BRIDGE G-29

HAZARDOUS MATERIALS SURVEY

BRIDGE INSPECTION AND SURVEY FOR PRESENCE OF ASBESTOS AND HEAVY METAL(S), MARCH 2020

NDOT Hazardous Materials Section
1263 South Stewart Drive
Carson City, NV 89712

EXECUTIVE SUMMARY

The inspection (survey) for hazardous materials was conducted on bridge G-29 on March 31, 2020 by NDOT personnel from the Hazardous Materials section. The bridge was evaluated for both asbestos containing materials (ACM) and lead in coating materials. One suspect lead sample, and sixteen suspect asbestos samples were collected with results and considerations summarized below:

- No ACMs were identified
- White bridge handrail coating material was sampled and contained 12% lead and considered a lead-based paint.
- Silver paint coating material was identified on the center steel beams of the bridge and was not sampled. This silver coating material is believed to be a lead-based paint and should be managed as such unless it is sampled to refute this assumption.

1.0 INTRODUCTION

NDOT conducted an asbestos survey and screening for metals-based coating materials on the following bridge structure located in Pershing county:

- G-29 (Northeast Lovelock SR 396, spanning Southern Pacific Railroad)

The survey was conducted on March 31, 2020 by NDOT personnel. Suspect Asbestos Containing Material (ACM) were identified and appropriately sampled. Coating materials, if present, were sampled and analyzed for lead.

Bulk asbestos samples were analyzed by a National Voluntary Laboratory Accredited laboratory by polarized light microscopy (PLM). Lead analysis was conducted by a Nevada Certified Lab. The results of the laboratory analysis are attached as Appendix C and Appendix D, respectively.

2.0 BRIDGE DESCRIPTION

Bridge G-29 was constructed in the 1940's and subsequently widened on an unknown date. Bridge G-29 in its entirety is constructed of concrete with white painted handrails and bridge deck overlain with asphaltic concrete. The original bridge was constructed using concrete piers, with concrete piers also being used for the subsequent bridge widening. Coating materials were only found on the handrails.

3.0 FIELD ACTIVITIES

The survey was conducted by NDOT personal, appropriately licensed Asbestos and Hazardous Emergency Response Act (AHERA) accredited asbestos inspectors. The survey was conducted in general accordance with the sample collection protocols established in EPA regulation 40 CFR 763. A summary of the survey activities performed is discussed below.

3.1 Visual and Physical Assessment

Survey activities began with a visual observation of the structures to identify homogeneous areas of suspect ACM and presence of coating materials. A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials.

The homogeneous areas identified during the visual survey, the presence of coating materials, and sample identifiers are summarized in Table 1.

Table 1 - Bridge Component Descriptions

Homogeneous Area	Description	Sample IDs
A	Concrete abutment, bridge deck: original construction	EAOP-1, EAOP-2, WAOP-1
B	Concrete abutment, bridge widening	EANP-1, WANP-1, WANP-2
C	Concrete bridge deck, bridge widening	BDNP-1, BDNP-2, BDNP-3
D	Concrete piers, original construction	WPOP-1, CPOP-1, EPOP-1
E	Concrete piers, bridge widening	WPNP-1, CPNP-1, EPNP-1
F	Bridge deck expansion joint	EXJ-1
G	Guardrail, white coating material	G-29 Bridge Paint

notes: none.

3.2 Sample Collection

Based on results of the visual observation, bulk samples of suspect ACM and coating materials were collected in general accordance with AHERA sampling protocols. Representative samples of suspect materials were collected in each homogeneous area. Samples were placed in new sealable containers and labeled with unique sample numbers.

3.3 Sample Analysis

Bulk samples of ACM were submitted under chain of custody to Asbestos TEM Laboratories for analysis by PLM. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Coating material sample was submitted to Alpha Analytical and analyzed for lead using EPA 6020 test method.

A discussion of suspect ACM and suspect metals-based coating samples collected during the survey and findings are included in Section 6.0.

4.0 PLAN REVIEW

No plans were available for review.

5.0 REGULATORY OVERVIEW

5.1 Asbestos Regulations

NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable, or Category II non-friable ACM. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which are in poor condition and have become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and

which could be crushed or pulverized during anticipated renovation or demolition activities are considered Regulated ACM (RACM).

5.2 Coating Material and Lead Based Paint Regulations

Lead-based paint (LBP) is defined as a surface coating or paint containing lead in excess of 0.5% (5000 mg/Kg) by weight (EPA Toxic Substance Control Act, Section 401).

