

# INFORMATION HANDOUT

## MATERIALS INFORMATION

LIMITED LEAD-CONTAINING PAINT  
SURVEY REPORT  
Randolph Collier Tunnel  
Del Norte County, California  
June 2009

**ROUTE: 01-DN-199-33.4/33.9**



**PREPARED FOR:**

**CALIFORNIA DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
1656 UNION STREET  
EUREKA, CALIFORNIA 95501**



**PREPARED BY:**

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



**GEOCON PROJECT NO. S9300-06-88  
TASK ORDER NO. 88, EA NO. 01-448301  
CONTRACT NO. 03A1368**

**JUNE 2009**



CONSULTANTS, INC.

G E O T E C H N I C A L ■ E N V I R O N M E N T A L ■ M A T E R I A L S



Project No. S9300-06-88  
June 16, 2009

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

Subject: RANDOLPH COLLIER TUNNEL  
DEL NORTE COUNTY, CALIFORNIA  
CONTRACT NO. 03A1368  
TASK ORDER NO. 88, EA NO. 01-448301  
LIMITED LEAD-CONTAINING PAINT SURVEY REPORT

Dear Mr. Werner:

In accordance with California Department of Transportation Contract No. 03A1368 and Task Order No. 88, we have performed a limited lead paint survey for the subject project in Del Norte County, California. The scope of services included surveying the interior walls, overhead, and sidewalks of the Randolph Collier Tunnel for suspect lead-containing paints, collecting bulk samples, and submitting the samples to a laboratory for analysis.

The accompanying report summarizes the services performed and laboratory analysis.

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

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

Sincerely,

GEOCON CONSULTANTS, INC.

David A. Watts, CAC  
Senior Project Scientist

John E. Juhrend, PE, CEG  
Project Manager

DAW:JEJ:jaj

(4 + 2 CDs) Addressee

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### FIGURE

1. Vicinity Map

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1. Summary of Paint Analytical Results

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- A. Analytical Laboratory Reports and Chain-of-custody Documentation

# LIMITED LEAD-CONTAINING PAINT SURVEY REPORT

## 1.0 INTRODUCTION

This limited lead-containing paint survey report was prepared by Geocon Consultants, Inc. under Caltrans Contract No. 03A1368, Task Order No. 88 (TO-88).

### 1.1 Project Description

The project will consist of stripping and repainting the interior walls, overhead, and sidewalks of the 575-foot-long Randolph Collier Tunnel (Tunnel 01-0049) at Post Mile 33.52 on Highway 199 in Del Norte County, California. The tunnel location is depicted on the Vicinity Map, Figure 1. Site photographs are attached.

### 1.2 General Objectives

The purpose of the scope of services outlined in TO-88 was to determine the presence of lead-containing paints (LCP) at the project location prior to repainting activities. Caltrans will use the information obtained from this investigation for waste profiling, determining California Occupational Safety and Health Administration (Cal/OSHA) applicability, and coordinating LCP disturbance activities.

*It was not Geocon's intent during this inspection to conduct an evaluation of lead-based paint hazards in accordance with U.S. Department of Housing and Urban Development (HUD) guidelines. HUD protocol generally requires a very extensive sampling strategy that includes sampling of paint on each surface type (e.g., wall, ceiling, window sill, window frame, door frame, molding, etc.) in each room.*

## 2.0 BACKGROUND

### 2.1 Lead Paint

Construction activities (including renovation and 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, Section 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 component. Renovation or demolition of a deteriorated LCP component would require waste characterization and appropriate disposal. Intact LCP on a component is currently accepted by most landfill 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 total lead content equals or exceeds the respective Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg); or 2) the 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 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 concentrations) 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 the Title 8, CCR, Section 1532.1.

## **2.2 Architectural Drawings and Previous Survey Activities**

Architectural plans and previous survey reports for the tunnel were not available for our review.

## **3.0 SCOPE OF SERVICES**

Mr. David Watts, a 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, 2009), completed the LCP survey at the project location on May 4, 2009.

A total of two bulk samples of paint were collected at the project location. Our paint sampling procedures are discussed below:

- Collected representative 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 paint samples to Advanced Technology Laboratories (ATL), a California-licensed laboratory, for lead analyses in accordance with EPA Test Method 6010 under standard chain-of-custody procedures. ATL is accredited by the California DPH for lead analysis. The laboratory analyses were requested on a ten-day turn-around-time.

Geocon paint sample identification numbers, paint descriptions, approximate peeling/flaking quantities, and photo references are summarized on Table 1.

