



COLORADO

Department of Transportation

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

February 4, 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 H-13-N
located at US-24 over Draw at MM 240.686 near Hartsel, Colorado**

Dear Mr. Cosyleon,

The Colorado Department of Transportation (CDOT) Environmental Project Coordinator (EPC) completed an asbestos and lead-based paint inspection at bridge H-13-N located at US 24 over Draw at Mile Marker (MM) 240.686 near Hartsel, 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 24 feet in length by 29 feet in width and was constructed in 1937. The bridge is a treated timber stringer with a timber deck and galvanized metal guard rails.

One suspect asbestos-containing material (ACM) was identified during the inspection. Two bulk samples of a black, hard tar material were collected from the northeast edge from the bridge deck. The two bulk samples were non-detect for asbestos.

One paint chip sample was collected from the bridge. A brown paint sample was collected from a metal bridge deck support (sample H-13-N-LP01). This paint was below the reporting limit for lead.

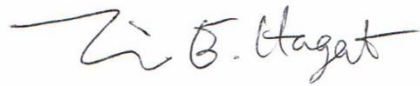
The bulk samples were submitted and analyzed by Polarized Light Microscopy (PLM) Analysis by Reservoirs Environmental, Inc. (Reservoirs). The paint chip sample was submitted and analyzed by Atomic Absorption Spectroscopy / Atomic Emission Spectroscopy – Mass Spectrometry (AAS/AES-MS) by Reservoirs. Reservoirs 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 PLM analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - American Certificate #480.



The suspect ACM sampled during the inspection was non-detect for asbestos. The paint sampled from the metal support does not contain lead. 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: Suspect Asbestos Bulk Sample Summary Table
Paint Chip Sample Summary Table
Laboratory Results
Sample Location Drawing
Photographic Log
Inspector Certificate



Suspect Asbestos Bulk Sample Summary Table

Sample ID	Sample Location	Lab Results	Condition	Material Description	Material Location	Friability	Estimated Quantity
H-13-N-TR01-01	Northeast on edge of bridge deck	<u>PLM</u> ND	Good	Black, hard tar	Bridge deck	Non-Friable	50 SF
H-13-N-TR01-02	Northeast on edge of bridge deck	<u>PLM</u> ND					

Notes: ND – No Asbestos Detected
 PLM – Polarized Light Microscopy
 SF – Square Feet

Paint Chip Sample Summary Table

Sample ID	Sample Description & Location	Analytical Result (%)
H-13-N-LP01	Brown paint on metal support brackets beneath bridge deck. Sample collected at northeast beneath bridge deck.	<u>Lead</u> BRL

Notes: BRL – Below Reporting Limit
% - Percent

Lead-Based Paint – 0.5% or greater



January 24, 2020

Subcontractor Number:

Laboratory Report: RES 454456-3

Project #/P.O. #: 22362.10.50

Project Description: R2 bridge inspections

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 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 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 454456-3 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,



by Piper-Lenore Murphy

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 454456-3**
 Client: **Colorado Dept. of Transportation (Denver)**
 Client Project Number / P.O.: **22362.10.50**
 Client Project Description: **R2 bridge inspections**
 Date Samples Received: **January 22, 2020**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **January 24, 2020**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
H-13-N-TR01-01	A	Black resinous tar	100		ND	0	100
H-13-N-TR01-02	A	Black resinous tar	100		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Piper Lenore O. Murphy
Piper-Lenore O. Murphy

Analyst / Data QA



RES Job #: 454456

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		-2 CHEM STANDARD	
DENVER, CO 80204		DENVER, CO 80204		Fax:		-3 PLM STANDARD	
Project Number and/or P.O. #: 22362.10.50		Final Data Deliverable Email Address:		TIM.HAGERT@STATE.CO.US (+ 1 ADDNL. CONTACTS)			
Project Description/Location: R2 BRIDGE INSPECTIONS							

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm				REQUESTED ANALYSIS				VALID MATRIX CODES				LAB NOTES	
PLM / PCM / TEM DTL RUSH PRIORITY STANDARD				<p>PLM - Short Report Long Report, CARB 435</p> <p>TEM - AHERA, (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794, Charfil, Waste Water, Drinking Water, Bulk +/-</p> <p>PCM - 7400A, 7400B, OSHA</p> <p>DUST - Total, Respirable</p> <p>METALS - Analyte(s) Pb Lead Only (7082, 7420) Waste Water, Foodware, Multi Metal (7303, 8020A, 200 B, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan</p> <p>ORGANICS - Methamphetamine, TSS</p> <p>Viables Campylobacter, Bacillus, Salmonella (Culturable, 1-2), Listeria, E. coli O157:H7, E. coli/Coliforms - Plated, S. aureus, Yeast & Mold, Aerobic Plate Count, Coliforms/E. coli (State Water, Drinking Water, Non-Drinking Water, +/-, Quantification), Lactic Acid, Viable Microbial Count (wo/ID, w/ID), Enterococcus (+/- or Quantification)</p> <p>MEDICAL - Biorburden, LAL</p> <p>MOLD - Spore Trap, Bulk Mold, Particulate Identification</p>				Air = A Bulk = B Dust = D Food = F Paint = P Soil = S Surface = SU Swab = SW Tape = T Wipe = W Drinking Water = DW Waste Water = WW **ASTM E1792 approved wipe media only**					
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm Dust RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT													
Metals RUSH PRIORITY STANDARD													
Organics* SAME DAY RUSH PRIORITY STANDARD													
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm Viable Analysis** PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH													
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 M-22-U-TCLP01						X							
2 M-22-Y-TCLP01						X							
3 M-21-J-TCLP01						X							
4 M-21-B-TCLP01						X							
5 M-21-C-TCLP01						X							
6 N-21-F-TCLP01						X							
7 N-21-C-TCLP01						X							
8 H-13-N-LP01						X							
9 H-13-N-TR01-01				X									
10 H-13-N-TR01-02				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: 01/22/2020 9:28:08	Sample Condition: ACCEPTABLE
Received By:		ANNEMARIE KIEFFER	Date/Time: 01/22/2020 9:28:08	Carrier: HAND



