



Absaroka
Joel Mason
112 High St.

February 12, 2025

Buffalo WY 82834

**Project Name - Citation - Speaker Unit
Compressor**

Project Number - CIT.CO.1055.47

Attached are your analytical results for Citation - Speaker Unit Compressor received by Origins Laboratory January 24, 2025. This project is associated with Origins project number E5A0544-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory
303.433.1322
projectmanager@originslab.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645



Absaroka

112 High St.

Buffalo

WY

82834

Joel Mason

Project Number: CIT.CO.1055.47

Project: Citation - Speaker Unit Compressor

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SPKRCOMP_BG@3'	E5A0544-01	Soil	January 23, 2025 9:47	01/24/2025 14:06

Origins Laboratory

A handwritten signature in black ink that reads "Jen Pellegrini".

Jen Pellegrini For Jordan A. Bynon, Project Manager

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WY 82834

Joel Mason
Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

ORIGINS
LABORATORY

65A0544

Page 1 of 1

Client: Citation/ Absaroka
Address: _____
Telephone Number: 307-262-6975
Email Address: joel.mason@absarokasolutions.com

Project Manager: Joel Mason
Project Name: Speaker Unit Compressor
Project Number: CIT.CO.1055.47
Collected By: JM
Invoice/Billing Info: On File - Absaroka Energy Solutions

Key:
W=Water
GW=Groundwater
SW=Surface Water
WW=Waste Water

Soil: Sp-Solid (D-20) / Ash / G-Gas / UNP-Lines / HCL=Hydrochloric / HNO3=Nitric / H2SO4=Sulfuric / NaOH=Sodium Hydroxide

Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservation	Analysis				Comments
					Table 915 Boron	Table 915-PH, EC, SAR	Table 915 Metals		
1 <u>WILLOW 8603</u>	<u>10/25</u>	<u>11:47</u>	<u>3</u>	UNP	X	X	X		
2									
3									
4									
5									
6									
7									
8									
9									
10									

Relinquished By: <u>[Signature]</u>	Date: <u>10/25</u>	Time: <u>12:00</u>	Received By: <u>SLM</u>	Date: <u>11/24/25</u>	Time: <u>14:06</u>	Turnaround Time <input type="checkbox"/> SAME <input type="checkbox"/> 24 DAY <input checked="" type="checkbox"/> Standard
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Temp Received: <u>3.5°C</u> Received On Ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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Jefe Pellegrini

Jen Pellegrini For Jordan A. Bynon, Project Manager

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Project: Citation - Speaker Unit Compressor

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Sample Receipt Checklist

F-012207-01-R1
Effective Date: 01/09/12

Origins Work Order: ESA0544

Client: Absaroka

Client Project ID: Speaker Unit Comp

Checklist Completed by: EH Dsem

Shipped Via: HO
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 1/29/25

Airbill #: N/A

Matrix(s) Received: (Check all that apply): SO Soil/Solid

Water Other: _____

Cooler Number/Temperature: 1/3.5°C

(Describe)

Thermometer ID: 1007

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) (pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) AY

Date/Time Reviewed 1/28/25

Origins Laboratory

Jefe Pellegrini

Jen Pellegrini For Jordan A. Bynon, Project Manager

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112 High St.
Buffalo WY 82834

Joel Mason
Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

SPKRCOMP BG@3'
1/23/2025 9:47:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory
E5A0544-01 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.0983	mg/L	1	B5A2749	01/27/2025	01/29/2025	Ua
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Metals by Saturated Paste by EPA 6010

Calcium	0.947	0.499	meq/L	10	[CALC]	01/27/2025	01/30/2025
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.37		pH Units	1	B5A2751	01/27/2025	01/30/2025
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SAR by 20B Saturated Paste

SAR	0.273	0.0100	SAR	1	B5A2746	01/27/2025	01/30/2025
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.199	0.00500	mmhos/cm	1	B5A2751	01/27/2025	01/31/2025
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Table 915 metals by EPA 6020B

