



**Absaroka**

**May 02, 2025**

**Max Dahlgren**

**112 High St.**

**Buffalo**

**WY**

**82834**

**Project Name - KMG - Miller 2&7-7 Facility**

**Project Number - [none]**

Attached are your analytical results for KMG - Miller 2&7-7 Facility received by Origins Laboratory April 07, 2025. This project is associated with Origins project number E5D0185-01.

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

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG01@3"	E5D0185-01	Soil	April 7, 2025 11:30	04/07/2025 16:16
BG01@3'	E5D0185-02	Soil	April 7, 2025 11:35	04/07/2025 16:16
BG01@6'	E5D0185-03	Soil	April 7, 2025 11:40	04/07/2025 16:16
BG02@3"	E5D0185-04	Soil	April 7, 2025 11:45	04/07/2025 16:16
BG02@3'	E5D0185-05	Soil	April 7, 2025 11:50	04/07/2025 16:16
BG02@6'	E5D0185-06	Soil	April 7, 2025 11:55	04/07/2025 16:16

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

# ORIGINS LABORATORY

Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**ORIGINS**  
LABORATORY

**ESD0185**

Page 1 of 1

Client: ONY / Absaroka  
Address: \_\_\_\_\_

Project Manager: Max Dahlgren  
Project Name: Miller 2&7-7 Facility

Key: \_\_\_\_\_  
W= Water

Telephone Number: 970-481-6999

Collected By: \_\_\_\_\_

GW=Groundwater

Email Address: ony.co@emgabsarokasolutions.com

Invoice Billing Info: \_\_\_\_\_

SW=Surface Water


SW=Irrigate Water

Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservative	Analysis			Comments
					Full 915	Boron	pH, SAR, EC	
B602311	4/7/25	1150	2	WAP	X	X	X	
B60231		1135	2		X	X	X	
B602061		1140	2		X	X	X	
B6020311		1145	2		X	X	X	
B602031		1150	2		X	X	X	
B602061		1155	2		X	X	X	

Relinquished By: [Signature] Date: 4/7/2025 Time: 11:15  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received By: [Signature] Date: 4/7/25 Time: 1616  
 Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Temp Received: 4.8 Received On Ice?  Yes  No  
 Standard  48 Hr  72

Turnaround Time  
 SAME DAY  24  
 48 Hr  72

Origins Laboratory  


The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

# ORIGINS LABORATORY

Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

Origins Laboratory

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

### Sample Receipt Checklist

Origins Work Order: ESD0185

Client: Ox/Absaroka

Client Project ID: Miller 2 & 7-7 Facility

Checklist Completed by: NB/JAR

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

Date/time completed: 4/8/25

Airbill #: N/A

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_

Cooler Number/Temperature: 1 / 4.8 °C (Describe)

Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water — is there headspace (≥ ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subsampled analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaOH, NaOH, ZnAc, NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Reviewed by (Project Manager) [Signature]

4/9/25  
Date/Time Reviewed

Origins Laboratory

[Signature]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG01@3"**  
**4/7/2025 11:30:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5D0185-01 (Soil)**  
**Enthalpy Analytical**

**Total Metals by 7199**

Chromium, Hexavalent	0.10	0.08	0.20	mg/kg	1	BID1290	04/24/2025	04/28/2025	J
----------------------	------	------	------	-------	---	---------	------------	------------	---

**Origins Laboratory**

**Boron (DTPA Sorbitol)**

Boron	ND		1.00	mg/L	10	B5D0822	04/08/2025	04/09/2025	
-------	----	--	------	------	----	---------	------------	------------	--

**Metals by Saturated Paste by EPA 6010**

Calcium	2.31		0.499	meq/L	"	[CALC]	04/08/2025	04/14/2025	
Magnesium	1.34		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	

**pH in Soil by 9045D**

pH	5.54			pH Units	1	B5D0845	04/08/2025	04/11/2025	
----	------	--	--	----------	---	---------	------------	------------	--

**SAR by 20B Saturated Paste**

SAR	0.218		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
-----	-------	--	--------	-----	---	---------	------------	------------	--

