

September 30, 2021

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

RE: Verdi Bridges, Keystone to Stateline

Dear Robert Piekarz:

Order No.: NDO2109325

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,

Kandy Sandner

Randy Gardner Laboratory Manager 255 Glendale Ave, #21 Sparks, Nevada 89431



Analytical Report

WO#: NDO2109325 Report Date:

9/30/2021

CLIENT:

Project:

Nevada DOT Environmental (NDOT) Verdi Bridges, Keystone to Stateline

Collection Date: 9/16/2021 9:30:00 AM

Lab ID: 2109325-01

Client Sample ID: I-763

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Chromium (Cr)	2,400	50		mg/Kg	9/29/2021	Metals by EPA 6020
Arsenic (As)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Selenium (Se)	ND	100		mg/Kg	9/29/2021	Metals by EPA 6020
Silver (Ag)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Cadmium (Cd)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Barium (Ba)	2,300	50		mg/Kg	9/29/2021	Metals by EPA 6020
Lead (Pb)	1,200	50		mg/Kg	9/29/2021	Metals by EPA 6020



Analytical Report

WO#: NDO2109325 Report Date:

9/30/2021

CLIENT:

Nevada DOT Environmental (NDOT)

Project: Lab ID:

Verdi Bridges, Keystone to Stateline 2109325-02

Client Sample ID: G-765

Collection Date: 9/16/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Chromium (Cr)	12,000	50		mg/Kg	9/29/2021	Metals by EPA 6020
Arsenic (As)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Selenium (Se)	ND	100		mg/Kg	9/29/2021	Metals by EPA 6020
Silver (Ag)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Cadmium (Cd)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Barium (Ba)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Lead (Pb)	21,000	50		mg/Kg	9/29/2021	Metals by EPA 6020



Analytical Report

WO#: NDO2109325 Report Date:

9/30/2021

CLIENT:

Nevada DOT Environmental (NDOT) **Project:**

Verdi Bridges, Keystone to Stateline

Lab ID:

2109325-03

Client Sample ID: G-764

Collection Date: 9/16/2021 10:30:00 AM

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Chromium (Cr)	16,000	50		mg/Kg	9/29/2021	Metals by EPA 6020
Arsenic (As)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Selenium (Se)	ND	100		mg/Kg	9/29/2021	Metals by EPA 6020
Silver (Ag)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Cadmium (Cd)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Barium (Ba)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Lead (Pb)	26,000	50		mg/Kg	9/29/2021	Metals by EPA 6020



Analytical Report

WO#: NDO2109325 Report Date:

9/30/2021

CLIENT:

Project:

Nevada DOT Environmental (NDOT) Verdi Bridges, Keystone to Stateline

Collection Date: 9/16/2021 10:45:00 AM

Lab ID: 2109325-04 Client Sample ID: I-773

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Chromium (Cr)	66	50		mg/Kg	9/29/2021	Metals by EPA 6020
Arsenic (As)	54	50		mg/Kg	9/29/2021	Metals by EPA 6020
Selenium (Se)	ND	100		mg/Kg	9/29/2021	Metals by EPA 6020
Silver (Ag)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Cadmium (Cd)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Barium (Ba)	60	50		mg/Kg	9/29/2021	Metals by EPA 6020
Lead (Pb)	27,000	50		mg/Kg	9/29/2021	Metals by EPA 6020



Analytical Report

WO#: NDO2109325 Report Date:

9/30/2021

CLIENT:

Nevada DOT Environmental (NDOT) **Project:**

Verdi Bridges, Keystone to Stateline

Collection Date: 9/16/2021 11:00:00 AM

Lab ID: 2109325-05 Client Sample ID: G-772

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Chromium (Cr)	74	50		mg/Kg	9/29/2021	Metals by EPA 6020
Arsenic (As)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Selenium (Se)	ND	100		mg/Kg	9/29/2021	Metals by EPA 6020
Silver (Ag)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Cadmium (Cd)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Barium (Ba)	ND	50		mg/Kg	9/29/2021	Metals by EPA 6020
Lead (Pb)	47,000	50		mg/Kg	9/29/2021	Metals by EPA 6020