#### 4.0 INVESTIGATIVE RESULTS

A sample representing intact beige paint used on the tunnel walls and overhead exhibited a total lead concentration of 610 mg/kg and a soluble (WET) lead concentration of 2.4 mg/l.

A sample representing intact white paint used on the tunnel sidewalks exhibited a total lead concentration of 450 mg/kg, a soluble (WET) lead concentration of 10 mg/l, and a soluble (TCLP) lead concentration of less than (<) 0.25 mg/l.

A summary of the analytical laboratory test results for LCP is presented on Table 1. Reproductions of the laboratory reports and chain-of-custody documentation are presented in Appendix A.

## 5.0 RECOMMENDATIONS

Based on the analytical test results, we recommend that paint stripped from the tunnel sidewalks during planned repainting activities be disposed of as a California hazardous waste. Paint stripped from the tunnel interior walls and overhead would not be classified as a California or Federal hazardous waste based on the reported lead content.

The Cal/OSHA lead standard will apply to any maintenance, renovation, or demolition activity that disturbs LCP identified during our survey. In accordance with Title 8, CCR, Section 1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work.

Contractors disturbing LCP should be required to use personnel who have lead-related construction certification as supervisors or workers, as appropriate, from the California DPH for LCP removal work. Loose, stripped, or peeling/flaking LCP require collection and removal prior to demolition for waste segregation purposes: to separate potentially hazardous waste (Category III concentrated lead such as loose paint, paint sludge, vacuum debris, and vacuum filters) from non-hazardous demolition debris (Category II intact lead-painted architectural components such as doors, windows, framework, cladding, and trim). Category I waste is low lead waste (typically non-hazardous) such as construction materials, filtered wash water, and plastic sheeting. Contractors are responsible for informing the landfill of the contractor's intent to dispose of RCRA waste, California hazardous waste, and/or architectural components containing intact LCP. Some landfills may require additional waste characterization. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

## 6.0 REPORT LIMITATIONS

This LCP survey was conducted in conformance with generally accepted standards of practice for identifying and evaluating LCP in structures. The survey addressed only the structure identified in Section 1.1. Due to the nature of structure surveys, LCP use, and laboratory analytical limitations, some 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. 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 LCP is found, additional sampling and analysis should be performed to determine if the material contains 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.



OREGON  
CALIFORNIA

**PROJECT  
LOCATION**

PACIFIC  
OCEAN

**Crescent  
City**

**Smith  
River**

**Gasquet**

**Klamath**

DEL NORTE CO.  
HUMBOLDT CO.



