

# ORIGINS LABORATORY

Quandary Consultants

Brandon VanHorn

2252 Emerson St.

Denver

CO

80205

January 23, 2025

**Project Name - KMG - Jones Guy H Gas UN2**

**Project Number - [none]**

Attached are your analytical results for KMG - Jones Guy H Gas UN2 received by Origins Laboratory January 09, 2025. This project is associated with Origins project number E5A0118-01.

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



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Brandon VanHorn  
Project Number: [none]  
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### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-B01V@6	E5A0118-01	Soil	January 9, 2025 10:48	01/09/2025 12:52
GW-BG-01	E5A0118-02	Water	January 9, 2025 11:57	01/09/2025 12:52

Too much sediment in the GW-BG-01 sample to run TDS. Analysis cancelled and client notified via email on 01/14/2025. JAB

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

### Sample Receipt Checklist

Origins Work Order: ESAO 118

Client: Quandary

Client Project ID: Jones Guy

Checklist Completed by: WS/sem

Shipped Via: HB

Date/time completed: 1/19/25

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: N/A

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

Cooler Number/Temperature: 1/3.1 °C

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 <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 subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaOH, NaOCl, 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 in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) LR

Date/Time Reviewed 1/19/25

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Jordan A. Bynon, Project Manager

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Project Number: [none]  
Project: KMG - Jones Guy H Gas UN2

WH-B01V@6'


1/9/2025 10:48:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory  
E5A0118-01 (Soil)

## pH in Soil by 9045D

pH	7.93			pH Units	1	B5A1016	01/10/2025	01/13/2025	
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**GW-BG-01**


**1/9/2025 11:57:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E5A0118-02 (Water)**

**Anions by IC 300.0**

Chloride	483		31.2	mg/L	125	B5A1002	01/10/2025	01/10/2025	
Sulfate	1570		31.2	"	"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B5A1002 - Filter .45um non acidified</b>										
<b>Blank (B5A1002-BLK1)</b>										
					Prepared: 01/10/2025 Analyzed: 01/10/2025					
Bromide	ND	0.100	mg/L							
<b>LCS (B5A1002-BS1)</b>										
					Prepared: 01/10/2025 Analyzed: 01/10/2025					
Bromide	3.99	0.100	mg/L	4.00		99.8	90-110			
<b>Matrix Spike (B5A1002-MS1)</b>										
					Source: E5A0116-01 Prepared: 01/10/2025 Analyzed: 01/10/2025					
Bromide	480		mg/L	500	0.00	96.0	90-110			
<b>Matrix Spike Dup (B5A1002-MSD1)</b>										
					Source: E5A0116-01 Prepared: 01/10/2025 Analyzed: 01/10/2025					
Bromide	480		mg/L	500	0.00	96.1	90-110	0.0625	5	

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**Saturated Paste - 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 B5A1016 - Saturated Paste pH/EC**

**Duplicate (B5A1016-DUP1)**

**Source: E5A0116-03**

Prepared: 01/10/2025 Analyzed: 01/13/2025

pH	7.66	pH Units	7.89	2.96	25
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## Notes and Definitions

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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