Arsenic	2.28	0.277	mg/kg	10	B5A2736	01/27/2025	01/28/2025
Barium	79.0	9.56	"	"	"	"	"
Cadmium	0.163	0.0956	"	"	"	"	"

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Jen Pellegrini For Jordan A. Bynon, Project Manager

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Project: Citation - Speaker Unit Compressor

SPKRCOMP BG@3'
1/23/2025 9:47:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory
E5A0544-01 (Soil)

Table 915 metals by EPA 6020B

Copper	ND	9.56	mg/kg	10	B5A2736	01/27/2025	01/28/2025	Ua
Lead	2.97	0.956	"	"	"	"	"	
Nickel	3.43	0.956	"	"	"	"	"	
Selenium	ND	0.249	"	"	"	"	"	Ua
Silver	ND	0.0956	"	"	"	"	"	Ua
Zinc	ND	35.4	"	"	"	"	"	Ua

Total Metals 7196A

Hexavalent Chromium	ND	0.127	0.318	mg/kg dry	1	2741430	01/31/2025	02/03/2025	U
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Jen Pellegrini For Jordan A. Bynon, Project Manager

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Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5A2736 - EPA 3050B

Blank (B5A2736-BLK1)

Prepared: 01/27/2025 Analyzed: 01/28/2025

Arsenic	ND	0.290	mg/kg							Ua
Barium	ND	10.0	"							Ua
Cadmium	ND	0.100	"							Ua
Copper	ND	10.0	"							Ua
Lead	ND	1.00	"							Ua
Nickel	ND	1.00	"							Ua
Selenium	ND	0.260	"							Ua
Silver	ND	0.100	"							Ua
Zinc	ND	37.0	"							Ua

LCS (B5A2736-BS1)

Prepared: 01/27/2025 Analyzed: 01/28/2025

Arsenic	4.87	0.290	mg/kg	5.00		97.4	80-120
Barium	437	10.0	"	500		87.4	80-120
Cadmium	4.86	0.100	"	5.00		97.2	80-120
Copper	50.6	10.0	"	50.0		101	80-120
Lead	4.59	1.00	"	5.00		91.8	80-120
Nickel	5.01	1.00	"	5.00		100	80-120
Selenium	4.32	0.260	"	5.00		86.5	80-120
Silver	5.00	0.100	"	5.00		100	80-120
Zinc	48.4	37.0	"	50.0		96.8	80-120

Matrix Spike (B5A2736-MS1)

Source: E5A0554-01

Prepared: 01/27/2025 Analyzed: 01/28/2025

Arsenic	7.79	0.260	mg/kg	4.48	3.61	93.2	75-125
Barium	545	8.96	"	448	108	97.4	75-125
Cadmium	4.51	0.0896	"	4.48	0.113	98.1	75-125
Copper	52.4	8.96	"	44.8	7.43	100	75-125
Lead	10.6	0.896	"	4.48	6.99	80.6	75-125

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Project: Citation - Speaker Unit Compressor

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5A2736 - EPA 3050B

Matrix Spike (B5A2736-MS1)		Source: E5A0554-01			Prepared: 01/27/2025 Analyzed: 01/28/2025					
Nickel	12.0	0.896	mg/kg	4.48	8.04	88.0	75-125			
Selenium	4.17	0.233	"	4.48	0.185	89.1	75-125			
Silver	4.50	0.0896	"	4.48	0.0201	100	75-125			
Zinc	70.1	33.1	"	44.8	30.3	88.7	75-125			
Matrix Spike Dup (B5A2736-MSD1)		Source: E5A0554-01			Prepared: 01/27/2025 Analyzed: 01/28/2025					
Arsenic	7.90	0.283	mg/kg	4.87	3.61	87.9	75-125	1.41	20	
Barium	548	9.75	"	487	108	90.2	75-125	0.595	20	
Cadmium	4.91	0.0975	"	4.87	0.113	98.3	75-125	8.52	20	
Copper	55.9	9.75	"	48.7	7.43	99.5	75-125	6.46	20	
Lead	10.7	0.975	"	4.87	6.99	77.1	75-125	1.37	20	
Nickel	11.6	0.975	"	4.87	8.04	72.0	75-125	3.70	20	QM-07
Selenium	4.33	0.253	"	4.87	0.185	85.1	75-125	3.72	20	
Silver	4.88	0.0975	"	4.87	0.0201	99.7	75-125	8.10	20	
Zinc	72.1	36.1	"	48.7	30.3	85.6	75-125	2.83	20	