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.690		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	
---------------------------	-------	--	---------	----------	---	---------	------------	------------	--

Origins Laboratory



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka

112 High St.

Buffalo WY 82834

Max Dahlgren

Project Number: [none]

Project: KMG - Miller 2&7-7 Facility

BG01@3"

4/7/2025 11:30:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5D0185-01 (Soil)

Origins Laboratory

Table 915 metals by EPA 6020B

Arsenic	3.26		0.281	mg/kg	10	B5D0820	04/08/2025	04/11/2025	
Barium	91.1		9.70	"	"	"	"	"	"
Cadmium	0.823		0.0970	"	"	"	"	"	"
Copper	20.6		9.70	"	"	"	"	"	"
Lead	34.2		0.970	"	"	"	"	"	"
Nickel	6.12		0.970	"	"	"	"	"	"
Selenium	ND		0.252	"	"	"	"	"	"
Silver	0.348		0.0970	"	"	"	"	"	"
Zinc	104		35.9	"	"	"	"	"	"

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG01@3'**  
**4/7/2025 11:35:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0185-02 (Soil)</b>									
<b>Enthalpy Analytical</b>									
<b>Total Metals by 7199</b>									
Chromium, Hexavalent	ND	0.08	0.21	mg/kg	1	BID1290	04/24/2025	04/28/2025	
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	ND		0.0997	mg/L	1	B5D0822	04/08/2025	04/09/2025	
<b>Metals by Saturated Paste by EPA 6010</b>									
Calcium	1.36		0.499	meq/L	10	[CALC]	04/08/2025	04/14/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	0.697		0.435	"	"	"	"	"	
<b>pH in Soil by 9045D</b>									
pH	7.96			pH Units	1	B5D0845	04/08/2025	04/11/2025	
<b>SAR by 20B Saturated Paste</b>									
SAR	0.726		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
<b>Specific Conductance Mod. 9050A</b>									
Specific Conductance (EC)	0.291		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

BG01@3'  
4/7/2025 11:35:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5D0185-02 (Soil)  
Origins Laboratory

**Table 915 metals by EPA 6020B**

Arsenic	0.723		0.260	mg/kg	10	B5D0820	04/08/2025	04/11/2025	
Barium	33.1		8.96	"	"	"	"	"	"
Cadmium	ND		0.0896	"	"	"	"	"	"
Copper	ND		8.96	"	"	"	"	"	"
Lead	4.39		0.896	"	"	"	"	"	"
Nickel	2.03		0.896	"	"	"	"	"	"
Selenium	ND		0.233	"	"	"	"	"	"
Silver	ND		0.0896	"	"	"	"	"	"
Zinc	ND		33.1	"	"	"	"	"	"

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG01@6'**  
**4/7/2025 11:40:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0185-03 (Soil)</b>									
<b>Enthalpy Analytical</b>									
<b>Total Metals by 7199</b>									
Chromium, Hexavalent	ND	0.08	0.20	mg/kg	1	BID1290	04/24/2025	04/28/2025	
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	ND		0.0999	mg/L	1	B5D0822	04/08/2025	04/09/2025	
<b>Metals by Saturated Paste by EPA 6010</b>									
Calcium	ND		0.499	meq/L	10	[CALC]	04/08/2025	04/14/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	
<b>pH in Soil by 9045D</b>									
pH	8.23			pH Units	1	B5D0845	04/08/2025	04/11/2025	
<b>SAR by 20B Saturated Paste</b>									
SAR	0.761		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
<b>Specific Conductance Mod. 9050A</b>									
Specific Conductance (EC)	0.0991		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG01@6'**  
**4/7/2025 11:40:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5D0185-03 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Arsenic	0.681		0.250	mg/kg	10	B5D0820	04/08/2025	04/11/2025	
Barium	18.4		8.61	"	"	"	"	"	"
Cadmium	ND		0.0861	"	"	"	"	"	"
Copper	ND		8.61	"	"	"	"	"	"
Lead	2.18		0.861	"	"	"	"	"	"
Nickel	1.62		0.861	"	"	"	"	"	"
Selenium	ND		0.224	"	"	"	"	"	"
Silver	ND		0.0861	"	"	"	"	"	"
Zinc	ND		31.9	"	"	"	"	"	"

