



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

May 5, 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 M-21-I
located at US Highway 350 over Draw at MM 56.442 Northeast of Timpas,
Colorado**

Dear Mr. Cosyleon,

The Colorado Department of Transportation (CDOT) Environmental Project Coordinator (EPC) completed an asbestos and lead-based paint inspection at bridge M-21-I located at US Highway 350 over Draw at Mile Marker (MM) 56.442 northeast of Timpas, Colorado. The CDOT-EPC is a certified asbestos building inspector, certification # 13915.

On April 9, 2020 the CDOT-EPC performed the asbestos and lead-based paint inspection of the bridge. The bridge is approximately 69 feet in length by 26 feet in width and was constructed in 1935. The bridge is a treated timber stringer structure with a timber deck and painted wooden guardrails.

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

Two paint chip samples were collected from the bridge. A white paint chip sample was collected from a wooden guardrail at the northeast of the bridge (sample M-21-I-LP01). A black paint chip sample was collected from a wooden guardrail at the southeast of the bridge (sample M-21-I-LP02). Both paints are greater than 0.5% of lead by weight and are considered lead-based paints. These paints are located on the wooden guardrails throughout the bridge structure.

As the lead-based paints were observed on a substrate other than metal, a composite sample of bridge components, including the white and black lead-based paints, was collected and submitted for Toxicity Characteristic Leaching Procedure (TCLP) analysis for lead. 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



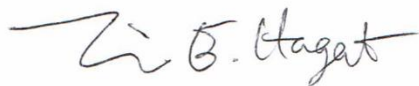
(mg/l) of lead. The debris from the bridge is therefore classified as solid waste (and not hazardous waste) as the TCLP result was less than the regulatory limit for lead of 5.0 mg/l.

The paint chip samples were 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 white and black paints located on the wooden guardrails are lead-based paints. If the paints 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 and Section 250.04 of the 2019 CDOT Standard Specifications for Road and Bridge Construction Handbook. 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 (%)
M-21-I-LP01	White paint collected from guardrail. Sample collected from northeast guardrail.	<u>Lead</u> 1.1
M-21-I-LP02	Black paint collected from guardrail. Sample collected from southeast guardrail.	<u>Lead</u> 5.0

Notes: BRL – Below Reporting Limit
% - Percent
Lead-Based Paint – 0.5% or greater

Toxicity Characteristic Leaching Procedure (TCLP) Sample Summary Table

Sample ID	Sample Description & Location	Analytical Result (mg/l)
M-21-I-TCLP01	Composite sample of bridge components including the black and white lead-based paints	<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



April 10, 2020

Subcontractor Number:

Laboratory Report: RES 460457-1

Project #/P.O. #: 22362.10.50

Project Description: R2 Bridges

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) / Inductively Coupled Plasma - 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 460457-1 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 Jeff Green

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 460457-1**
 Client: **Colorado Dept. of Transportation (Denver)**
 Client Project/P.O.: **22362.10.50**
 Client Project Description: **R2 Bridges**
 Date Samples Received: **April 10, 2020**
 Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 3050B/7420-M**
 Turnaround: **Priority**
 Date Samples Analyzed: **April 10, 2020**

NA = Not Analyzed NR = Not Received ND = None Detected BAS = Below Analytical Sensitivity BRL = Below Reporting Limit

Client ID Number	Reporting Limit (%)	LEAD CONCENTRATION (%)
M-21-I-LP01	0.0047	1.1
M-21-I-LP02	0.0050	5.0
P-19-G-LP01	0.0047	51.1
P-19-G-LP02	0.0050	9.2
P-19-G-LP03	0.0046	12.0

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



Jeff Green

Analyst/Data QA



April 27, 2020

Subcontractor Number:

Laboratory Report: RES 460653-1

Project #/P.O. #: 22362.10.50

Project Description: R2 BRIDGES

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) / Inductively Coupled Plasma - 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 460653-1 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 Jeff Green" 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 460653-1**
 Client: **Colorado Dept. of Transportation (Denver)**
 Client Project/P.O.: **22362.10.50**
 Client Project Description: **R2 BRIDGES**
 Date Samples Received: **April 14, 2020**
 Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 1311/3011A/7420-M**
 Turnaround: **Standard**
 Date Samples Analyzed: **April 27, 2020**

NA = Not Analyzed NR = Not Received ND = None Detected BAS = Below Analytical Sensitivity BRL = Below Reporting Limit

Client ID Number	Reporting Limit (mg/L)	LEAD CONCENTRATION (mg/L)
M-21-I-TCLP01	0.25	BRL
P-19-G-TCLP01	0.25	0.30

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

Jeff Green
Jeff Green

Analyst/Data QA



RES Job #: 460653

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES	
Company: COLORADO DEPT. OF TRANSPORTATION (DEN ...)		Company: COLORADO DEPT. OF TRANSPORTATION (DEN ...)		Contact: TIM HAGERT		-1 CHEM STANDARD	
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. #: 22362.10.50				Cell:			
Project Description/Location: R2 BRIDGES				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		
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm				Dust = D	Food = F		
Dust	RUSH PRIORITY STANDARD			Paint = P	Soil = S		
Metals	RUSH PRIORITY STANDARD			Surface = SU	Swab = SW		
				Tape = T	Wipe = W		
Organics*	SAME DAY RUSH PRIORITY STANDARD			Drinking Water = DW			
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm				Waste Water = WW			
Viable Analysis**	PRIORITY STANDARD			**ASTM E1792 approved wipe media only**			
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	VIABLES	MEDICAL	MOLD	Laboratory Analysis Instructions
1	M-21-I-TCLP01		X				
2	P-19-G-TCLP01		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: 04/14/2020 12:30:50	Sample Condition: ACCEPTABLE - INTACT
Received By:		HANNA MARTI	Date/Time: 04/14/2020 12:30:50	Carrier: HAND

M-21-I - sample locations

M-21-I-LP01




M-21-I-LP02



M-21-I



Legend
 M-21-I



Suspect Lead-Based Paint
Sample Locations



Bridge M-21-I Photographic Log



View of bridge M-21-I looking southwest.



View of bridge M-21-I signage.



Paint sample M-21-I-LP01. The white paint on wood is considered lead-based paint.



Paint sample M-21-I-LP02. The black paint on wood is considered lead-based paint.



View of bridge M-21-I looking northeast along the south side of the structure showing the extent of the lead-based 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 21, 2020

Expires: January 26, 2021

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


Authorized APCD Representative