QC SUMMARY REPORT

WO#: 2109325

30-Sep-21

Client: Project:	Nevada DOT Env Verdi Bridges, K	vironmen eystone t	tal (NI o State	DOT) eline			1	FestCode:	MET	ALS_SC)	
Sample ID: MB-1	3992	-		SampType	• MBI K		TestCor	he MFTAI	S SO	Units:	ma/Ka	
Client ID: BBS				Batch ID:	13002		TestNo	E200.8	0_00	011101		
Dren Deter	100/0004			Datch ID.	10392		Contraction	2200.0				
Prep Date: 9	/28/2021			Runno:	12738		Seqivo:	355404				
Analysis Date: 9	/29/2021			0.51/	0.517							
Analyte		Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium (Cr)		ND	1									
Arsenic (As)		ND	1									
Selenium (Se)		ND	2									
Silver (Ag)		ND	1									
Cadmium (Cd)		ND	1									
Barium (Ba)		ND	1									
Lead (Pb)		ND	1									
Sample ID: LCS-	13992			SampType	e: LCS		TestCoo	de: METAL	S_SO	Units:	mg/Kg	
Client ID: LCSS	5			Batch ID:	13992		TestNo:	E200.8				
Prep Date: 9	/28/2021			RunNo:	12738		SeqNo:	355405				
Analysis Date: 9	/29/2021											
Analyte		Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium (Cr)		46.8	1	50	0	93.6	79.51	120.49				
Arsenic (As)		47.3	1	50	0	94.6	79.51	120.49				
Selenium (Se)		49.9	2	50	0	99.7	79.51	120.49				
Silver (Ag)		48.7	1	50	0	97.4	79.51	120.49				
Cadmium (Cd)		46.1	1	50	0	92.1	79.51	120.49				
Barium (Ba)		48.5	1	50	0	97.0	79.51	120.49				
Lead (Pb)		49.6	1	50	0	99.3	79.51	120.49				
Sample ID: 21093	308-01AMSD			SampType	: MSD		TestCoo	de: METAL	S_SO	Units:	mg/Kg-dr	у
Client ID: Batch	nQC			Batch ID:	13992		TestNo:	E200.8				
Prep Date: 9)/28/2021			RunNo:	12738		SeqNo:	355408				
Analysis Date: 9)/29/2021											
Analyte		Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium (Cr)		104	2.17	108.664	7.59	88.3	69.51	130.49	103	0.65	20	
Arsenic (As)		97.6	2.17	108.664	1.25	88.7	69.51	130.49	97.5	0.13	20	
Selenium (Se)		100	4.35	108.664	0	92.3	69.51	130.49	99.8	0.48	20	
Silver (Ag)		99.7	2.17	108.664	0	91.7	69.51	130.49	99.9	0.25	20	
Cadmium (Cd)		94.2	2.17	108.664	0	86.7	69.51	130.49	93.9	0.34	20	
Barium (Ba)		171	2.17	108.664	41.4	119	69.51	130.49	145	17	20	
Lead (Pb)		122	2.17	108.664	0	112	69.51	130.49	104	15	20	

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



QC SUMMARY REPORT

WO#: 2109325

30-Sep-21

Client:	Nevada DOT Enviro	onmental (NDOT)
Project:	Verdi Bridges, Keys	stone to Stateline
Sample ID: 21)9308-01AMS	SampTyp

TestCode: METALS_SO

Sample ID: 2109308-01AMS			SampType	: MS		TestCoo	le: METAL	S_SO	Units:	mg/Kg-dr	/
Client ID: BatchQC			Batch ID:	13992		TestNo:	E200.8				
Prep Date: 9/28/2021			RunNo:	12738		SeqNo:	355407				
Analysis Date: 9/29/2021											
			SPK	SPK				RPD			
Analyte	Result	PQL	Value	Ref Val	%REC	LowLimit	HighLimit	Ref Val	%RPD	RPDLimit	Qual
Chromium (Cr)	103	2.17	108.664	7.59	87.7	69.51	130.49				
Arsenic (As)	97.5	2.17	108.664	1.25	88.5	69.51	130.49				
Selenium (Se)	99.8	4.35	108.664	0	91.9	69.51	130.49				
Silver (Ag)	99.9	2.17	108.664	0	91.9	69.51	130.49				
Cadmium (Cd)	93.9	2.17	108.664	0	86.4	69.51	130.49				
Barium (Ba)	145	2.17	108.664	41.4	95.4	69.51	130.49				
Lead (Pb)	104	2.17	108.664	0	96.2	69.51	130.49				

Qualifiers:

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits



Definition Only

WO#: **2109325** Date: **9/30/2021**

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

Alpha Analytical, Inc.