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Absaroka  
 112 High St.  
 Buffalo WY 82834

Max Dahlgren  
 Project Number: [none]  
 Project: KMG - Miller 2&7-7 Facility

**BG02@3"**  
**4/7/2025 11:45:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5D0185-04 (Soil)**  
**Enthalpy Analytical**

**Total Metals by 7199**

Chromium, Hexavalent	0.20	0.08	0.20	mg/kg	1	BID1290	04/24/2025	04/28/2025	J
----------------------	------	------	------	-------	---	---------	------------	------------	---

**Origins Laboratory**

**Boron (DTPA Sorbitol)**

Boron	0.311		0.100	mg/L	1	B5D0822	04/08/2025	04/09/2025	
-------	-------	--	-------	------	---	---------	------------	------------	--

**Metals by Saturated Paste by EPA 6010**

Calcium	2.01		0.499	meq/L	10	[CALC]	04/08/2025	04/14/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	3.03		0.435	"	"	"	"	"	

**pH in Soil by 9045D**

pH	7.68			pH Units	1	B5D0845	04/08/2025	04/11/2025	
----	------	--	--	----------	---	---------	------------	------------	--

**SAR by 20B Saturated Paste**

SAR	2.56		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
-----	------	--	--------	-----	---	---------	------------	------------	--

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.580		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	
---------------------------	-------	--	---------	----------	---	---------	------------	------------	--

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Absaroka

112 High St.

Buffalo WY 82834

Max Dahlgren

Project Number: [none]

Project: KMG - Miller 2&7-7 Facility

BG02@3"

4/7/2025 11:45:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5D0185-04 (Soil)

Origins Laboratory

Table 915 metals by EPA 6020B

Arsenic	4.70		0.270	mg/kg	10	B5D0820	04/08/2025	04/12/2025	
Barium	104		9.30	"	"	"	"	"	"
Cadmium	1.52		0.0930	"	"	"	"	"	"
Copper	41.5		9.30	"	"	"	"	"	"
Lead	57.6		0.930	"	"	"	"	"	"
Nickel	8.57		0.930	"	"	"	"	"	"
Selenium	0.305		0.242	"	"	"	"	"	"
Silver	0.877		0.0930	"	"	"	"	"	"
Zinc	163		34.4	"	"	"	"	"	"

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG02@3'**  
**4/7/2025 11:50:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0185-05 (Soil)</b>									
<b>Enthalpy Analytical</b>									
<b>Total Metals by 7199</b>									
Chromium, Hexavalent	ND	0.08	0.20	mg/kg	1	BID1290	04/24/2025	04/28/2025	
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	ND		0.100	mg/L	1	B5D0822	04/08/2025	04/09/2025	
<b>Metals by Saturated Paste by EPA 6010</b>									
Calcium	ND		0.499	meq/L	10	[CALC]	04/08/2025	04/14/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	0.989		0.435	"	"	"	"	"	
<b>pH in Soil by 9045D</b>									
pH	7.47			pH Units	1	B5D0845	04/08/2025	04/11/2025	
<b>SAR by 20B Saturated Paste</b>									
SAR	2.09		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
<b>Specific Conductance Mod. 9050A</b>									
Specific Conductance (EC)	0.159		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	

Origins Laboratory



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**BG02@3'**  
**4/7/2025 11:50:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5D0185-05 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Arsenic	2.02		0.270	mg/kg	10	B5D0820	04/08/2025	04/12/2025	
Barium	43.3		9.31	"	"	"	"	"	"
Cadmium	0.162		0.0931	"	"	"	"	"	"
Copper	ND		9.31	"	"	"	"	"	"
Lead	8.24		0.931	"	"	"	"	"	"
Nickel	3.72		0.931	"	"	"	"	"	"
Selenium	ND		0.242	"	"	"	"	"	"
Silver	ND		0.0931	"	"	"	"	"	"
Zinc	ND		34.5	"	"	"	"	"	"

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
 112 High St.  
 Buffalo WY 82834