January 29, 2020

Subcontractor Number:

Laboratory Report: RES 454456-2

Project #/P.O. #: 22362.10.50

Project Description: R2 bridge inspections

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 454456-2 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 454456-2**
 Client: **Colorado Dept. of Transportation (Denver)**
 Client Project/P.O.: **22362.10.50**
 Client Project Description: **R2 bridge inspections**
 Date Samples Received: **January 22, 2020**
 Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 3050B/7420-M**
 Turnaround: **Standard**
 Date Samples Analyzed: **January 22, 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 (%)
H-13-N-LP01	0.0033	BRL

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



Adam Kelly
Analyst/Data QA



RES Job #: 454456

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	-2	CHEM STANDARD
				Fax:		-3	PLM STANDARD
	DENVER, CO 80204		DENVER, CO 80204	Cell:			
Project Number and/or P.O. #:	22362.10.50	Final Data Deliverable Email Address:					
Project Description/Location:	R2 BRIDGE INSPECTIONS	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	PLM - Short Report Long Report, CARB 435 TEM - AHERA, (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794, Charfield, Waste Water, Drinking Water, Bulk +/- PCM - 7400A, 7400B, OSHA DUST - Total, Respirable METALS - Analyte(s) Pb, Lead Only (7082, 7420) Waste Water, Foodware, Multi Metal (7303, 8020A, 200 B, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA & Scan, Welding Fume Scan, Full Metals Scan ORGANICS - Methamphetamine, TSS Campylobacter, Bacillus, Salmonella (Culturable, 1-2), Listeria, E. coli O157:H7, E. coli/Coliforms - Plated, S. aureus, Yeast & Mold, Aerobic Plate Count, Coliforms/E. coli (State Water, Drinking Water, Non-Drinking Water, +/-, Quantification), Lactic Acid, Viable Microbial Count (wo/ID, w/ID), Enterococcus (+/- or Quantification) MEDICAL - Biorburden, LAL MOLD - Spore Trap, Bulk Mold, Particulate Identification	Air = A	Bulk = B						
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm			Dust	RUSH PRIORITY STANDARD	Paint = P	Soil = S				
Metals	RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT		Surface = SU	Swab = SW	Tape = T	Wipe = W				
Organics*	SAME DAY RUSH PRIORITY STANDARD		Drinking Water = DW		Waste Water = WW					
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm			**ASTM E1792 approved wipe media only**							
Viable Analysis**	PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH		Sample Volume (L) / Area							
Medical Device Analysis	RUSH STANDARD		Length (or Aliquots) X Width (or Area per Aliquot)							
Mold Analysis	RUSH PRIORITY STANDARD		Matrix Code							
Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.			# of Containers							
Special Instructions:			Date Collected mm/dd/yy							
Client Sample ID Number (Sample ID's must be unique)		Time Collected hr:mm								
		Laboratory Analysis Instructions								
		ASBESTOS	CHEMISTRY	MICROBIOLOGY						
1 M-22-U-TCLP01			X							
2 M-22-Y-TCLP01			X							
3 M-21-J-TCLP01			X							
4 M-21-B-TCLP01			X							
5 M-21-C-TCLP01			X							
6 N-21-F-TCLP01			X							
7 N-21-C-TCLP01			X							
8 H-13-N-LP01			X							
9 H-13-N-TR01-01	X									
10 H-13-N-TR01-02	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: 01/22/2020 9:28:08	Sample Condition: ACCEPTABLE
Received By:		ANNEMARIE KIEFFER	Date/Time: 01/22/2020 9:28:08	Carrier: HAND

Bridge H-13-N Photographic Log



View of bridge H-13-N looking northeast.



View of bridge H-13-N signage.



Suspect asbestos-containing material H-13-N-TR01. The tar material is non-detect for asbestos.



Paint sampled as H-13-N-LP01. The brown paint does not contain lead.



Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Tim Hagert

Certification No.: 13915

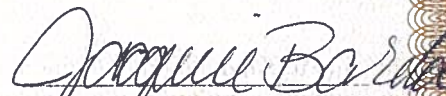
has met the requirements of 25-7-507, C.R.S. and Air Quality Control
Commission Regulation No. 8, Part B, and is hereby certified by the
state of Colorado in the following discipline:

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