Under EPA regulations heavy metal impacted wastes generated during abatement activities are handled as either a solid waste or a hazardous waste, depending on the concentration of each of the metal(s) and the method of coating material removal.

6.0 FINDINGS AND RECOMMENDATIONS

6.1 Suspect Asbestos Containing Materials

A total of 16 bulk samples were collected from 6 homogeneous areas of suspect ACM. No Asbestos Containing Materials were identified.

A bridge Location Map is included in Appendix A. A photographic log showing homogenous areas is presented in Appendix B. Asbestos analytical results are included in Appendix C. A summary of the suspect ACMs identified is provided in Table 2.

Table 2 – Summary of Suspected ACM

Homogeneous Sampling Area	Sample Number	Material Description/Sample Location	Lab Results[(1)], % Asbestos	NESHAP Category[(2)]	Friability[(3)]
A	EAOP-1	Concrete abutment, bridge deck (original construction)	Not detected	N/A	non-friable
	EAOP-2				
	WAOP-1				
B	EANP-1	Concrete abutment, bridge widening	Not detected	N/A	non-friable
	WANP-1				
	WANP-2				
C	BDNP-1	Concrete bridge deck, bridge widening	Not detected	N/A	non-friable
	BDNP-2				
	BDNP-3				
D	WPOP-1	Concrete piers, original construction	Not detected	N/A	non-friable
	CPOP-1				
	EPOP-1				
E	WPNP-1	Concrete piers, bridge widening	Not detected	N/A	non-friable
	CPNP-1				
	EPNP-1				
F	EXJ-1	Bridge deck expansion joint	Not detected	N/A	friable

notes: (1) PLM unless otherwise noted.
(2) NESHAAP category I, category II, RACM, or (N/A) not applicable.
(3) Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

Suspect materials, other than those identified during the survey, could exist within the structures in areas not accessible to the inspector at the time of the survey. Should suspect materials other than those identified during this survey be uncovered during the renovation/demolition process, those materials should be assumed to be ACM until sampling and analysis can confirm or refute this assumption.

6.2 Coating Materials

Steel surfaces with suspected metals-based paints and/or protective coatings were observed on the guardrails of bridge B-28. One composite paint chip sample from the white coating identified as “B-28 Bridge Paint” was collected for analysis. The composite sample was analyzed for lead (total metal). Based on the EPA’s definition of LBP, this coating is considered a LBP.

Silver paint coating material identified on the center steel beams of the bridge was not sampled due to limited accessibility. This silver coating material is believed to be a LBP and should be managed as such unless it is sampled to refute this assumption.

Analytical results are included in Appendix D and laboratory results are summarized in Table 3.

Table 3 – Summary of Coating Material

Homogeneous Sampling Area	Sample Number	Material Description/Sample Location	Heavy Metal Results(1), mg/Kg						
			As	Ba	Cd	Cr	Pb	Se	Ag
D	G-29 Bridge Paint	White coating material on bridge guiderail	na	na	na	na	120,000	na	na

notes: (1) EPA test method 6020.
na – not analyzed.
nd – not detected above method limits.

6.3 Recommendations

Based on the presence of lead in handrail coatings and the presumed assumption of lead in the silver paint coating on the steel beams, any activities which could result in exposure to workers should be performed in accordance with OSHA regulations to protect workers. Total concentration(s) of the above metal(s) indicates that the paint waste could be deemed a toxic characteristic hazardous waste. However, the method used to remove the coating material has an impact on the outcome of the waste determination and will need to be characterized prior to disposal.

Appendix A
Bridge Location Map

SITE LOCATION MAP
NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

Appendix B
Bridge Photo Log

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

PHOTO 1 **DATE:** 03/31/2020 **DIRECTION:** Southeast **TAKEN BY:** Brian Reed **DESCRIPTION:** East end of G-29.	
PHOTO 2 **DATE:** 03/31/2020 **DIRECTION:** South **TAKEN BY:** Brian Reed **DESCRIPTION:** West end of G-29.	

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

PHOTO 3 **DATE:** 03/31/2020 **DIRECTION:** East **TAKEN BY:** Brian Reed **DESCRIPTION:** Surface view of G-29.	
PHOTO 4 **DATE:** 03/31/2020 **DIRECTION:** North **TAKEN BY:** Brian Reed **DESCRIPTION:** Western pillar supports of G-29.	