255 Glendale Ave. #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention: Robert Piekarz

TEL:

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

7758887692 FAX: 7758887104 ProjectNo: Verdi Bridges, Keystone to Stateline

Date Received: 20-Sep-21

Alpha	Client		Collection	No. of Bottles Alpha Sub TAT		es	Requested Tests							
Sample ID	Sample ID	Matrix	Date			TAT	METALS_SO					Sample Remarks		
NDO2109325-01	I-763	OTHER	9/16/2021 9:30:00 AM	1	0	10	A - As, Ba, Cd, Cr, Pb, Ag, Se							
NDO2109325-02	G-765	OTHER	9/16/2021 10:00:00 AM	1	0	10	A - As, Ba, Cd, Cr, Pb, Ag, Se							
NDO2109325-03	G-764	OTHER	9/16/2021 10:30:00 AM	1	0	10	A - As, Ba, Cd, Cr, Pb, Ag, Se							
NDO2109325-04	1-773	OTHER	9/16/2021 10:45:00 AM	1	0	10	A - As, Ba, Cd, Cr, Pb, Ag, Se							
NDO2109325-05	G-772	OTHER	9/16/2021 11:00:00 AM	1	0	10	A - As, Ba, Cd, Cr, Pb, Ag, Se							

Paint Chips. **Comments:**

	Signature	Print Name	Company	Date/Time
Logged in by: Hayli	n Filton	HaylerTilton	Alpha Analytical, Inc.	9/20/21 1357

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

NV

WorkOrder: NDO2109325 Report Due By: 04-Oct-21 EDD Required: NO

Company Attn: Address: City, State Phone Nu	a, Zip: imber:	Billing NDOT Robert Piek 1263 South Carson City 775-888-76	g Information: arz Stewart . NV 89712 92 Fax: 775-888-7104 	Job and Purchase Order	TINC.	Ma Nort	ain Labora	Alpha Ar atory: 255 Glenda Satellite Se 9891 Horn Road, Northern NV: 350 Report Name: Email Address:	halytical, Inc. le Ave, Suite 21 ervice Center Suite C, Ranche 7th St. Elko, NY Attention/Pro- <u>Rob Piekarz</u> reiekarz@ddt 0	Sparks, NV 89431 s: o Cordova, CA 95827 / 89801 oject Manager:	Phone Fax: Phone Phone	2: 775-355- 775-355-0 2: 916-366-9 2: 775-388- EDD Req	1044 0406 9089 7043 QC Deliv uuired? Yes / N	Page # o	f d? Yes / Nc
City, State	e, Zip:			P.O. #:	o to otatomio			Phone #:	775-888-7692			Global ID	:		
				0				Cell #:				Data Vali	dation Packages:	III or IV	/
Samples	Collected	from whi	ch State? (circle one) AR CA KS	NV OR WA DOD Site Other						Analysis Re	quested			Remarks	
Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below	Lab ID Number (For Lab Use Only)	Sample Description	TAT	B Field Filtered? (Yes / No)	# Containers** (See Key Below)	 RCRA 7, total metals 							
9:30	9/16/2021	от	ND02109325-01	1-763	SI	×	1-01	~							
10:00	9/16/2021	ОТ	02	G-765	ST	×	1-OT	×				_			
10:30	9/16/2021	OT	03	G-764	ST	×	1-OT	x							
10:45	9/16/2021	ОТ	09	1-773	ST	×	1-OT	X							
11:00	9/16/2021	от	05	G-772	ST	×	1-OT	x				_		/	
												_			
ADDITIO	NAL INST	RUCTION	IS:				1								

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: Relinquished by: (Signature/Affiliation): Relinquished by: (Signature/Affiliation):	9/20/2021 Date:	Time: Time:	Received by: (Signature/Affiliation):	Date: Date: Date: Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
* Key: AQ NOTE: Samples are discarded 60 days after sample receipt unless	- Aqueous AR-Air OT - C other arrangements are made.	L Dther SO - Soil WA-Wa Hazardous samples will be re	ste **: B - Brass L - Liter O - Orbo OT-Other P-Plastic S-Soil Jar T - Tedlar V-VOA turned to client or disposed of at client expense. The report for the analysis of the above samples is applicate	l A le only to those samples	1

received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.