

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

Zi & Gaget

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,

Robin Klover Vice President

NA = Not Analyzed

NR = Not Received

ND = None Detected

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

USEPA SW846 3050B/7420-M

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

Analyst/Data QA



RES	Job	#:	460	457
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SUBMITTE	D BY		INVOICE TO	CONTACT INFORMATION	SERIES
Company:	COLORADO DEPT. OF TRA	ANSPORTATION (DEN	Company: COLORADO DEPT. OF TRANSPORTATION (DEN		-1 CHEM PRIORITY
Address:	2829 WEST HOWARD PLA	CE	Address: 2829 WEST HOWARD PLACE	Phone: (720) 582-0694	-2 PLM PRIORITY
				Fax:	
	DENVER, CO 80204		DENVER, CO 80204	Cell:	
Project Num	ber and/or P.O. #:	2362.10.50		Final Data Deliverable Email Address:	
Project Desc	cription/Location:	R2 BRIDGES		TIM.HAGERT@STATE.CO.US (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm	REQUESTED	ANALYSIS	VA	LID MATRIX (LAB NOTES	
PLM / PCM / TEM DTL RUSH PRIORITY STANDARD	t, uid),	e	Air :	= A	Bulk = B	
	13794 1-Liqu	cation	Dust	= D	Food = F	
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm	SO 1, Nor,	old, trer, antific	Paint	= P	Soil = S	
Dust RUSH PRIORITY STANDARD	312, I	eria, & Mo g Wat r Qua	Surface	e = SU	Swab = SW	
*PRIOR NOTICE REQUIRED FOR SAME DAY TAT	ied), 55 55 Mett	inking +/- or	Tape	= T	Wipe = W	
Metals RUSH PRIORITY STANDARD	Multi Metal (7303, 55), pH (Liquid, No.	a (Culturable, 1-2), Listeria, laided, S. autreus, Yeast & Mold, lister Water, Drinking Water, ton), Lactic Acid.)), Enterococcus (4-, or Quantification) and identification		Drinking Water =	= DW	
	or Q evel , CAR	rable aure aure aure aure aure aure aure aur		Waste Water =		
Organics* SAME DAY RUSH PRIORITY STANDARD	c (+/-	Cultur Cultur State State (), Lac Enter		792 approved w	ipe media only**	
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm	AARB rovar Yam '', Bu	S seall, S sealla (C seall), S sealla (C seall), S sealla (C seall), S sealla (C sealla seall	Aliquot)			
Viable Analysis** PRIORITY STANDARD	urt, C. 402, Mio Wate	mon mon may rms - ns/E. Intific	A Alic			
**TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH	ong Repc uantified) NIOSH 7 Drinking ISHA e e	mine (%) Sal (wo/ (wo/ (wo/ (wo/ E)))	ea B			
Medical Device Analysis RUSH STANDARD	Long Radio Allong Radio Allong Radio Allon Allon Allon Allon Radio Allon	in wealing rune amphetamine, T. Bacillus, Salmo , E.coll/Coliforms/ Vater. +/-, Quantif asl Count (wo/lb), den, LAL	or Ar			
Mold Analysis RUSH PRIORITY STANDARD	port, L. H- or Q. ntffied), Water, Water, 100B, C. spirabl spirabl aste (S) P.	(GANICS - Methamphela Campylobacter, Bacillus E.coll G757-H7, E.coll/C Arcobic Planting Water, 41, Vable Microbiotal Court DICAL - Bioburden, LAL	Area Width(
**Turnaround times establish a laboratory priority, subject to laboratory volume and are not	11 Re (708 / 17 / 18 / 19 / 19 / 19 / 19 / 19 / 19 / 19	S-Me obac obac obac inkin inkin Micro	Volume (L) / Area			
guaranteed. Additional fees apply for afterhours, weekends and holidays.**	Short BAHERA AHERA H or Q sld, Was 7400A, - Total, S - Ans SO0.8, (200.8,	3ANICS - 3ANICS - Campylob E. coli O15 Areobic Pl Non-Drink Viable Mic	ume liquo	. Gers	yyy yy r	
Special Instructions:	PLM - Short TEM - AHERA Wipe (+/- or Q Chaffield, Wa PCM - 7400A DUST - Total, METAL S - An Lead Only (7 Ead Only		nple Volume gth(or Aliqu	Matrix Code # of Containers	Date Collected mm/dd/yy Time Collected hh:mm	Laboratory Analysis
(Appel Discoult Start)	1 2 2 2	: :	ampl	latrix of Cc	Date mr Time	Instructions
Client Sample ID Number (Sample ID's must be unique)	ASBESTOS CHEMIST	RY MICROBIOLOGY	ο <u> </u>	2 #		
1 M-21-I-LP01	X		ļ	Р		
2 M-21-I-LP02	X		ļ	Р		
3 P-19-G-LP01	X		ļ	P		
4 P-19-G-LP02	X		ļļ	Р		
5 P-19-G-LP03	X		.	P		
6 P-19-G-MS01-01	X		.	В		
7 P-19-G-MS01-02	X		ļ	В		
8 O-19-D-TR01-01	X		.	В		
9 O-19-G-TR01-02	X			В		