**GEOCON**  
CONSULTANTS, INC.

3160 GOLD VALLEY DR. - SUITE 800 - RANCHO CORDOVA, CA. 95742  
PHONE 916 852-9118 - FAX 916 852-9132

Randolph Collier Tunnel

Del Norte County,  
California

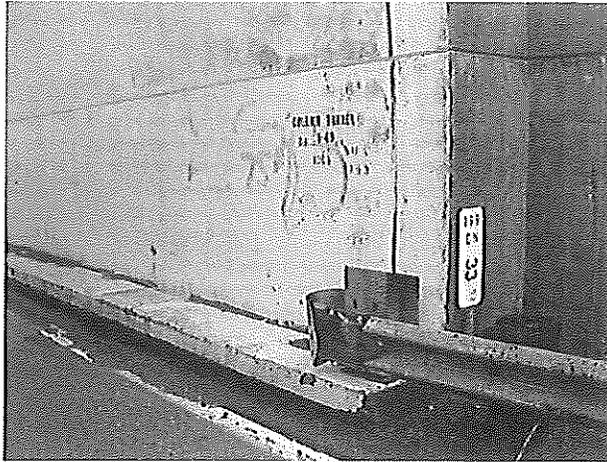
**VICINITY MAP**

GEOCON Proj. No. S9300-06-88

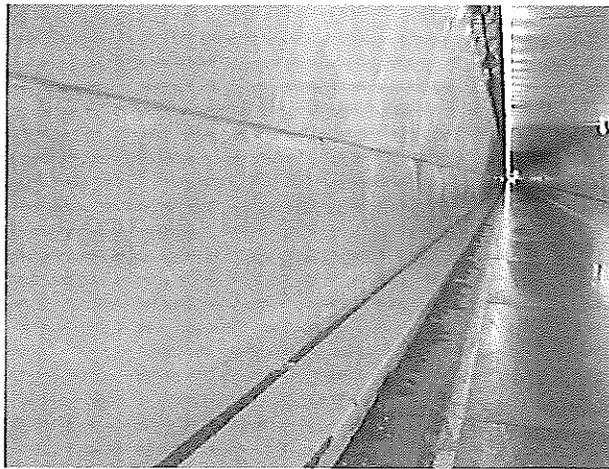
Task Order No. 88, EA 01-448301

June 2009

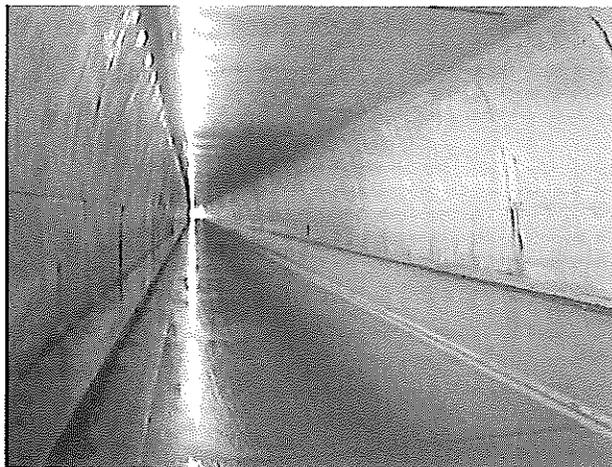
Figure 1



**Photo 1 – Randolph Collier Tunnel (Tunnel 01-0049) in Del Norte County, California**



**Photo 2 – Tunnel interior (view from north)**



**Photo 3 – Tunnel interior (view from south)**



**GEOCON**  
CONSULTANTS, INC.

3180 GOLD VALLEY DR - SUITE 800 - RANCHO CORDOVA, CA 95742  
PHONE 916.852.9118 - FAX 916.852.9132

**PHOTOGRAPHS 1, 2, & 3**

Randolph Collier Tunnel  
Del Norte County, California

S9300-06-88

Task Order No. 88

June 2009

TABLE 1

SUMMARY OF PAINT ANALYTICAL RESULTS  
 RANDOLPH COLLIER TUNNEL (TUNNEL 01-0049)  
 CALTRANS CONTRACT 03A1638, TASK ORDER NO. 88, EA 01-448301  
 DEL NORTE COUNTY, CALIFORNIA

Paint Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Site Photos	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)
CT-P1	Beige paint (tunnel walls/overhead)	Intact	1, 2, and 3	610	2.4	—
CT-P2	White paint (tunnel sidewalks)	Intact	1, 2, and 3	450	10	<0.25

Notes:

mg/kg = milligrams per kilogram (EPA Test Method 6010)

mg/l = milligrams per liter

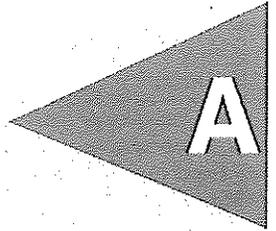
WET = Waste Extraction Test (EPA Test Method 7420)

TCLP = Toxicity Characteristic Leaching Procedure (EPA Test Method 1311)

— = Not analyzed

< = Not detected at or above the indicated laboratory reporting limit

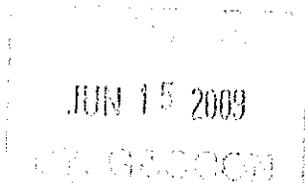
# APPENDIX



May 11, 2009



Dave Watts  
Geocon Consultants, Inc.  
6671 Brisa Street  
Livermore, CA 94550  
TEL: (925) 371-5900  
FAX: (925) 371-5915



ELAP No.: 1838  
NELAP No.: 02107CA  
NEVADA.: CA-401  
CSDLAC No.: 10196

Workorder No.: 105375

RE: COLLIER TUNNEL, S9300-06-88

Attention: Dave Watts

Enclosed are the results for sample(s) received on May 06, 2009 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez  
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



---

CLIENT: Geocon Consultants, Inc.  
Project: COLLIER TUNNEL, S9300-06-88  
Lab Order: 105375

---

**CASE NARRATIVE**

Analytical Comments for Method 6010

RPD for Duplicate (DUP) is outside criteria for sample 105353-001ADUP; however, the Laboratory Control Sample (LCS) validated the analytical batch.



