174-P2A/B	1403117-02	Paint	10/15/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0174-P1A/B

Lab ID: 1403117-01

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**12**	2.0	1	B4J0640	10/23/2014	10/24/14 12:47	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0174-P2A/B

Lab ID: 1403117-02

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**1500**	100	50	B4J0640	10/23/2014	10/23/14 18:20	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0640 - EPA 3050B									
Blank (B4J0640-BLK1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	ND	1.0			NR				
LCS (B4J0640-BS1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	50.7664	1.0	50.0000		102	80 - 120			
Duplicate (B4J0640-DUP1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	8.78763	2.0		11.5273	NR		27.0	20	R
Matrix Spike (B4J0640-MS1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	234.831	2.0	250.000	11.5273	89.3	33 - 134			
Matrix Spike Dup (B4J0640-MSD1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	224.980	2.0	250.000	11.5273	85.4	33 - 134	4.28	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

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)
TX1	TX-NELAP (TCEQ)

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.

CALTRANS Contract # 03A2172

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(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: GSO

Sample Condition Upon Receipt:
1. CHILLED 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: 6671 BRISA St.		TEL: (925) 371-5900
Attn: D. WATTS	City LIVERMORE	State CA Zip Code 94550	FAX: (") " - 5915

Project Name: D1/D2 BRIDGES Project #: 39805-01-28 Sampler: (Printed Name) D. WATTS (Signature)

Relinquished by: (Signature and Printed Name)	Date: 10/16/14	Time: 1800	Received by: (Signature and Printed Name) GSO	Date: 10/16/14	Time: 1800
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) C. Aguilera	Date: 10/17/14	Time: 0915
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:
D. WATTS _____
Print Name Date
_____
Signature

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

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

Special Instructions/Comments:
ANTICIPATE SOLUBLE REQUESTS
FRENCH

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 : $1.00 / ATL workorder / mo (after 1 year)

ITEM	LAB USE ONLY: Batch # / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	Circle or Add Analysis(es) Requested	SPECIFY APPROPRIATE MATRIX	TAT	Container(s) #	Container(s) Type	PRESERVATION	QA/QC / REMARKS
	1403117-01	0174-P1A/B	10/15/14	V+D	8270C (BNA) X; 6010B (Total Metal) — Pb; WASTEWATER X; Paint		10-Day	1	Bag P		WTS
	-02	-P2	↓	↓	8270C (BNA) ↓	WASTEWATER ↓	↓	↓	↓		YTS

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

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 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=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091415789
CustomerID:	GECN21
CustomerPO:	S9805-01-28
ProjectID:	03A2132

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	10/17/14 9:45 AM
Analysis Date:	10/30/2014
Collected:	10/15/2014

Project: **D1/D2 BRIDGES S9805-01-28**

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**
0174-1A-Concrete *091415789-0001*		Gray Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (other)		**None Detected**
0174-1B-Concrete *091415789-0002*		Gray Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (other)		**None Detected**
0174-2A-Shims *091415789-0003*		Black Fibrous Homogeneous		20% Matrix 40% Non-fibrous (other)	**40%**	**Chrysotile**
0174-2B-Shims *091415789-0004*		Black Fibrous Homogeneous		20% Matrix 40% Non-fibrous (other)	**40%**	**Chrysotile**

Analyst(s)

Sam Evans (4)

Derrick Tanner, Laboratory Manager
or other approved signatory

Initial report from 10/30/2014 16:49:09

November 04, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403117

Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0174-P2A/B	1403117-02	Paint	10/15/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Client Sample ID 0174-P2A/B

Lab ID: 1403117-02

TCLP Metals by ICP-AES EPA 6010B **Analyst: CB**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**0.71**	0.050	1	B4J0850	10/31/2014	10/31/14 18:04	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0850 - EPA 3010A_SOIL									
Blank (B4J0850-BLK1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
Blank (B4J0850-BLK2)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
LCS (B4J0850-BS1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	0.963356	0.050	1.00000		96.3	80 - 120			
Duplicate (B4J0850-DUP1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	1.26539	0.050		1.16267	NR		8.46	20	
Duplicate (B4J0850-DUP2)		**Source: 1402990-27**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050		ND	NR			20	
Matrix Spike (B4J0850-MS1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.45325	0.050	2.50000	1.16267	91.6	77 - 121			
Matrix Spike Dup (B4J0850-MSD1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.54586	0.050	2.50000	1.16267	95.3	77 - 121	2.65	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Notes and Definitions

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)
TX1	TX-NELAP (TCEQ)

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.

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Tuesday, October 28, 2014 1:50 PM
To: Diane Galvan
Subject: Re: D1/D2 BRIDGES

Same tat

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

On Oct 28, 2014, at 1:49 PM, "Dave Watts, CAC" <watts@geoconinc.com> wrote:

S9805-01-28

For all, please run:

TCLPs on results >1000 ppm
WETs on results 50-999 ppm

Run TCLPs on WET fails if TTLC at or above 100 ppm.

