



# COLORADO

## Department of Transportation

Office of the Chief Engineer  
2829 W. Howard Place  
Denver, CO 80204-2305

February 13, 2020

Mr. Gabriel Cosyleon  
Environmental Program Manager/Ecologist – Region 2  
Colorado Department of Transportation  
1480 Quail Lake Loop  
Colorado Springs, CO 80906

**RE: Asbestos and Lead-Based Paint Inspection Report for Bridge G-12-C  
located at State Highway 9 over Platte Gulch at MM 71.445 north of Alma,  
Colorado**

Dear Mr. Cosyleon,

The Colorado Department of Transportation (CDOT) Environmental Project Coordinator (EPC) completed an asbestos and lead-based paint inspection at bridge G-12-C located at State Highway 9 over Platt Gulch at Mile Marker (MM) 71.445 north of Alma, Colorado. The CDOT-EPC is a certified asbestos building inspector, certification # 13915.

On January 21, 2020 the CDOT-EPC performed the asbestos and lead-based paint inspection of the bridge. The bridge is approximately 23 feet in length by 38 feet in width and was constructed in 1938. The bridge is a concrete box culvert structure without guardrails.

Asbestos-containing materials (ACMs) were not identified during the inspection so bulk samples were not collected.

One paint chip sample was collected from the bridge. A tan paint chip sample was collected off the northeast concrete wing wall (sample G-12-C-LP01). This paint was below the threshold of 0.5% as a lead-based paint but is considered as a lead containing paint. The paint is located on the concrete below the bridge deck on the abutment, piers and wing walls.

As the lead containing paint was observed on a substrate other than metal (and per the EPA 20 times rule being greater than the regulatory limit of 100 milligrams per kilogram) a composite sample of bridge components, including the black lead-based paint, was collected and submitted for Toxicity Characteristic Leaching Procedure (TCLP) analysis. The sample was collected to determine if the components of the bridge structure would be considered as hazardous waste. The TCLP laboratory result for this bridge structure revealed a result below the reporting limit of less than 0.25 milligrams per liter (mg/l) of



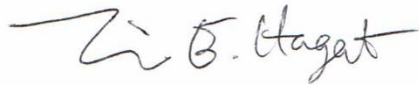
lead. The debris from the bridge is therefore classified as solid waste (and not hazardous waste) as the TCLP result was less than the regulatory limit for lead of 5.0 mg/l.

The paint chip sample was submitted and analyzed by Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy – Mass Spectrometry (AES-MS) by Reservoirs Environmental, Inc. (Reservoirs). The TCLP sample was analyzed by Reservoirs using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy – Inductively Coupled Plasma (AES-ICP). Reservoirs is an accredited laboratory for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - American Certificate #480.

The tan paint located on the concrete abutment, piers and wing walls is a lead containing paint. If the paint will be disturbed by repair or removal activities, it is recommended that paint removal and waste disposal work be performed in accordance with 29 CFR 1926.62. ACMs were not identified on the structure during the bridge inspection. Please contact (720) 582-0694 with any questions or concerns regarding this report.

Sincerely,

**COLORADO DEPARTMENT OF TRANSPORTATION**



Tim Hagert

Environmental Project Coordinator

Certified Asbestos Building Inspector #13915

Attachments: Paint Chip Sample Summary Table  
TCLP Sample Summary Table  
Laboratory Results  
Sample Location Drawing  
Photographic Log  
Inspector Certificate



### Paint Chip Sample Summary Table

Sample ID	Sample Description & Location	Analytical Result (%)
G-12-C-LP01	Tan paint located on concrete abutment and wing walls of bridge. Sample collected from northeast wing wall.	<u>Lead</u> 0.017

Notes: BRL – Below Reporting Limit  
% - Percent

**Lead-Based Paint – 0.5% or greater**

**Toxicity Characteristic Leaching Procedure (TCLP) Sample Summary Table**

<b>Sample ID</b>	<b>Sample Description &amp; Location</b>	<b>Analytical Result (mg/l)</b>
G-12-C-TCLP01	Composite sample of bridge components including the tan lead containing paint	<u>Lead</u> BRL

Notes: BRL – Below Reporting Limit (less than 0.25 mg/l)  
mg/l – milligrams per liter

**Regulatory Level as Hazardous Waste (for Lead) – 5.0 mg/l or greater**



February 05, 2020

**Subcontractor Number:**

**Laboratory Report:** RES 455505-1

**Project #/P.O. #:** 23582.10.50

**Project Description:** R2 Bridge

Tim Hagert  
Colorado Dept. of Transportation (Denver)  
2829 West Howard Place  
Denver CO 80204

Dear Tim,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both IHPAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Mass Spectrometry (ICP-MS) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

**RES 455505-1** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

A handwritten signature in blue ink that reads "Robin Klover".

by Adam Kelly

Robin Klover  
Vice President

## RESERVOIRS ENVIRONMENTAL, INC

NVLAP Lab Code 101896-0  
AIHA Certificate of Accreditation #480 LAB ID 101533

### TABLE: I ANALYSIS: LEAD IN PAINT

RES Job Number: **RES 455505-1**  
 Client: **Colorado Dept. of Transportation (Denver)**  
 Client Project/P.O.: **23582.10.50**  
 Client Project Description: **R2 Bridge**  
 Date Samples Received: **February 04, 2020**  
 Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 3050B/7420-M**  
 Turnaround: **Priority**  
 Date Samples Analyzed: **February 05, 2020**