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

PHOTO 5 **DATE:** 03/31/2020 **DIRECTION:** Northeast **TAKEN BY:** Brian Reed **DESCRIPTION:** Eastern pillar supports of G-29.	
PHOTO 6 **DATE:** 03/31/2020 **DIRECTION:** West **TAKEN BY:** Brian Reed **DESCRIPTION:** Western abutment.	

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

PHOTO 7

DATE:
03/31/2020

DIRECTION:
East

TAKEN BY:
Brian Reed

DESCRIPTION:
Eastern abutment.

PHOTO 8

DATE:
03/31/2020

DIRECTION:
NA

TAKEN BY:
Brian Reed

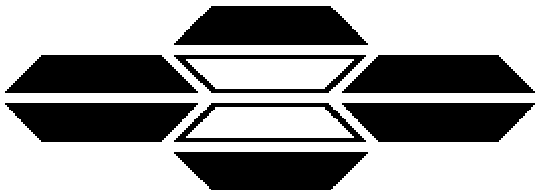
DESCRIPTION:
Contrast of original support structure and expansion supports.

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge G-29
Upper Valley Road
Lovelock, NV

PHOTO 9	
DATE: 03/31/2020	
DIRECTION: East	
TAKEN BY: Brian Reed	
DESCRIPTION: View of underside of G-29.	

Appendix C
Asbestos Sample(s)
Analytical Results



ASBESTOS TEM LABORATORIES, INC.

EPA Method 600/R-93/116
Polarized Light Microscopy
Analytical Report

Report No. 141925

1350 Freeport Blvd., Unit 104
Sparks, NV 89431
(775) 359-3377
FAX (775) 359-2798

With Main Office Located At:
630 Bancroft Way, Berkeley, CA 94710
Ph. (510) 704-8930 Fax (510) 704-8929

ASBESTOS TEM LABORATORIES, INC

NVLAP Lab Code 200104-0

Apr-02-20

Brian Reed/Robert Piekarz
Nevada Department of Transportation
1263 South Stewart Street
Carson City, NV 89712

RE: LABORATORY JOB # 9092-00004
Polarized light microscopy analytical results for 16 bulk sample(s).
Job Site: Lovelock G-29
Job No.:
Report No.: 141925

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with EPA Method 600/R-93/116 or 600/M4-82-020 for the determination of asbestos in bulk building materials by polarized light microscopy (PLM). Please note that while PLM analysis is commonly performed on non-friable and fine grained materials such as floor tiles and dust, the EPA method recognizes that PLM is subject to limitations. In these situations, accurate results may only be obtainable through the use of more sophisticated and accurate techniques such as transmission electron microscopy (TEM) or X-ray diffraction (XRD).

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Each sample is opened in a class 100 HEPA negative air hood. A representative sampling of the material is selected and placed onto a glass microscope slide containing a drop of refractive index oil. The glass slide is placed under a polarizing light microscope where standard mineralogical techniques are used to analyze and quantify the various materials present, including asbestos. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

Please note all samples will be held for 3 months from the date of receipt unless otherwise requested by client.

Sincerely Yours,

Laboratory Analyst
ASBESTOS TEM LABORATORIES, INC.

NVLAP Lab Code 200104-0

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: Brian Reed/Robert

Address: Nevada Department of
1263 South Stewart Street
Carson City, NV 89712

Samples Indicated: 16
Reg. Samples Analyzed: 16
Split Layers Analyzed: 0

Job Site / No. Lovelock G-29

Report No. **141925**
Date Submitted: Mar-31-20
Date Reported: Apr-02-20

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
WPNP-1 Lab ID # 9092-00004-001	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, W. pillor-new pour / Concrete-Grey
WPOP-1 Lab ID # 9092-00004-002	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, W. pillor-org. pour / Concrete-Grey
CPOP-1 Lab ID # 9092-00004-003	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, center pillor-org. pour / Concrete-Grey
CPNP-1 Lab ID # 9092-00004-004	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, center pillor-new pour / Concrete-Grey
EPOP-1 Lab ID # 9092-00004-005	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, E. pillor-org. pour / Concrete-Grey
EPNP-1 Lab ID # 9092-00004-006	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, E. pillor-new pour / Concrete-Grey
EANP-1 Lab ID # 9092-00004-007	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, E. abatement-new pour / Concrete-Grey
EAOP-1 Lab ID # 9092-00004-008	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, E. abatement-org. pour / Concrete-Grey
EAOP-2 Lab ID # 9092-00004-009	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, E. abatement-org. pour / Concrete-Grey
WAOP-1 Lab ID # 9092-00004-010	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other 3) 4) Apr-02-20	Grey concrete, W. abatement-org. pour / Concrete-Grey

Limit of quantitation of method is estimated to be 1% asbestos using a visual area estimation technique. Split samples are inhomogeneous.