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 consitute 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:	rif. Hut	TIM HAGERT	Date/Time: 04/10/2020 8:22:28	Sample Condition: ACCEPTABLE
Received By:	DM X	ANNEMARIE KIEFFER	Date/Time: 04/10/2020 8:22:28	Carrier: HAND



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,

Robin Klover

Vice President

NA = Not Analyzed

NR = Not Received

ND = None Detected

BAS = Below Analytical Sensitivity

BRL = Below Reporting Limit

RESERVOIRS ENVIRONMENTAL, INC

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

TABLE: I ANALYSIS: LEAD VIA TCLP EXTRACTION

RES 460653-1 **RES Job Number:**

Colorado Dept. of Transportation (Denver) Client:

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: Date Samples Analyzed: April 27, 2020

Client ID Number	Reporting Limit	LEAD CONCENTRATION		
	(mg/L)	(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

Analyst/Data QA



RES Job #: 460653

SUBMITTE	D BY		INVOICE TO	CONTACT INFORMATION	SERIES
Company:	COLORADO DEPT. OF T	RANSPORTATION (DEN	Company: COLORADO DEPT. OF TRANSPORTATION (DEN	Contact: TIM HAGERT	-1 CHEM STANDARD
Address:	2829 WEST HOWARD PI	LACE	Address: 2829 WEST HOWARD PLACE	Phone: (720) 582-0694	
				Fax:	
	DENVER, CO 80204		DENVER, CO 80204	Cell:	
Project Number and/or P.O. #: 22362.10.50		Final Data Deliverable Email Address:			
Project Desc	ription/Location:	R2 BRIDGES		TIM.HAGERT@STATE.CO.US (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY	/ HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm		REQUESTED AN	ALYSIS		VALII	D MATR	RIX COL	ES	LAB NOTES
PLM / PCM / TEM	DTL RUSH PRIORITY STANDARD		id),			Air = A		В	ulk = B	
		3794	-Liqu	ation	L	Dust = D)	Fo	od = F]
CHEMISTRY LABORATOR	Y HOURS: Weekdays: 8am - 5pm	ISO 1:	o Z	ntific	L	Paint = F	Þ	S	oil = S	
Dust	RUSH PRIORITY STANDARD	312, 1	7303, -iquid	Listeria, east & Mold, nking Water, nkror Quantif		Surface =	SU	Sw	ab = SW]
	*PRIOR NOTICE REQUIRED FOR SAME DAY TAT	€ €	ot (L ot (L can), Lister Yeast & rinking (+/- or C		Tape = 1	Γ	W	pe = W	
Metals	RUSH PRIORITY STANDARD	Quantifie el II, ISO ARB 435	Iti Me 5G), p	us, Yeus, Yeus, Yeus, Yeus, Yeus, Yeus, Yeus, Cid, ccus (-	<u></u>	Dri	nking Wa	ater = DV	/	
		or o), Mu O-12E I Met	rable aure Watı Stic A	 ≣ E	W	aste Wat	er = WW		
Organics*	SAME DAY RUSH PRIORITY STANDARD	35 (+/- ate L K +/-,	ware HA II	Sultur State), Lac	**A		2 approv	ed wipe ı	nedia only*	
MICROBIOLOGY LABORA	TORY HOURS: Weekdays: 8am - 5pm	RB 435 rovac (Yamat r, Bulk	ood 9, OS Scar	ella (C	ulate	dnot)				
Viable Analysis**	PRIORITY STANDARD	t, CAF , Mic 7402, Wate	ater, f	mone rms - ns/E intific	artic	ar Alic				
Medical Device Analysis	**TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH RUSH STANDARD	ong Report Quantified) d), NIOSH 7	bole Waste W. Water, Fooc , Welding F	Sacillus, Sal Ecoli/Colifo unt, Coliforr ter, +/-, Qua Count (wo/ n, LAL	Bulk Mold, F	n(or Area pe				
Mold Analysis	RUSH PRIORITY STANDARD	port, l (+/- or antifie e Wat	400B espirate(s) 2,742 Vaste Vaste	cter, E :H7, E te Coi ig Wa obioal	Area	: Width (a				
	s establish a laboratory priority, subject to laboratory volume and are not d. Additional fees apply for afterhours, weekends and holidays.**	Short Re AHERA, +/- or Quast	- 7400A, 7 - Total, R - LS - Anali DIJ (708: V 200.8, V RCRA 8	ampyloba coli O157 eobic Pla on-Drinkir able Micr	- Spore lume (L)/	Aliquots) >	Φ	ners	/yy sected	
Special Instructions:		PLM- TEM- Wipe (PCM - 7400 DUST - Tot METALS - A Lead Only (6020A TCLP), RCI ORGANICS	Viables Can Viable Viab	MOLI mple Vo	angth(or /	Matrix Code	fContai	nm/dd/yy me/collected	Laboratory Analysis Instructions
Client Sample ID Number	(Sample ID's must be unique)	ASBESTO	S CHEMISTRY	MICROBIOLOGY	Sa	Lei	Ma	# of	ă F	
1 M-21-I-TCLP01			X				В			
2 P-19-G-TCLP01			X				В			

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 consitute 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.

Received By:

TIM HAGERT

Date/Time: 04/14/2020 12:30:50

Sample Condition: ACCEPTABLE - INTACT

Date/Time: 04/14/2020 12:30:50

Carrier: HAND



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

**