NA = Not Analyzed  
 NR = Not Received  
 ND = None Detected  
 TR = Trace; <1 % Visual Estimate  
 Trem-Act = Tremolite-Actinolite  
 BAS = Below Analytical Sensitivity  
 BRL = Below Reporting Limit  
 CBR = Cannot Be Read

Client ID Number	Reporting Limit (%)	LEAD CONCENTRATION (%)
<b>G-12-C-LP01</b>	0.0050	0.017

\* Unless otherwise noted all quality control samples performed within specifications established by the laboratory



Adam Kelly  
Analyst/Data QA



RES Job #: 455505

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES	
Company:	COLORADO DEPT. OF TRANSPORTATION (DEN ...)	Company:	COLORADO DEPT. OF TRANSPORTATION (DEN ...)	Contact:	TIM HAGERT	-1 CHEM PRIORITY	
Address:	2829 WEST HOWARD PLACE	Address:	2829 WEST HOWARD PLACE	Phone:	(720) 582-0694		
	DENVER, CO 80204		DENVER, CO 80204	Fax:			
Project Number and/or P.O. #:	23582.10.50			Cell:			
Project Description/Location:				R2 BRIDGE		Final Data Deliverable Email Address:	
						TIM.HAGERT@STATE.CO.US (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm		REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES	
PLM / PCM / TEM	DTL RUSH PRIORITY STANDARD			Air = A	Bulk = B	<b>Laboratory Analysis Instructions</b>  **ASTM E1792 approved wipe media only**	
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm				Dust = D	Food = F		
Dust	RUSH PRIORITY STANDARD			Paint = P	Soil = S		
<b>Metals</b>	RUSH <b>PRIORITY</b> STANDARD			Surface = SU	Swab = SW		
Organics*	SAME DAY RUSH PRIORITY STANDARD			Tape = T	Wipe = W		
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm				Drinking Water = DW			
Viable Analysis**	PRIORITY STANDARD			Waste Water = WVV			
Medical Device Analysis	RUSH STANDARD						
Mold Analysis	RUSH PRIORITY STANDARD						
**Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.**							
Special Instructions:							
Client Sample ID Number	(Sample ID's must be unique)	ASBESTOS	CHEMISTRY	Microbiology			
1	G-12-C-LP01		X				

REI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:		TIM HAGERT	Date/Time: 02/04/2020 12:18:44	Sample Condition: ACCEPTABLE - INTACT
Received By:		HANNA MARTI	Date/Time: 02/04/2020 12:18:44	Carrier: HAND



February 12, 2020

**Subcontractor Number:**

**Laboratory Report: RES 455560-1**

**Project #/P.O. #: 23582.10.50**

**Project Description: R2 Bridge**

Tim Hagert  
Colorado Dept. of Transportation (Denver)  
2829 West Howard Place  
Denver CO 80204

Dear Tim,

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Inductively Coupled Plasma (AES-ICP) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

**RES 455560-1** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

A handwritten signature in blue ink that reads "Robin Klover". Below the signature, the text "by Adam Kelly" is printed in a small, black font.

Robin Klover  
Vice President



## RESERVOIRS ENVIRONMENTAL, INC

NVLAP Lab Code 101896-0  
AIHA Certificate of Accreditation #480 LAB ID 101533

### TABLE: I ANALYSIS: LEAD VIA TCLP EXTRACTION

RES Job Number: **RES 455560-1**  
 Client: **Colorado Dept. of Transportation (Denver)**  
 Client Project/P.O.: **23582.10.50**  
 Client Project Description: **R2 Bridge**  
 Date Samples Received: **February 05, 2020**  
 Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 1311/3011A/7420-M**  
 Turnaround: **Priority**  
 Date Samples Analyzed: **February 12, 2020**

NA = Not Analyzed  
 NR = Not Received  
 ND = None Detected  
 TR = Trace; <1 % Visual Estimate  
 Trem-Act = Tremolite-Actinolite  
 BAS = Below Analytical Sensitivity  
 BRL = Below Reporting Limit  
 CBR = Cannot Be Read

Client ID Number	Reporting Limit (mg/L)	LEAD CONCENTRATION (mg/L)
<b>G-12-C-TCLP01</b>	0.25	BRL

\* Unless otherwise noted all quality control samples performed within specifications established by the laboratory




Adam Kelly  
Analyst/Data QA




# G-12-C - sample location



**Legend**

-  G-12-C

 Suspect Lead Paint Sample Location

## Bridge G-12-C Photographic Log



View of bridge G-12-C looking north.



View of bridge G-12-C signage.



Paint sample G-12-C-LP01. The tan paint on the concrete is considered lead containing paint.



Colorado Department  
of Public Health  
and Environment

## ASBESTOS CERTIFICATION\*

This certifies that

**Tim Hagert**

**Certification No.: 13915**

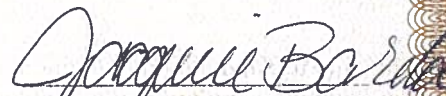
has met the requirements of 25-7-507, C.R.S. and Air Quality Control  
Commission Regulation No. 8, Part B, and is hereby certified by the  
state of Colorado in the following discipline:

**Building Inspector\***

**Issued: January 23, 2019**

**Expires: January 26, 2020**

*\* This certificate is valid only with the possession of a  
current Division-approved training course certification  
in the discipline specified above.*

  
Authorized APCD Representative

SEAL