Thanks.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

OrderID: 091415789

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

№091415789

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR , STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

CALTRANS CONTRACT # 03A2132

Company: GEOCON		**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 6671 BRISA ST.			
City: LIVERMORE	**State/Province:** CA	**Zip/Postal Code:** 94550	**Country:** USA
Report To (Name): D. WATTS		**Fax #:** 925-371-5915	
Telephone #: 925-371-5900		**Email Address:** WATTS@GEOCONINC.COM	
Project Name/Number: D1/D2 BRIDGES		59805-01-28	
Please Provide Results: ☐ Fax ☒ Email	**Purchase Order:**	**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 TEM Air 3 hours/6 hours, 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
- ☐ 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)
- ☐ 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 CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Samplers Name: D. WATTS **Samplers Signature:** Watts

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
0174-1A/B	Concrete	NA	10/15/14
" -2 "	SHIMS	"	"

Client Sample # (s): **Total # of Samples:** 4

Relinquished (Client): Watts **Date:** 10/17/14 **Time:** 0945

Received (Lab): Gheahndra Gibson **Date:** 10/17/14 **Time:** 9:45am (WI)

Comments/Special Instructions:

FREMONT RD

Project No. S9805-01-28
December 5, 2014

Steve Werner, Task Order Manager
Caltrans District 1
Environmental Engineering Office
1656 Union Street
Eureka, California 95501

Subject: ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT
SPROWEL CREEK ROAD OVERCROSSING (04-0195)
HUMBOLDT COUNTY, CALIFORNIA
CONTRACT NO. 03A2132, E-FIS 01 1400 0016 (EA 01-0E2100)
TASK ORDER NO. 28, 01-HUM-101, POST MILE 11.1

Dear Mr. Werner:

In accordance with California Department of Transportation Contract No. 03A2132 and Task Order No. 28, we have performed an asbestos and lead-containing paint survey of the subject overcrossing (OC) in Humboldt County, California. 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.

PROJECT DESCRIPTION

The project consists of the Sprowel Creek Road OC (04-0195) at Post Mile (PM) 11.1 on Highway 101 in Humboldt 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.

GENERAL OBJECTIVES

The scope of services outlined in TO-28 included the determination of the presence and quantity of asbestos and LCP at the project location prior to various improvements. Assuming that no asbestos is added during future operations, our survey would satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. 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.

BACKGROUND

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 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, 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).

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.

Architectural Drawings and Previous Survey Activities

We reviewed structure as-built plans provided by Caltrans prior to field activities. We did not observe specifications or notes regarding the use of asbestos-containing materials or lead paint in the architectural plans provided. Previous asbestos survey reports were not available for our review.

SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2015), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2015), performed the asbestos and LCP survey at the project location on October 15, 2014.

Asbestos

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

Our procedures for inspection and sampling in accordance with TO-28 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a light mist of water. The samples were then cut from the substrate and transferred to labeled containers.
- Relinquished bulk asbestos samples 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) under chain-of-custody protocol. 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

Lead Paint

A total of four bulk paint samples were collected from suspect LCP observed at the project location. Mr. Watts field-composited the suspect LCP samples into two paint schemes prior to submittal to the laboratory. We did not observe deteriorated LCP during our survey. Our sampling procedures in accordance with TO-28 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 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

INVESTIGATIVE RESULTS

Asbestos

Chrysotile asbestos at concentrations of 55 and 60% was detected in samples representing sheet packing used as shims in the bridge barrier rail systems. No asbestos was detected in samples of the remaining suspect materials collected during our survey. Sample identification numbers, material descriptions, approximate quantities, friability assessments, and a summary of the analytical laboratory test results for asbestos are summarized below. Reproductions of the laboratory report and chain-of-custody documentation are attached.

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116				
Sample No.	**Description of Material**	**Approximate Quantity**	**Friable**	**Asbestos Content**
0195-1A and B	Concrete	NA	NA	ND
0195-2A and B	**Asbestos sheet packing (shims)**	**2 square feet**	**No**	**55 and 60%**
0195-3A and B	Joint fill material	NA	NA	ND

NA = Not applicable (no asbestos detected)
ND = Not detected

Lead Paint

A sample representing intact white traffic striping exhibited a representative total lead concentration of 15 mg/kg.

A sample representing intact yellow traffic striping exhibited a representative total lead concentration of 23,000 mg/kg and a representative TCLP lead concentration of 27 mg/l.

Sample identification numbers, descriptions, peeling and flaking quantities, and a summary of the analytical laboratory test results for paint are summarized below. Reproductions of the laboratory reports and chain-of-custody documentation are attached.

Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Total Lead (mg/kg)	TCLP Lead (mg/l)
0195-P1A/B	White traffic striping	Intact	15	---
0195-P2A/B	Yellow traffic striping	Intact	23,000	27

TCLP = Toxicity Characteristic Leaching Procedure (EPA Test Method 1311)
mg/kg = milligrams per kilogram (EPA Test Method 6010B)
mg/l = milligrams per liter (EPA Test Method 6010B)
--- = not analyzed

RECOMMENDATIONS

Asbestos

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

We also recommend the notification of contractors (that will be conducting demolition, renovation, or related activities) 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 by contractor[s] during subsequent activities. Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Written notification to the North Coast Unified Air Quality Management District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Lead Paint

Yellow traffic striping sampled during our survey would be considered a California and Federal hazardous waste based on lead content if stripped, blasted, or otherwise separated from the substrate.

White traffic striping sampled during our survey would not be considered a California or Federal hazardous waste based on lead content

We recommend that all paints at the project location (graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes 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. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

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 above. 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, express or implied, 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.