Laboratory Analyst Greg Hanes

NVLAP Lab Code 200104-0

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: Brian Reed/Robert

Address: Nevada Department of
1263 South Stewart Street
Carson City, NV 89712

Samples Indicated: 16
Reg. Samples Analyzed: 16
Split Layers Analyzed: 0

Job Site / No. Lovelock G-29

Report No. **141925**
Date Submitted: Mar-31-20
Date Reported: Apr-02-20

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
WANP-1	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other	Grey concrete, W. abatement-new pour
Lab ID # 9092-00004-011		3) 4) Apr-02-20	Concrete-Grey
WANP-2	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other	Grey concrete, W. abatement-new pour
Lab ID # 9092-00004-012		3) 4) Apr-02-20	Concrete-Grey
BDNP-1	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other	Grey concrete, E. bridge deck-new pour
Lab ID # 9092-00004-013		3) 4) Apr-02-20	Concrete-Grey
BDNP-2	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other	Grey concrete, E. bridge deck-new pour
Lab ID # 9092-00004-014		3) 4) Apr-02-20	Concrete-Grey
BDNP-3	**None Detected**	1) <1% Cellulose 2) 100-100% Clay, Qtz, Opq, Other	Grey concrete, W. bridge deck-new pour
Lab ID # 9092-00004-015		3) 4) Apr-02-20	Concrete-Grey
EXJ-1	**None Detected**	1) 70-80% Cellulose 2) 20-30% Tar, Other m.p.	Brown black expansion joint, bridge deck expansions
Lab ID # 9092-00004-016		3) 4) Apr-02-20	Joint-Brown/Black
Lab ID #		1) 2) 3) 4)	
Lab ID #		1) 2) 3) 4)	
Lab ID #		1) 2) 3) 4)	
Lab ID #		1) 2) 3) 4)	

Limit of quantitation of method is estimated to be 1% asbestos using a visual area estimation technique. Split samples are inhomogeneous.

Laboratory Analyst Greg Hanes

ASBESTOS TEM LABORATORIES, INC. 1350 Freeport Blvd., Unit 104, Sparks, NV 89431 (775) 359-3377
With Main Office in Berkeley, CA (510) 704-8930

Nevada Department of Transportation
1263 S. Stewart St
Carson City, NV 89701

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Survey Data

Inspectors: Brian Reed/Robert Piekarz	Project Name: G-29 Bridge	Project Number:	Date Sampled: 3/3/20
Phone: 775-888-7892 Fax: 775-888-7104	Project Location: Lovelock - G29	Analysis Type: Abestos	Air Bulk
Turn-A-Round Time: Rush 24-Hour (2 Day)	Requests: Verbals Fax	Test to First Positive: Yes (No)	

Lab #	Sample ID	Material Description	Sample Location	Location of Materials	Quantity	Condition	Friable	Asbestos %
	1 WPNP-1	Grey Concrete	West Piller - New Pour	G-29	1	G	N	
	2 WPOP-1		West Piller - Org. Pour	G-29	1	G	N	
	3 CPOP-1		Center Piller - Org. Pour	G-29	1	G	N	
	4 CPNP-1		Center Piller - New Pour	G-29	1	G	N	
	5 EPOP-1		East Piller - Org. Pour		1	G	N	
	6 EPNP-1		East Piller - New Pour		1	G	N	
	7 EANP-1		East Abutment - New Pour		1	G	N	
	8 EAOP-1		East Abutment - Org Pour		1	G	N	
	9 EAOP-2		East Abutment - Org Pour		1	G	N	
	10 WAOP-1		West Abutment - Org Pour		1	G	N	

Comments/Additional Information
G-29 Concrete ~~bridge~~ Bridge components - No bearing Pad - on rollers

MATERIAL			CONDITION	UNITS	ASBESTOS %
PFI - Pipe Fitted Insulation	VT - Vinyl Tile	GA - Gasket	G - Good	LF - Linear Feet	A - Asmosite Asbestos
PRI - Pipe Run Insulation	M - Mastic	D - Debris	D - Damaged	SF - Square Feet	C - Chrysotile Asbestos
DI - Duct Insulation	CBM - Cove Bas Mastic	TSI - Thermal System	SD - Significant Damage	CF - Cubic Feet	NDA - No Asbestos Detected
TI - Tank Insulation	AT - Acoustical Tile	Insulation			Assumed ACM - No Samples Taken
EJ - Expansion Joint	SA - Spray Acoustic	R - Roof			
BI - Boiler Insulation	W- Wall	DW - Drywall			
(Concrete)	P - Plaster	JC - Joint Compound			