Max Dahlgren  
 Project Number: [none]  
 Project: KMG - Miller 2&7-7 Facility

**BG02@6'**  
**4/7/2025 11:55:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0185-06 (Soil)</b>									
<b>Enthalpy Analytical</b>									
<b>Total Metals by 7199</b>									
Chromium, Hexavalent	ND	0.08	0.20	mg/kg	1	BID1290	04/24/2025	04/28/2025	
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	ND		0.100	mg/L	1	B5D0822	04/08/2025	04/09/2025	
<b>Metals by Saturated Paste by EPA 6010</b>									
Calcium	ND		0.499	meq/L	10	[CALC]	04/08/2025	04/14/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	
<b>pH in Soil by 9045D</b>									
pH	8.06			pH Units	1	B5D0845	04/08/2025	04/11/2025	
<b>SAR by 20B Saturated Paste</b>									
SAR	0.693		0.0100	SAR	1	B5D0841	04/08/2025	04/14/2025	
<b>Specific Conductance Mod. 9050A</b>									
Specific Conductance (EC)	0.0773		0.00500	mmhos/cm	1	B5D0845	04/08/2025	04/11/2025	

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Absaroka

112 High St.

Buffalo WY 82834

Max Dahlgren

Project Number: [none]

Project: KMG - Miller 2&7-7 Facility

BG02@6'

4/7/2025 11:55:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5D0185-06 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Arsenic	0.796		0.260	mg/kg	10	B5D0820	04/08/2025	04/12/2025	
Barium	14.8		8.97	"	"	"	"	"	
Cadmium	ND		0.0897	"	"	"	"	"	
Copper	ND		8.97	"	"	"	"	"	
Lead	2.17		0.897	"	"	"	"	"	
Nickel	1.35		0.897	"	"	"	"	"	
Selenium	ND		0.233	"	"	"	"	"	
Silver	ND		0.0897	"	"	"	"	"	
Zinc	ND		33.2	"	"	"	"	"	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5D0822 - DTPA Sorbitol Preparation**

**Blank (B5D0822-BLK1)**

Prepared: 04/08/2025 Analyzed: 04/09/2025

Boron ND 0.100 mg/L

**Duplicate (B5D0822-DUP1)**

**Source: E5D0168-01**

Prepared: 04/08/2025 Analyzed: 04/09/2025

Boron 0.171 0.100 mg/L 0.170 0.451 50

**Batch B5D0841 - Saturated Paste Metals**

**Blank (B5D0841-BLK1)**

Prepared: 04/08/2025 Analyzed: 04/14/2025

Calcium PPM ND 10.0 mg/L

SAR ND 0.0100 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

**Duplicate (B5D0841-DUP1)**

**Source: E5D0182-01**

Prepared: 04/08/2025 Analyzed: 04/14/2025

SAR ND 0.0100 SAR 8.53 200

Calcium PPM 326 10.0 mg/L 418 24.8 50

Magnesium PPM 93.6 10.0 " 118 23.3 50

Sodium PPM 688 10.0 " 767 10.8 50

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5D0820 - EPA 3050B**

**Blank (B5D0820-BLK1)**

Prepared: 04/08/2025 Analyzed: 04/11/2025

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

**LCS (B5D0820-BS1)**

Prepared: 04/08/2025 Analyzed: 04/11/2025

Arsenic	5.73	0.290	mg/kg	5.00		115	80-120			
Barium	592	10.0	"	500		118	80-120			
Cadmium	5.88	0.100	"	5.00		118	80-120			
Copper	56.3	10.0	"	50.0		113	80-120			
Lead	5.78	1.00	"	5.00		116	80-120			
Nickel	5.65	1.00	"	5.00		113	80-120			
Selenium	5.75	0.260	"	5.00		115	80-120			
Silver	5.48	0.100	"	5.00		110	80-120			
Zinc	57.2	37.0	"	50.0		114	80-120			