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

Sincerely,

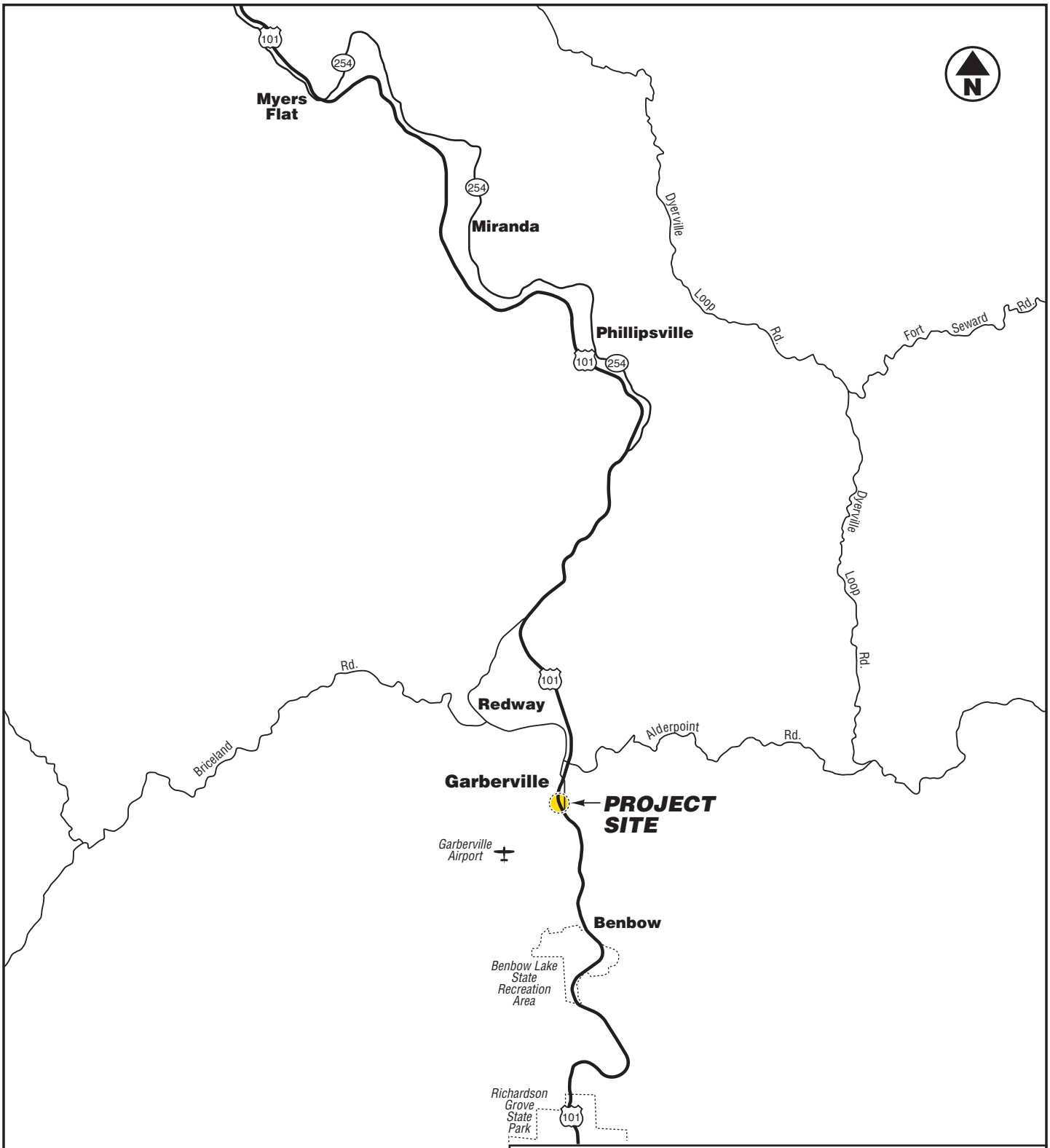
GEOCON CONSULTANTS INC.

David A. Watts, CAC
Senior Project Scientist

John E. Juhrend, PE, CEG
Project Manager

(2 + 2 CD) Addressee

Attachments: Figure 1, Vicinity Map
Figure 2, Site Plan
Site Photographs (1 through 3)
Analytical Laboratory Reports and Chain-of-custody Documentation