Relinquished By:	Relinquished By:	Relinquished By:
Date/Time :	Date/Time :	Date/Time :
Received By: R Byrne/ATEM	Received By:	Received By:
3/3/2020 12:56pm		

Nevada Department of Transportation
1263 S. Stewart St
Carson City, NV 89701

Survey Data

Inspectors: Brian Reed/Robert Piekarz	Project Name: G-29 Bridge	Project Number:	Date Sampled: 3/31/20
Phone: 775-888-7892 Fax: 775-888-7104	Project Location: Lovelock - G-29	Analysis Type: Abestos	Air Bulk
Turn-A-Round Time: Rush 24-Hour (2 Day)	Requests: Verbals Fax	Test to First Positive:	Yes (No)

Lab #	Sample ID	Material Description	Sample Location	Location of Materials	Quantity	Condition	Friable	Asbestos %
	1 WANP-1	Grey Concrete	West Abutment-New Pour	G-29	1	G	N	
	2 WANP-2	↓	West Abutment-New Pour	G-29	1	G	N	
	3 BDNP-1		East Bridge Deck - New Pour	↓	1	G		
	4 BDNP-2		East Bridge Deck - New Pour		1	G	N	
	5 BDNP-3	↓	West Bridge Deck - New Pour		1	G	N	
	6 EXJ-1	Brown Black Expansion Joint	Bridge Deck expansions	↓	1	G	N	
	7							
	8							
	9							
	10							

Comments/Additional Information

MATERIAL			CONDITION	UNITS	ASBESTOS %
PFI - Pipe Fitted Insulation	VT - Vinyl Tile	GA - Gasket	G - Good	LF - Linear Feet	A - Asmosite Asbestos
PR - Pipe Run Insulation	M - Mastic	D - Debris	D - Damaged	SF - Square Feet	C - Chrysotile Asbestos
DI - Duct Insulation	CBM - Cove Bas Mastic	TSI - Thermal System	SD - Significant Damage	CF - Cubic Feet	NDA - No Asbestos Detected
TI - Tank Insulation	AT - Acoustical Tile	Insulation			Assumed ACM - No Samples Taken
EJ - Expans on Joint	SA - Spray Acoustic	R - Roof			
BI - Boiler Insulation	W- Wall	DW - Drywall			
	P - Plaster	JC - Joint Compound			

Relinquished By: _____ Relinquished By: _____ Relinquished By: _____
Date/Time : _____ Date/Time : _____ Date/Time : _____
Received By: R Byrne/ATEM Received By: _____ Received By: _____
3/31/2020 12:56pm

Appendix D
Material Coating Sample(s) Analytical Results

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

April 02, 2020

Robert Piekarz
Nevada DOT Environmental (NDOT)
1263 S. Stewart St.
Carson City, NV 89712
TEL: (775) 888-7692
FAX (775) 888-7104

RE: Lovelock Bridges

Order No.: NDO2003203

Dear Robert Piekarz:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Roger Scholl

Roger Scholl
Laboratory Director
255 Glendale Ave, #21
Sparks, Nevada 89431

Alpha Analytical, Inc.

(775) 355-1044 / (775) 355-0406 FAX / 1-800-283-1183
255 Glendale Ave. - Suite 21 - Sparks, Nevada 89431-5578

Analytical Report

WO#: **NDO2003203**
Report Date: **4/2/2020**

CLIENT: Nevada DOT Environmental (NDOT) **Collection Date:** 3/31/2020 10:30:00 AM
Project: Lovelock Bridges
Lab ID: 2003203-01 **Matrix:** OTHER
Client Sample ID G-29 Bridge Paint

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lead (Pb)	120,000	1,000		mg/Kg	4/1/2020	Metals by EPA 6020

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2003203**
02-Apr-20

Client: Nevada DOT Environmental (NDOT)
Project: Lovelock Bridges **TestCode:** **METALS_SO**

Sample ID: **MB-10534** SampType: **MBLK** TestCode: **METALS_SO** Units: **mg/Kg**
Client ID: **PBS** Batch ID: **10534** TestNo: **E200.8**
Prep Date: **3/30/2020** RunNo: **9084** SeqNo: **267140**
Analysis Date: **4/1/2020**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead (Pb)	ND	2									