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Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

Classical Chemistry Parameters - Quality Control

Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5A2746 - Saturated Paste Metals

Blank (B5A2746-BLK1)

Prepared: 01/27/2025 Analyzed: 01/30/2025

SAR	ND	0.0100	SAR							Ua
Calcium PPM	ND	10.0	mg/L							Ua
Magnesium PPM	ND	10.0	"							Ua
Sodium PPM	ND	10.0	"							Ua

Duplicate (B5A2746-DUP1)

Source: E5A0540-01

Prepared: 01/27/2025 Analyzed: 01/30/2025

Calcium PPM	11.0	10.0	mg/L		12.4			11.7	50	
SAR	ND	0.0100	SAR		10.7				200	Ua
Magnesium PPM	1.23	10.0	mg/L		1.48			18.5	50	Ua
Sodium PPM	135	10.0	"		150			10.4	50	

Batch B5A2749 - DTPA Sorbitol Preparation

Blank (B5A2749-BLK1)

Prepared: 01/27/2025 Analyzed: 01/31/2025

Boron	ND	0.100	mg/L							Ua
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Duplicate (B5A2749-DUP1)

Source: E5A0536-01

Prepared: 01/27/2025 Analyzed: 01/31/2025

Boron	ND	1.00	mg/L		ND				50	Ua
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Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

Saturated Paste - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5A2751 - Saturated Paste pH/EC										
Blank (B5A2751-BLK1)					Prepared: 01/27/2025 Analyzed: 01/31/2025					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							Ua
Duplicate (B5A2751-DUP1)					Source: E5A0540-01 Prepared: 01/27/2025 Analyzed: 01/29/2025					
pH	8.43		pH Units		8.42			0.119	25	
Specific Conductance (EC)	0.748	0.00500	mmhos/cm		0.772			3.12	25	

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Project Number: CIT.CO.1055.47
Project: Citation - Speaker Unit Compressor

Total Metals 7196A - Quality Control GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2741430 - SW846 3060A										
BLANK (1205989325-BLK)					Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	ND	0.306	mg/kg				-			U
LCS (1205989326-BKS)					Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	3.86	0.379	mg/kg	3.79		102	80-120			
DUP (1205989327 D)					Source: 705745001 Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	ND	0.289	mg/kg dry		<0.116		0-50	N/A	50	U
MS (1205989328 S)					Source: 705745001 Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	2.62	0.289	mg/kg dry	2.89	<0.116	89	75-125			
DUP (1205989329 D)					Source: 705749001 Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	ND	0.311	mg/kg dry		<0.124		0-50	N/A	50	U
MS (1205989330 S)					Source: 705749001 Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	2.40	0.311	mg/kg dry	3.11	<0.124	76.8	75-125			
ILCS (1205989331-ILCS)					Prepared: 01/31/2025 Analyzed: 02/03/2025					
Hexavalent Chromium	6.78	0.315	mg/kg	6.39		106	80-120			

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Joel Mason

Project Number: CIT.CO.1055.47

Project: Citation - Speaker Unit Compressor

Notes and Definitions

Ua Sample is Non-Detect.

U Result not detected above the detection limit

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

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