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

Sprowel Creek Road OC

Humboldt County, California

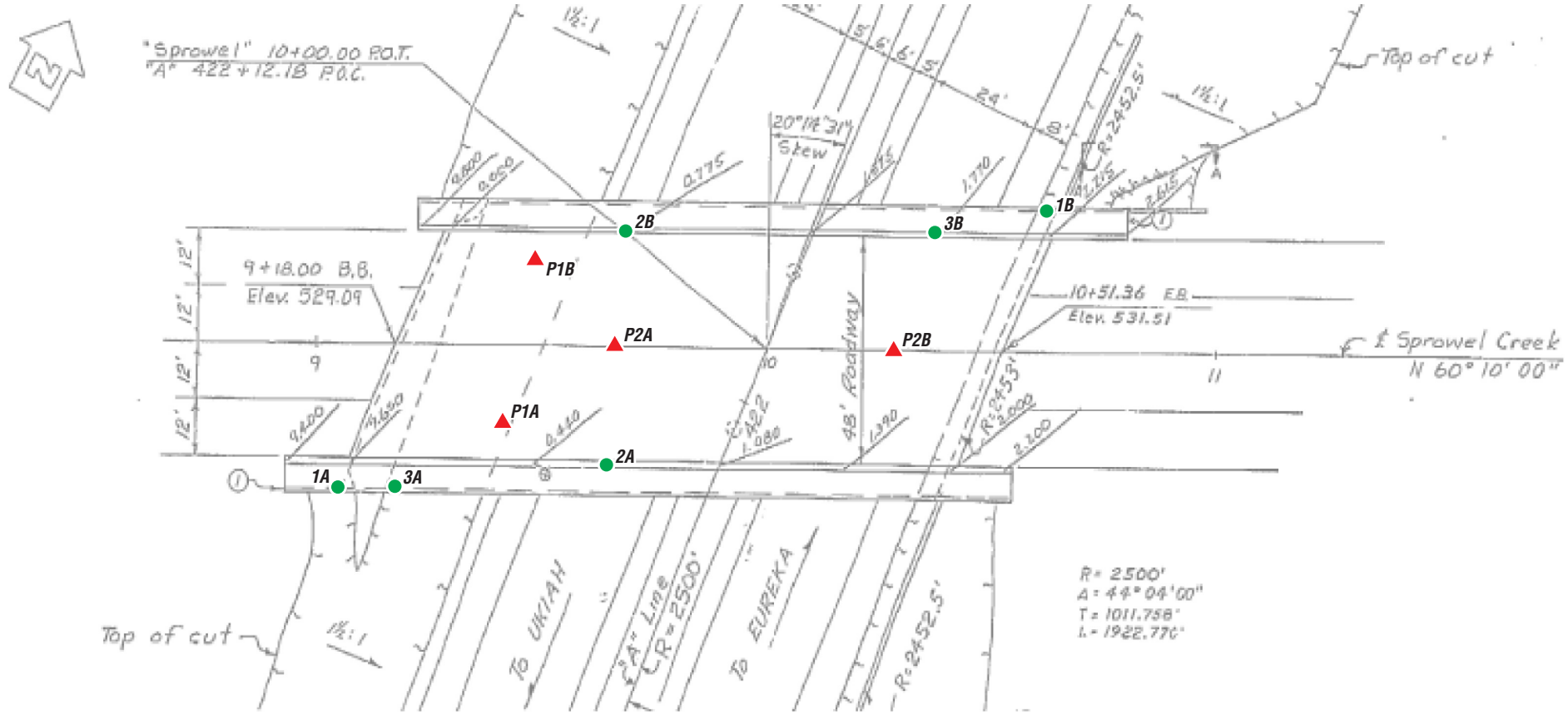
GEOCON Proj. No. S9805-01-28

Task Order No. 28

VICINITY MAP

December 2014

Figure 1



SPROWEL CREEK ROAD OC

LEGEND:

- ● Approximate Asbestos Sample Location
- ▲ Approximate Paint Sample Location

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PHONE 916.852.9118 – FAX 916.852.9132

Sprowel Creek Road OC		
Humboldt County, California	**SITE PLAN**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 2

Photo 1 – Sprowel Creek Road OC (04-0195) at PM 11.1 on Highway 101 in Humboldt County, California

Photo 2 – Bridge deck and barriers (shims are asbestos sheet packing)

Photo 3 – Span and girders

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

PHOTOGRAPHS 1, 2, & 3		
Sprowel Creek Road OC (04-0195) Humboldt County, California		
S9805-01-28		December 2014

ADVANCED TECHNOLOGY LABORATORIES

October 24, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403118
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0195-P1A/B	1403118-01	Paint	10/15/14 0:00	10/17/14 9:50
0195-P2A/B	1403118-02	Paint	10/15/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0195-P1A/B

Lab ID: 1403118-01

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**15**	2.0	1	B4J0640	10/23/2014	10/24/14 12:59	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0195-P2A/B

Lab ID: 1403118-02

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**23000**	100	50	B4J0640	10/23/2014	10/23/14 18:24	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0640 - EPA 3050B									
Blank (B4J0640-BLK1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	ND	1.0			NR				
LCS (B4J0640-BS1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	50.7664	1.0	50.0000		102	80 - 120			
Duplicate (B4J0640-DUP1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	8.78763	2.0		11.5273	NR		27.0	20	R
Matrix Spike (B4J0640-MS1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	234.831	2.0	250.000	11.5273	89.3	33 - 134			
Matrix Spike Dup (B4J0640-MSD1)		**Source: 1403117-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	224.980	2.0	250.000	11.5273	85.4	33 - 134	4.28	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

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)
TX1	TX-NELAP (TCEQ)

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.

CALTRANS Contract # 03A2172

CHAIN OF CUSTODY RECORD

Pg 1 of 1

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(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: 650

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

Client: GEOCON	Address: 6671 BRISA St.		TEL: (925) 371-5900
Attn: D. WATTS	City LIVERMORE	State CA Zip Code 94550	FAX: (") " - 5915

Project Name: D1/D2 BRIDGES Project #: 59805-01-28 Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature]	Date: 10/16/14	Time: 1800	Received by: (Signature and Printed Name) 650	Date: 10/16/14	Time: 1800
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) C. Aguilar	Date: 10/17/14	Time: 0950
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:
D. WATTS _____
Print Name Date
[signature]
Signature

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

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

Special Instructions/Comments:
ANTICIPATE SOLUBLE REQUESTS
SPROWL

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 : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

Q A / Q C
RTNE ☐
CT ☒
SWRCB ☐ Logcode ____
OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	SOIL	WATER	GROUND WATER	WASTEWATER	PAINT	TAT	Container(s) #	Container(s) Type	REMARKS
	1403118-01	0195-P1/B	10/15/14	1400				X									X		10-DAY	1	Pint P	WTS
	↓ -02	↓ -P2 ↓	↓	↓				↓									↓		↓	↓	↓	YTS

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 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=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

November 04, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403118

Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0195-P2A/B	1403118-02	Paint	10/15/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Client Sample ID 0195-P2A/B

Lab ID: 1403118-02

TCLP Metals by ICP-AES EPA 6010B **Analyst: CB**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**27**	0.050	1	B4J0850	10/31/2014	10/31/14 18:07	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0850 - EPA 3010A_SOIL									
Blank (B4J0850-BLK1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
Blank (B4J0850-BLK2)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050			NR				
LCS (B4J0850-BS1)				Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	0.963356	0.050	1.00000		96.3	80 - 120			
Duplicate (B4J0850-DUP1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	1.26539	0.050		1.16267	NR		8.46	20	
Duplicate (B4J0850-DUP2)		**Source: 1402990-27**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	ND	0.050		ND	NR			20	
Matrix Spike (B4J0850-MS1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.45325	0.050	2.50000	1.16267	91.6	77 - 121			
Matrix Spike Dup (B4J0850-MSD1)		**Source: 1402935-04**		Prepared: 10/31/2014 Analyzed: 10/31/2014					
Lead	3.54586	0.050	2.50000	1.16267	95.3	77 - 121	2.65	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Notes and Definitions

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)
TX1	TX-NELAP (TCEQ)

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.