**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**

Print Date: 11-May-09

**CLIENT:** Geocon Consultants, Inc.  
**Project:** COLLIER TUNNEL, S9300-06-88

**Lab Order:** 105375

**Lab ID:** 105375-001 **Collection Date:** 5/4/2009 3:11:00 PM  
**Client Sample ID:** CT-P1 **Matrix:** PAINT CHIPS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID: ICP8_090507C	QC Batch: 55210				PrepDate: 5/7/2009	Analyst: CL
Lead	610	4.0		mg/Kg	1	5/7/2009 05:51 PM

**Lab ID:** 105375-002 **Collection Date:** 5/4/2009 3:31:00 PM  
**Client Sample ID:** CT-P2 **Matrix:** PAINT CHIPS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID: ICP8_090507C	QC Batch: 55210				PrepDate: 5/7/2009	Analyst: CL
Lead	450	4.0		mg/Kg	1	5/7/2009 05:54 PM

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		



*Advanced Technology  
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

Date: 11-May-09

ANALYTICAL QC SUMMARY REPORT

CLIENT: Geocoon Consultants, Inc.

Work Order: 105375

Project: COLLIER TUNNEL, S9300-06-88

TestCode: 6010\_S

Sample ID: MB-55210	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 5/7/2009	RunNo: 108839						
Client ID: PBS	Batch ID: 55210	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 5/7/2009	SeqNo: 1708005						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.202	1.0									

Sample ID: LCS-55210	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 5/7/2009	RunNo: 108839						
Client ID: LCSS	Batch ID: 55210	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 5/7/2009	SeqNo: 1708006						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.502	1.0	50.00	0.2023	101	80	120				

Sample ID: 105353-001ADUP	SampType: DUP	TestCode: 6010_S	Units: mg/Kg	Prep Date: 5/7/2009	RunNo: 108839						
Client ID: ZZZZZZ	Batch ID: 55210	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 5/7/2009	SeqNo: 1708008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.547	1.0						1.766	36.2	20	R

Sample ID: 105353-001AMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 5/7/2009	RunNo: 108839						
Client ID: ZZZZZZ	Batch ID: 55210	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 5/7/2009	SeqNo: 1708009						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	117.256	1.0	125.0	1.766	92.4	33	120				

Sample ID: 105353-001AMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 5/7/2009	RunNo: 108839						
Client ID: ZZZZZZ	Batch ID: 55210	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 5/7/2009	SeqNo: 1708010						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	113.646	1.0	125.0	1.766	89.5	33	120	117.3	3.13	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040



May 21, 2009



Dave Watts  
Geocon Consultants, Inc.  
6671 Brisa Street  
Livermore, CA 94550  
TEL: (925) 371-5900  
FAX: (925) 371-5915

JUN 16 2009

ELAP No.: 1838  
NELAP No.: 02107CA  
NEVADA.: CA-401  
CSDLAC No.: 10196

Workorder No.: 105375

RE: COLLIER TUNNEL, S9300-06-88

Attention: Dave Watts

Enclosed are the results for sample(s) received on May 06, 2009 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Rodriguez".

Eddie F. Rodriguez  
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



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**CLIENT:** Geocon Consultants, Inc.  
**Project:** COLLIER TUNNEL, S9300-06-88  
**Lab Order:** 105375

---

**CASE NARRATIVE**

Analytical Comments for Method 7420

Dilution was necessary for samples 105375-001A and 105375-002A, due to sample matrix.



LEAD BY ATOMIC ABSORPTION (STLC)

ANALYTICAL RESULTS

WET/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	Lab Order:	105375
Project:	COLLIER TUNNEL, S9300-06-88	Date Received:	5/6/2009 9:50:00 AM
Project No:		Matrix:	Paint Chips
Analyte:	Lead	Analyst:	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
105375-001A	CT-P1	2.4	mg/L	55387	0.50	2	5/4/2009	5/20/2009
105375-002A	CT-P2	10	mg/L	55387	0.50	2	5/4/2009	5/20/2009

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		





Advanced Technology Laboratories

Date: 21-May-09

CLIENT: Geocon Consultants, Inc.