Sample ID: **LCSD-10534** SampType: **LCSD** TestCode: **METALS_SO** Units: **mg/Kg**
Client ID: **LCSS02** Batch ID: **10534** TestNo: **E200.8**
Prep Date: **3/30/2020** RunNo: **9084** SeqNo: **267142**
Analysis Date: **4/1/2020**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead (Pb)	55.9	2	50	0	112	79.51	120.49	57.7	3.3	20	

Sample ID: **LCS-10534** SampType: **LCS** TestCode: **METALS_SO** Units: **mg/Kg**
Client ID: **LCSS** Batch ID: **10534** TestNo: **E200.8**
Prep Date: **3/30/2020** RunNo: **9084** SeqNo: **267141**
Analysis Date: **4/1/2020**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead (Pb)	57.7	2	50	0	115	79.51	120.49				

Qualifiers:

B	Analyte detected in the associated Method Blank
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Alpha Analytical, Inc.
255 Glendale Ave, #21
Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

Definition Only

WO#: **2003203**
Date: **4/2/2020**

Definitions:

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

Report CC's Robert Piekarz

WORKORDER SUMMARY

NV

Alpha Analytical, Inc.

255 Glendale Ave, #21 Sparks, Nevada 89431

TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder: NDO2003203
Report Due By: 14-Apr-20
EDD Required: NO

Report Attention: Robert Piekarz

Client:
Nevada DOT Environmental (NDOT)
1263 S. Stewart St.
Carson City, NV 89712

TEL: 7758887692
FAX: 7758887104
ProjectNo: Lovelock Bridges

Date Received: 31-Mar-20

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests METALS_SO							Sample Remarks
NDO2003203-01	G-29 Bridge Paint	OTHER	3/31/2020 10:30:00 AM	1	0	10	A - Pb							
NDO2003203-02	B-28 Bridge Paint	OTHER	3/31/2020 11:00:00 AM	1	0	10	A - Pb							

Comments: Paint chips.

	Signature	Print Name	Company	Date/Time
Logged in by:		Daija Nordyke	**Alpha Analytical, Inc.**	03.31.20 13:30

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Company: NDOT
Attn: R. PicKorz
Address: 1263 S. Stewart St
City, State, Zip: Carson City NV 89701
Phone Number: 775 888 7812 Fax:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431
Phone: 775-355-1044
Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

14662

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Consultant/ Client Info:

Company: NDOT
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Lovelock Bridges
P.O. #:

Report Attention/Project Manager:

Name: R. PicKorz
Email Address: rpickorz@dot.NV.gov
Phone #: 775 888 7812
Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No
Global ID:
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS (NV) OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: Total lead	Remarks
1030	3/31	OT	ND02003203-01	G-29 Bridge Point	Stnd	OT			X	
1100	3/31	OT	02	B-28 Bridge Point	Stnd	OT			X	

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By:

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation):	3/31/20	13:00	Received by: (Signature/Affiliation):	3/31/20	13:00
Relinquished by: (Signature/Affiliation):			Received by: (Signature/Affiliation):		
Relinquished by: (Signature/Affiliation):			Received by: (Signature/Affiliation):		

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* Key: AQ - Aqueous WA - Waste OT - Other So-Soil ** L - Liter V - VOA S-Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Appendix E

Asbestos Inspector License and Training Certifications

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Robert Piekarz
State of Nevada-DOT
is Licensed As Asbestos Abatement Consultant

License No. IJ-1049 Expiration Date 11/24/2021

Signature Of Licensee

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Robert Piekarz
State of Nevada-DOT
is Licensed As Asbestos Abatement Consultant

License No. IJ-1049 Expiration Date 11/24/2021

Signature Of Licensee

M & C Environmental Training

Asbestos Inspector

Refresher Training Course

Robert Piekarz

Has successfully completed the Asbestos Inspector Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510 499-5646

Course Approval Number: CA-003-06

Location:	**Concord, California**	**Expiration: November 24, 2021**
Dates:	**November 24, 2020**	
Director of Training: John McGinnis		

Certificate Number **48309 IR**

M & C Environmental Training

Asbestos Management Planner

Refresher Training Course

Robert Piekarz

Has successfully completed the Asbestos Management Planner Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California. Tel. # (510) 499 - 5646

Course Approval Number: CA-003-08

Location:	**Concord, California**	**Expiration: November 24, 2021**
Dates:	**November 24, 2020**	
Director of Training: John McGinnis		

Certificate Number **48327 PR**