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Tuesday, October 28, 2014 1:50 PM
To: Diane Galvan
Subject: Re: D1/D2 BRIDGES

Same tat

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

On Oct 28, 2014, at 1:49 PM, "Dave Watts, CAC" <watts@geoconinc.com> wrote:

S9805-01-28

For all, please run:

TCLPs on results >1000 ppm
WETs on results 50-999 ppm

Run TCLPs on WET fails if TTLC at or above 100 ppm.

Thanks.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091415790
CustomerID:	GECN21
CustomerPO:	S9805-01-28
ProjectID:	03A2132

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	10/17/14 9:45 AM
Analysis Date:	10/30/2014
Collected:	10/15/2014

Project: **D1/D2 BRIDGES S9805-01-28**

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**
0195-1A-Concrete *091415790-0001*		Gray Non-Fibrous Homogeneous			40% Quartz 60% Non-fibrous (other)		**None Detected**
0195-1B-Concrete *091415790-0002*		Gray Non-Fibrous Homogeneous			40% Quartz 60% Non-fibrous (other)		**None Detected**
0195-2A-Shims *091415790-0003*		Black Fibrous Homogeneous			20% Matrix 25% Non-fibrous (other)	**55%**	**Chrysotile**
0195-2B-Shims *091415790-0004*		Black Fibrous Homogeneous			20% Matrix 20% Non-fibrous (other)	**60%**	**Chrysotile**
0195-3A-Fibrous Material *091415790-0005*		Black Fibrous Homogeneous	40%	Cellulose	30% Matrix 30% Non-fibrous (other)		**None Detected**
0195-3C-Fibrous Material *091415790-0006*		Black Fibrous Homogeneous	40%	Cellulose	30% Matrix 30% Non-fibrous (other)		**None Detected**

Analyst(s)

Sam Evans (6)

Derrick Tanner, Laboratory Manager
or other approved signatory

Initial report from 10/30/2014 16:47:14

OrderID: 091415790

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

№ 091415790

CALTRANS CONTRACT # 03A2132

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: GEOCON	EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments**
Street: 6671 BRISA ST.	*Third Party Billing requires written authorization from third party*
City: LIVERMORE State/Province: CA	Zip/Postal Code: 94550 Country: USA
Report To (Name): D. WATTS	Fax #: 925-371-5915
Telephone #: 925-371-5900	Email Address: WATTS@GEOCONINC.COM
Project Name/Number: D1/D2 BRIDGES 59805-01-28	
Please Provide Results: ☐ Fax ☒ Email	Purchase Order: 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 TEM Air 3 hours/6 hours, 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
- ☐ 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)
- ☐ 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 CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Samplers Name: D. WATTS Samplers Signature: [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
0195-1A/B	Concrete	NA	10/15/14
-2	Slurry	↓	↓
-3	SFM		

Client Sample # (s): Total # of Samples: 6

Relinquished (Client): [signature] Date: 10/17/14 Time: 0945

Received (Lab): Gheahndra Vision Date: 10/17/14 Time: 9:45am(W)

Comments/Special Instructions: SPROWL

Project No. S9805-01-28
December 11, 2014

Steve Werner, Task Order Manager
Caltrans District 1
Environmental Engineering Office
1656 Union Street
Eureka, California 95501

Subject: ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT
SEAWOOD DRIVE OVERCROSSING (04-0209)
HUMBOLDT COUNTY, CALIFORNIA
CONTRACT NO. 03A2132, E-FIS 01 1400 0016 (EA 01-0E2100)
TASK ORDER NO. 28, 01-HUM-101, POST MILE 103.4

Dear Mr. Werner:

In accordance with California Department of Transportation Contract No. 03A2132 and Task Order No. 28, we have performed an asbestos and lead-containing paint survey of the subject overcrossing (OC) in Humboldt County, California. 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.

PROJECT DESCRIPTION

The project consists of the Seawood Drive OC (04-0209) at Post Mile (PM) 103.4 on Highway 101 in Humboldt 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.

GENERAL OBJECTIVES

The scope of services outlined in TO-28 included the determination of the presence and quantity of asbestos and LCP at the project location prior to various improvements. Assuming that no asbestos is added during future operations, our survey would satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. 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.

BACKGROUND

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 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, 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).

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.

Architectural Drawings and Previous Survey Activities

We reviewed structure as-built plans provided by Caltrans prior to field activities. We did not observe specifications or notes regarding the use of asbestos-containing materials or lead paint in the architectural plans provided. Previous asbestos survey reports were not available for our review.

SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2015), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2015), performed the asbestos and LCP survey at the project location on October 14, 2014.

Asbestos

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

Our procedures for inspection and sampling in accordance with TO-28 are discussed below:

- Collected bulk asbestos samples after first wetting friable materials with a light mist of water. The samples were then cut from the substrate and transferred to labeled containers.
- Relinquished bulk asbestos samples 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) under chain-of-custody protocol. 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

Lead Paint

A total of four bulk paint samples were collected from suspect LCP observed at the project location. Mr. Watts field-composited the suspect LCP samples into two paint schemes prior to submittal to the laboratory. We did not observe deteriorated LCP during our survey. Our sampling procedures in accordance with TO-28 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 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 ten days.

Approximate sample locations are presented on Figure 2. Materials represented by the samples collected are shown in the attached photographs.

INVESTIGATIVE RESULTS

Asbestos

Chrysotile asbestos at a concentration 60% was detected in samples representing sheet packing used as shims in the bridge barrier rail systems. No asbestos was detected in samples of the remaining suspect materials collected during our survey. Sample identification numbers, material descriptions, approximate quantities, friability assessments, and a summary of the analytical laboratory test results for asbestos are summarized below. Reproductions of the laboratory report and chain-of-custody documentation are attached.