Work Order: 105375

Project: COLLIER TUNNEL S9300-06-SS

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420\_ST

Sample ID:	MB-55387A	SampType:	MBLK	TestCode:	7420_ST	Units:	mg/L	Prep Date:	5/18/2009	RunNo:	109181
Client ID:	PBS	Batch ID:	55387	TestNo:	WET/EPA 74 WET			Analysis Date:	5/20/2009	SeqNo:	1714363
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.25									
Sample ID:	LCS-55387	SampType:	LCS	TestCode:	7420_ST	Units:	mg/L	Prep Date:	5/18/2009	RunNo:	109181
Client ID:	LCSS	Batch ID:	55387	TestNo:	WET/EPA 74 WET			Analysis Date:	5/20/2009	SeqNo:	1714364
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	4.569	0.25	5.000	0	91.4	80	120				
Sample ID:	105393-013A-DUP	SampType:	DUP	TestCode:	7420_ST	Units:	mg/L	Prep Date:	5/18/2009	RunNo:	109181
Client ID:	ZZZZZZ	Batch ID:	55387	TestNo:	WET/EPA 74 WET			Analysis Date:	5/20/2009	SeqNo:	1714375
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	7.149	0.25						7.112	0.524	20	
Sample ID:	105393-013A-MIS	SampType:	MIS	TestCode:	7420_ST	Units:	mg/L	Prep Date:	5/18/2009	RunNo:	109181
Client ID:	ZZZZZZ	Batch ID:	55387	TestNo:	WET/EPA 74 WET			Analysis Date:	5/20/2009	SeqNo:	1714376
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	12.539	0.50	5.000	7.112	109	80	120				
Sample ID:	MB-55387B	SampType:	MBLK	TestCode:	7420_ST	Units:	mg/L	Prep Date:	5/18/2009	RunNo:	109181
Client ID:	PBS	Batch ID:	55387	TestNo:	WET/EPA 74 WET			Analysis Date:	5/20/2009	SeqNo:	1714377
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference



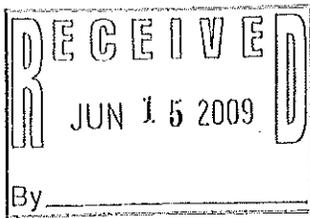
**Diane Galvan**

---

**From:** David Watts [watts@geoconinc.com]  
**Sent:** Friday, May 15, 2009 2:50 PM  
**To:** Diane Galvan  
**Subject:** RE: Results/EDD - COLLIER TUNNEL (105375)

Thanks.  
Please run WETs (and TCLP(s) if we fail WET(s)). Same TAT as CofC.





June 02, 2009



Dave Watts  
Geocon Consultants, Inc.  
6671 Brisa Street  
Livermore, CA 94550  
TEL: (925) 371-5900  
FAX: (925) 371-5915

ELAP No.: 1838  
NELAP No.: 02107CA  
NEVADA.: CA-401  
CSDLAC No.: 10196

Workorder No.: 105375

RE: COLLIER TUNNEL, S9300-06-88

Attention: Dave Watts

Enclosed are the results for sample(s) received on May 06, 2009 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie F. Rodriguez".

Eddie F. Rodriguez  
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



LEAD BY ATOMIC ABSORPTION (TCLP)

ANALYTICAL RESULTS

EPA 1311/7420

CLIENT:	Geocon Consultants, Inc.	Lab Order:	105375
Project:	COLLIER TUNNEL, S9300-06-88	Date Received:	5/6/2009 9:50:00 AM
Project No:		Matrix:	Paint Chips
Analyte:	Lead	Analyst:	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
105375-002A	CT-P2	ND	mg/L	55640	0.25	1	5/4/2009	6/2/2009

Qualifiers: B Analyte detected in the associated Method Blank E Value above quantitation range  
 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
 S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
 DO Surrogate Diluted Out





Advanced Technology Laboratories

Date: 02-Jun-09

CLIENT: Gecon Consultants, Inc.  
Work Order: 105375  
Project: COLLIER TUNNEL, S9300-06-88

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420\_IC

Sample ID:	MB-55640A	Batch ID:	PBS	Result	ND	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID:	MB-55640A	Batch ID:	PBS	Result	ND	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719532				
Sample ID:	MB-55640 MS	Batch ID:	55640	Result	MS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	ZZZZZZ	Batch ID:	55640	Result	MS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719533				
Sample ID:	MB-55640 MSD	Batch ID:	55640	Result	MSD	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	ZZZZZZ	Batch ID:	55640	Result	MSD	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719534				
Sample ID:	LCS-55640	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	LCSS	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719535				
Sample ID:	LCS-55640	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	LCSS02	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719536				
Sample ID:	LCS-55640	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	LCSS02	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719536				
Sample ID:	LCS-55640	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	LCSS02	Batch ID:	55640	Result	LCS	0.25	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TestCode: 7420_IC		EPA3010A		Units: mg/L		Prep Date: 6/2/2009		RunNo: 109480		Analysis Date: 6/2/2009		SeqNo: 1719536				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- S Spikes/Surrogate outside of limits due to matrix interference

**Diane Galvan**

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**From:** David Watts [watts@geoconinc.com]  
**Sent:** Wednesday, May 27, 2009 2:01 PM  
**To:** Diane Galvan  
**Cc:** Bing Roura  
**Subject:** RE: Additional Results/EDD - COLLIER TUNNEL (105375)

TCLP on P2 please. Std TAT.