**Matrix Spike (B5D0820-MS1)**

**Source: E5D0180-02**

Prepared: 04/08/2025 Analyzed: 04/11/2025

Arsenic	10.8	0.250	mg/kg	4.31	5.31	128	75-125			QM-07
Barium	678	8.62	"	431	161	120	75-125			
Cadmium	5.44	0.0862	"	4.31	0.182	122	75-125			
Copper	70.8	8.62	"	43.1	14.8	130	75-125			QM-07
Lead	18.6	0.862	"	4.31	12.4	143	75-125			QM-07

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5D0820 - EPA 3050B**

**Matrix Spike (B5D0820-MS1)**

**Source: E5D0180-02**

Prepared: 04/08/2025 Analyzed: 04/11/2025

Nickel	21.4	0.862	mg/kg	4.31	15.0	148	75-125			QM-07
Selenium	4.84	0.224	"	4.31	0.118	109	75-125			
Silver	4.96	0.0862	"	4.31	0.0433	114	75-125			
Zinc	117	31.9	"	43.1	56.5	140	75-125			QM-07

**Matrix Spike Dup (B5D0820-MSD1)**

**Source: E5D0180-02**

Prepared: 04/08/2025 Analyzed: 04/11/2025

Arsenic	9.08	0.268	mg/kg	4.62	5.31	81.5	75-125	17.6	20	
Barium	650	9.25	"	462	161	106	75-125	4.20	20	
Cadmium	5.01	0.0925	"	4.62	0.182	104	75-125	8.30	20	
Copper	62.3	9.25	"	46.2	14.8	103	75-125	12.8	20	
Lead	16.1	0.925	"	4.62	12.4	79.8	75-125	14.4	20	
Nickel	19.9	0.925	"	4.62	15.0	104	75-125	7.60	20	
Selenium	4.66	0.240	"	4.62	0.118	98.2	75-125	3.72	20	
Silver	4.52	0.0925	"	4.62	0.0433	96.9	75-125	9.08	20	
Zinc	102	34.2	"	46.2	56.5	98.1	75-125	13.7	20	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**Saturated Paste - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5D0845 - Saturated Paste pH/EC**

**Blank (B5D0845-BLK1)**

Prepared: 04/08/2025 Analyzed: 04/11/2025

Specific Conductance (EC) ND 0.00500 mmhos/cm

**Duplicate (B5D0845-DUP1)**

**Source: E5D0182-01**

Prepared: 04/08/2025 Analyzed: 04/11/2025

pH 8.02 pH Units 7.95 0.877 25

Specific Conductance (EC) 4.33 0.00500 mmhos/cm 4.87 11.8 25

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Absaroka  
112 High St.  
Buffalo WY 82834

Max Dahlgren  
Project Number: [none]  
Project: KMG - Miller 2&7-7 Facility

**Total Metals by 7199 - Quality Control**  
**Enthalpy Analytical**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BID1290 - No Prep IC-WET</b>										
<b>Blank (BID1290-BLK1)</b>										
					Prepared: 04/24/2025 Analyzed: 04/28/2025					
Chromium, Hexavalent	ND	0.005	mg/kg				-			
<b>LCS (BID1290-BS1)</b>										
					Prepared: 04/24/2025 Analyzed: 04/28/2025					
Chromium, Hexavalent	0.06	0.005	mg/kg	0.0500		111	80-120			
<b>LCS (BID1290-BS2)</b>										
					Prepared: 04/24/2025 Analyzed: 04/28/2025					
Chromium, Hexavalent	9.33	1.00	mg/kg	8.40		111	80-120			
<b>Matrix Spike (BID1290-MS1)</b>										
		<b>Source: 25D1023-06</b>			Prepared: 04/24/2025 Analyzed: 04/28/2025					
Chromium, Hexavalent	2.23	0.20	mg/kg	1.96	0.10	109	75-125			
<b>Matrix Spike Dup (BID1290-MSD1)</b>										
		<b>Source: 25D1023-06</b>			Prepared: 04/24/2025 Analyzed: 04/28/2025					
Chromium, Hexavalent	2.31	0.20	mg/kg	2.02	0.10	109	75-125	3.55	20	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Absaroka

112 High St.

Buffalo

WY

82834

Max Dahlgren

Project Number: [none]

Project: KMG - Miller 2&7-7 Facility

### Notes and Definitions

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

J The reported result is an estimated value.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*