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116				
Sample No.	**Description of Material**	**Approximate Quantity**	**Friable**	**Asbestos Content**
0209-1A and B	Concrete	NA	NA	ND
0209-2A and B	**Asbestos sheet packing (shims)**	**5 square feet**	**No**	**60%**
0209-3A and B	Joint fill material	NA	NA	ND

NA = Not applicable (no asbestos detected)
ND = Not detected

Lead Paint

Representative total lead was not detected at or above the laboratory reporting limit (RL) of 20 mg/kg in a sample representing intact white traffic striping.

A sample representing intact yellow traffic striping exhibited a representative total lead concentration of 220 mg/kg and a representative WET lead concentration of 2.0 mg/l.

Sample identification numbers, descriptions, peeling and flaking quantities, and a summary of the analytical laboratory test results for paint are summarized below. Reproductions of the laboratory reports and chain-of-custody documentation are attached.

Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Total Lead (mg/kg)	WET Lead (mg/l)
0209-P1A/B	White traffic striping	Intact	<20	---
0209-P2A/B	Yellow traffic striping	Intact	220	2.0

WET = Waste extraction Test
mg/kg = milligrams per kilogram (EPA Test Method 6010B)
mg/l = milligrams per liter (EPA Test Method 6010B)
< = not detected at or above the indicated laboratory reporting limit
--- = not analyzed

RECOMMENDATIONS

Asbestos

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

We also recommend the notification of contractors (that will be conducting demolition, renovation, or related activities) 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 by contractor[s] during subsequent activities. Personnel not trained for asbestos work should be instructed not to disturb asbestos.

Written notification to the North Coast Unified Air Quality Management District is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Lead Paint

Traffic striping sampled during our survey would not be considered a California or Federal hazardous waste based on lead content.

We recommend that all paints at the project location (graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes 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. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

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 above. 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, express or implied, 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.

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

Sincerely,

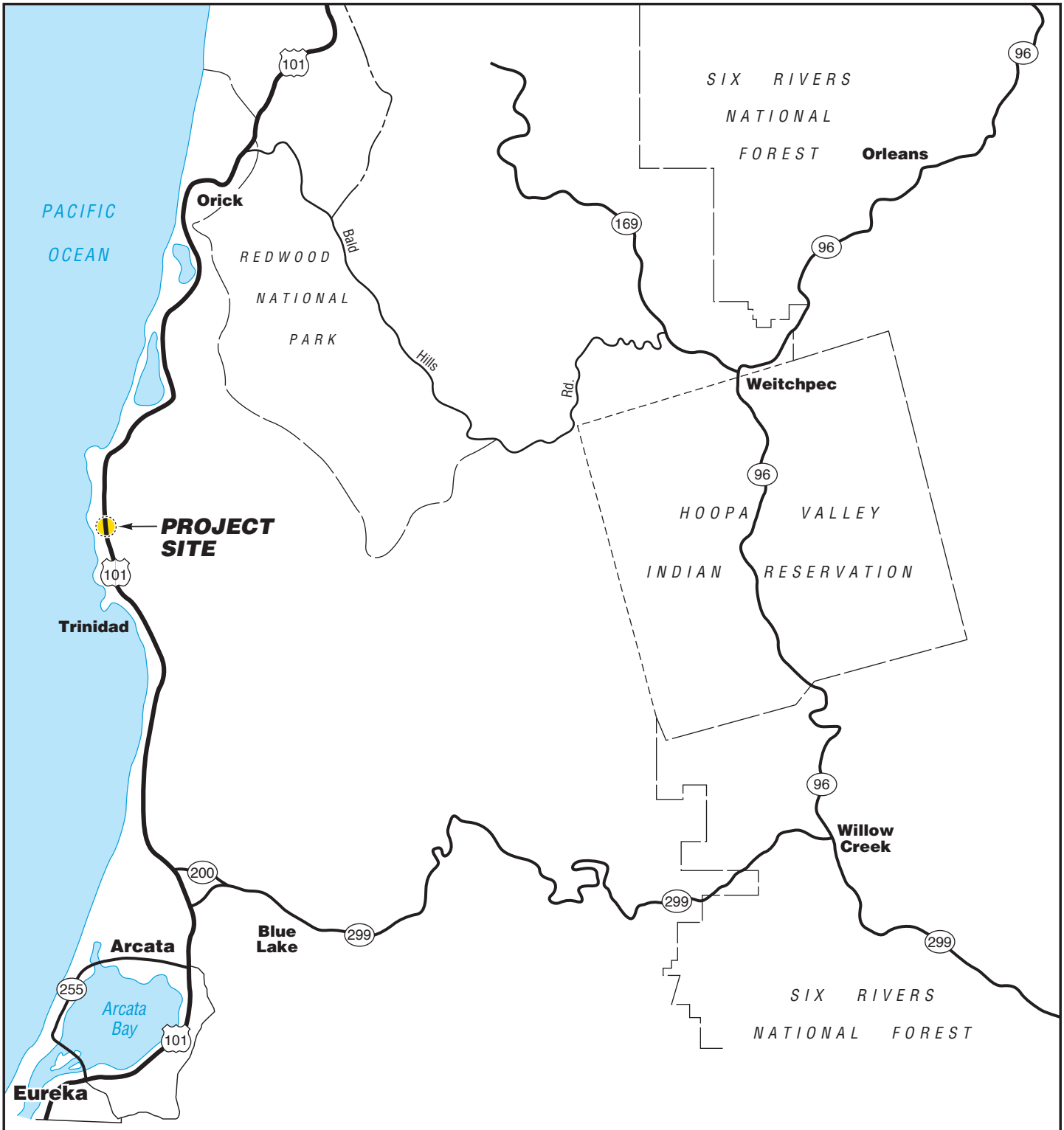
GEOCON CONSULTANTS INC.

