



January 16, 2024

Tasman Geosciences

Andy Sagen

6855 West 119th Avenue

Broomfield CO 80020

Project Name - KMG - Bryant 16,23,36-30

Project Number - [none]

Attached are your analytical results for KMG - Bryant 16,23,36-30 received by Origins Laboratory, Inc. January 08, 2024. This project is associated with Origins project number Y401138-01.

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, Inc.  
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Tasman Geosciences  
6855 West 119th Avenue  
Broomfield CO 80020

Andy Sagen  
Project Number: [none]  
Project: KMG - Bryant 16,23,36-30

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
36-WH-B01R@6'	Y401138-01	Soil	January 8, 2024 13:23	01/08/2024 15:10
23-WH-B01R@6'	Y401138-02	Soil	January 8, 2024 13:25	01/08/2024 15:10
16-FL-B01R@4'	Y401138-03	Soil	January 8, 2024 13:27	01/08/2024 15:10

Origins Laboratory, Inc.

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# ORIGINS LABORATORY, INC

Tasman Geosciences  
6855 West 119th Avenue  
Broomfield CO 80020

Andy Sagen  
Project Number: [none]  
Project: KMG - Bryant 16,23,36-30

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

### Sample Receipt Checklist

Origins Work Order: 4401138 Client: Tasman  
 Checklist Completed by: JST/MS Client Project ID: Bryant  
 Date/time completed: 1/8/24 Shipped Via: FD  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: N/A  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1, 11 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C  
 Thermometer ID: 1004

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

<sup>1,2</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 in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 1/8/24

Origins Laboratory, Inc.  
[Signature]

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Andy Sagen  
Project Number: [none]  
Project: KMG - Bryant 16,23,36-30

**36-WH-B01R@6'**  
**1/8/2024 1:23:00PM**

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y401138-01 (Soil)**

**Table 915 metals by EPA 6020B**

Barium	213	9.67	mg/kg	10	B4A0821	ZZZ	01/08/2024	01/09/2024	
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Origins Laboratory, Inc.  
*Bynon*

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6855 West 119th Avenue  
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Andy Sagen  
Project Number: [none]  
Project: KMG - Bryant 16,23,36-30

23-WH-B01R@6'  
1/8/2024 1:25:00PM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
Y401138-02 (Soil)

**pH in Soil by 9045D**

pH	8.02		pH Units	1	B4A0916	EAL	01/09/2024	01/10/2024	
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**Table 915 metals by EPA 6020B**

Barium	25.0	9.80	mg/kg	10	B4A0821	ZZZ	01/08/2024	01/09/2024	
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Origins Laboratory, Inc.  
*Bynon*

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 Project Number: [none]  
 Project: KMG - Bryant 16,23,36-30

16-FL-B01R@4  
 1/8/2024 1:27:00PM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
 Y401138-03 (Soil)

**Table 915 metals by EPA 6020B**

Barium	216	8.39	mg/kg	10	B4A0821	ZZZ	01/08/2024	01/09/2024	
Cadmium	0.138	0.0839	"	"	"	ZZZ	"	"	

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 Project Number: [none]  
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**Metals by EPA 6000/7000 Series Methods - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4A0821 - EPA 3050B**

Prepared: 01/08/2024 Analyzed: 01/09/2024

**Blank (B4A0821-BLK1)**

Barium	ND	1.00	mg/kg							
Cadmium	ND	0.0100	"							

**LCS (B4A0821-BS1)**

Prepared: 01/08/2024 Analyzed: 01/09/2024

Barium	477	1.00	mg/kg	500		95.4	80-120			
Cadmium	4.94	0.0100	"	5.00		98.8	80-120			

**Matrix Spike (B4A0821-MS1)**

**Source: Y312336-01**

Prepared: 01/08/2024 Analyzed: 01/09/2024

Barium	556	9.50	mg/kg	475	379	37.3	75-125			
Cadmium	5.20	0.0950	"	4.75	0.144	106	75-125			

**Matrix Spike Dup (B4A0821-MSD1)**

**Source: Y312336-01**

Prepared: 01/08/2024 Analyzed: 01/09/2024

Barium	545	8.86	mg/kg	443	379	37.6	75-125	1.96	20	
Cadmium	4.75	0.0886	"	4.43	0.144	104	75-125	8.99	20	

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Jordan A. Bynon For Jen Pellegrini, Project Manager



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**Saturated Paste - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4A0916 - Saturated Paste pH/EC**

**Duplicate (B4A0916-DUP1)**

**Source: Y401138-02**

Prepared: 01/09/2024 Analyzed: 01/10/2024

pH	7.97		pH Units		8.02			0.625	25	
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Jordan A. Bynon For Jen Pellegrini, Project Manager

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Andy Sagen  
Project Number: [none]  
Project: KMG - Bryant 16,23,36-30

## Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
  - RPD Relative Percent Difference
- All soil results are reported at a wet weight basis.

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