David A. Watts, CAC
Senior Project Scientist

John E. Juhrend, PE, CEG
Project Manager

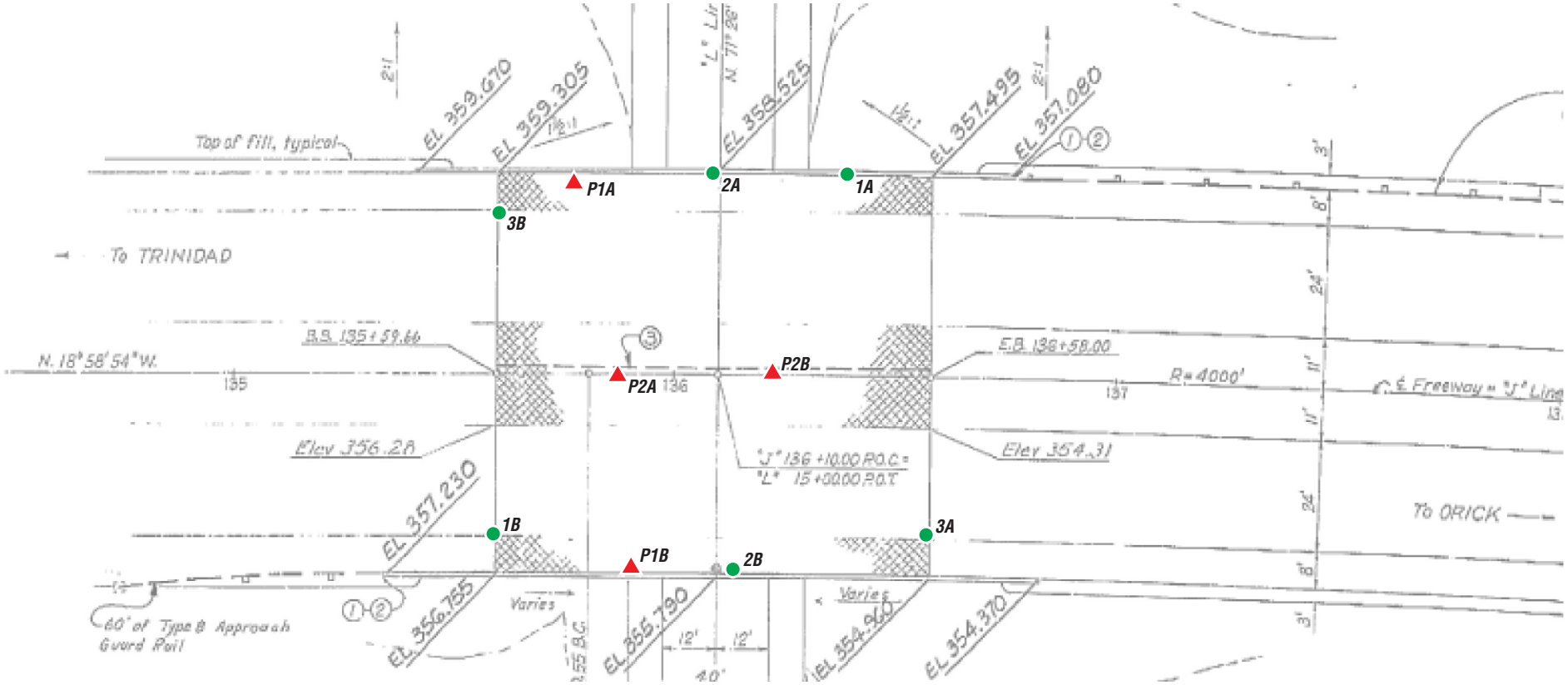
(2 + 2 CD) Addressee

Attachments: Figure 1, Vicinity Map
Figure 2, Site Plan
Site Photographs (1 through 3)
Analytical Laboratory Reports and Chain-of-custody Documentation



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

Seawood Drive OC		
Humboldt County, California	**VICINITY MAP**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 1



SEAWOOD DRIVE OC (04-0209)

LEGEND:

- ● Approximate Asbestos Sample Location
- ▲ Approximate Paint Sample Location

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

Seawood Drive OC		
Humboldt County, California	**SITE PLAN**	
GEOCON Proj. No. S9805-01-28		
Task Order No. 28	December 2014	Figure 2

ADVANCED TECHNOLOGY LABORATORIES

October 24, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403112
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0209-P1A/B	1403112-01	Paint	10/14/14 0:00	10/17/14 9:50
0209-P2A/B	1403112-02	Paint	10/14/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0209-P1A/B

Lab ID: 1403112-01

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	ND	20	10	B4J0639	10/23/2014	10/24/14 12:17	D2

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Client Sample ID 0209-P2A/B

Lab ID: 1403112-02

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**220**	2.0	1	B4J0639	10/23/2014	10/24/14 12:25	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4J0639 - EPA 3050B									
Blank (B4J0639-BLK1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	ND	1.0			NR				
LCS (B4J0639-BS1)				Prepared: 10/23/2014 Analyzed: 10/23/2014					
Lead	48.0262	1.0	50.0000		96.1	80 - 120			
Duplicate (B4J0639-DUP1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	4.95660	20		6.21083	NR		22.5	20	R
Matrix Spike (B4J0639-MS1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	243.070	20	250.000	6.21083	94.7	33 - 134			
Matrix Spike Dup (B4J0639-MSD1)		**Source: 1403112-01**		Prepared: 10/23/2014 Analyzed: 10/24/2014					
Lead	248.313	20	250.000	6.21083	96.8	33 - 134	2.13	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 10/24/2014

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
D2	Sample required dilution due to high concentration of non-target analyte.
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)
TX1	TX-NELAP (TCEQ)

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.

CALTRANS CONTRACT # 03A2132

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(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: GSO

Sample Condition Upon Receipt
1. CHILLED 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
Attn: D. WATTS
Address: 6671 BRISA ST.
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: (") " - 5915

Project Name: D1/D2 BRIDGES Project #: 9805-01-28 Sampler: (Printed Name) D. WATTS (Signature)

Relinquished by: (Signature and Printed Name)		Date: 10/16/14	Time: 1800	Received by: (Signature and Printed Name)	GSO	Date: 10/16/14	Time: 1800
Relinquished by: (Signature and Printed Name)		Date:	Time:	Received by: (Signature and Printed Name)	C. Bajala	Date: 10/17/14	Time: 940
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:
D. WATTS
Print Name Date
Signature

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

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

Special Instructions/Comments:
ANTHEPATE SOLUBLE REQUESTS
SEAWOOD

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 : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

Q A / Q C
RTNE ☐
CT ☒
SWRCB ☐
Logcode ____
OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal) — Pb	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	SOIL	WATER	GROUND WATER	WASTEWATER	[illegible]	TAT	Container(s) #	Container(s) Type	REMARKS
	1403112 - 01	0209 - P1A/B	10/14/14	V+HR				X									X		10-Day	1	Bg P	WTS
	↓ - 02	↓ - P2 ↓	↓	↓				↓									↓		↓	↓	↓	YTS

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 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=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

ADVANCED TECHNOLOGY LABORATORIES

November 04, 2014

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5273
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403112
Client Reference : D1/D2 BRIDGES, S9805-01-28

Enclosed are the results for sample(s) received on October 17, 2014 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 : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0209-P2A/B	1403112-02	Paint	10/14/14 0:00	10/17/14 9:50

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Client Sample ID 0209-P2A/B
Lab ID: 1403112-02

STLC Metals by ICP-AES by EPA 6010B **Analyst: CB**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**2.0**	1.0	20	B4K0006	11/02/2014	11/03/14 15:43	

QUALITY CONTROL SECTION

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

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4K0006 - STLC Extraction									
Blank (B4K0006-BLK1)				Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	ND	1.0			NR				
LCS (B4K0006-BS1)				Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	1.97922	1.0	2.00000		99.0	80 - 120			
Duplicate (B4K0006-DUP1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	0.987683	1.0		1.02374	NR		3.59	20	
Matrix Spike (B4K0006-MS1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	3.27089	1.0	2.50000	1.02374	89.9	44 - 130			
Matrix Spike Dup (B4K0006-MSD1)		**Source: 1403122-02**		Prepared: 11/2/2014 Analyzed: 11/3/2014					
Lead	3.34220	1.0	2.50000	1.02374	92.7	44 - 130	2.16	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : D1/D2 BRIDGES, S9805-01-28
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 11/04/2014

Notes and Definitions

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)
TX1	TX-NELAP (TCEQ)

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.

From: Dave Watts, CAC [watts@geoconinc.com]
Sent: Tuesday, October 28, 2014 1:50 PM
To: Diane Galvan
Subject: Re: D1/D2 BRIDGES

Same tat

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

On Oct 28, 2014, at 1:49 PM, "Dave Watts, CAC" <watts@geoconinc.com> wrote:

S9805-01-28

For all, please run:

TCLPs on results >1000 ppm
WETs on results 50-999 ppm

Run TCLPs on WET fails if TTLC at or above 100 ppm.

Thanks.

David Watts, Geocon
925-785-5340
watts@geoconinc.com
Sent from my iPhone

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091415729
CustomerID:	GECN21
CustomerPO:	
ProjectID:	03A2132

Attn: **Geocon Livermore**
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	10/17/14 9:45 AM
Analysis Date:	10/30/2014
Collected:	10/14/2014

Project: **D1/D2 BRIDGES S9805-01-28**

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**
0209-1A-Concrete *091415729-0001*		Gray/Tan Non-Fibrous Homogeneous			60% Ca Carbonate 40% Non-fibrous (other)		**None Detected**
0209-1B-Concrete *091415729-0002*		Gray/Tan Non-Fibrous Homogeneous			60% Ca Carbonate 40% Non-fibrous (other)		**None Detected**
0209-2A-Shims *091415729-0003*		Gray/White Fibrous Homogeneous			40% Non-fibrous (other)	**60%**	**Chrysotile**
0209-2B-Shims *091415729-0004*		Gray Fibrous Homogeneous			40% Non-fibrous (other)	**60%**	**Chrysotile**
0209-3A-JFM *091415729-0005*		Brown/Black Fibrous Homogeneous	90%	Cellulose	10% Non-fibrous (other)		**None Detected**
0209-3B-JFM *091415729-0006*		Brown/Black Fibrous Homogeneous	90%	Cellulose	10% Non-fibrous (other)		**None Detected**

Analyst(s)

Amber Albon (6)

Derrick Tanner, Laboratory Manager
or other approved signatory

Initial report from 10/30/2014 16:40:19

OrderID: 091415729

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

091415729

CALTRANS CONTRACT # 03A2132

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: GEOCON		EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 6671 BRISA ST.			
City: LIVERMORE	State/Province: CA	Zip/Postal Code: 94550	Country: USA
Report To (Name): D. WATTS		Fax #: 925-371-5915	
Telephone #: 925-371-5900		Email Address: WATTS@GEOCONINC.COM	
Project Name/Number: D1/D2 BRIDGES		59805-01-28	
Please Provide Results: ☐ Fax ☒ Email	Purchase Order:	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 TEM Air 3 hours/6 hours, 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
- ☐ 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)
- ☐ 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 CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Samplers Name: D. WATTS | Samplers Signature: Watt

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
0209-1A/B	Concrete	NA	10/14/14
-2	Stirrups	↓	↓
-3	JFM	↓	↓

Client Sample # (s): Total # of Samples: 6

Relinquished (Client): Watt Date: 10/17/14 Time: 0945

Received (Lab): Robin Date: 10-17-14 Time: 9:45

Comments/Special Instructions:

SEAWOOD