



Ensolum

December 16, 2024

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

**Project Name - KMG - Windell 1-13& 4& 5-18  
Facility**

**Project Number - 09A1417933**

Attached are your analytical results for KMG - Windell 1-13& 4& 5-18 Facility received by Origins Laboratory December 03, 2024. This project is associated with Origins project number E4L0074-01.

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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CROSS REFERENCE REPORT

| Sample ID       | Laboratory ID | Matrix | Date Sampled           | Date Received    |
|-----------------|---------------|--------|------------------------|------------------|
| SEP01-OUTLET@3' | E4L0074-01    | Soil   | December 3, 2024 14:45 | 12/03/2024 16:04 |

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

**Sample Receipt Checklist**

Origins Work Order: E4L0074 Client: ENSOLUM  
 Client Project ID: Windell  
 Checklist Completed by: ADD KK Shipped Via: HD  
 Date/time completed: 12/3/24 (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: 11 °C 1 °C 1 °C 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"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <u>SD</u>         |
| 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 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 checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                   |
| Were all samples received intact <sup>(1)</sup> ?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                   |
| Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?  | <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)</sup> ?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</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)</sup> ?   | <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 checked="" type="checkbox"/> | <input type="checkbox"/>            | <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 NaAsO2+NaOH, ZnAc+NaOH) | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <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) [Signature] Date/Time Reviewed 12/3/24

Origins Laboratory

[Signature]

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**SEP01-OUTLET@3'**  
**12/3/2024 2:45:00PM**

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

**Origins Laboratory**  
**E4L0074-01 (Soil)**

**pH in Soil by 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 8.23 |  |  | pH Units | 1 | B4L0915 | 12/09/2024 | 12/09/2024 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**Table 915 metals by EPA 6020B**

|         |       |  |        |       |    |         |            |            |  |
|---------|-------|--|--------|-------|----|---------|------------|------------|--|
| Cadmium | 0.224 |  | 0.0844 | mg/kg | 10 | B4L0350 | 12/03/2024 | 12/04/2024 |  |
|---------|-------|--|--------|-------|----|---------|------------|------------|--|

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**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 B4L0350 - EPA 3050B**

**Blank (B4L0350-BLK1)**

Prepared: 12/03/2024 Analyzed: 12/04/2024

|          |    |       |       |  |  |  |  |  |  |  |
|----------|----|-------|-------|--|--|--|--|--|--|--|
| 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 (B4L0350-BS1)**

Prepared: 12/03/2024 Analyzed: 12/04/2024

|          |      |       |       |      |  |     |        |  |  |  |
|----------|------|-------|-------|------|--|-----|--------|--|--|--|
| Arsenic  | 5.33 | 0.290 | mg/kg | 5.00 |  | 107 | 80-120 |  |  |  |
| Barium   | 536  | 10.0  | "     | 500  |  | 107 | 80-120 |  |  |  |
| Cadmium  | 5.82 | 0.100 | "     | 5.00 |  | 116 | 80-120 |  |  |  |
| Copper   | 55.8 | 10.0  | "     | 50.0 |  | 112 | 80-120 |  |  |  |
| Lead     | 5.69 | 1.00  | "     | 5.00 |  | 114 | 80-120 |  |  |  |
| Nickel   | 5.59 | 1.00  | "     | 5.00 |  | 112 | 80-120 |  |  |  |
| Selenium | 5.38 | 0.260 | "     | 5.00 |  | 108 | 80-120 |  |  |  |
| Silver   | 5.55 | 0.100 | "     | 5.00 |  | 111 | 80-120 |  |  |  |
| Zinc     | 56.4 | 37.0  | "     | 50.0 |  | 113 | 80-120 |  |  |  |

**Matrix Spike (B4L0350-MS1)**

Source: E4L0063-01

Prepared: 12/03/2024 Analyzed: 12/04/2024

|         |      |        |       |      |        |     |        |  |  |       |
|---------|------|--------|-------|------|--------|-----|--------|--|--|-------|
| Arsenic | 7.15 | 0.262  | mg/kg | 4.51 | 1.02   | 136 | 75-125 |  |  | QM-07 |
| Barium  | 531  | 9.02   | "     | 451  | 18.7   | 114 | 75-125 |  |  |       |
| Cadmium | 5.38 | 0.0902 | "     | 4.51 | 0.0224 | 119 | 75-125 |  |  |       |
| Copper  | 60.5 | 9.02   | "     | 45.1 | 1.72   | 130 | 75-125 |  |  | QM-07 |
| Lead    | 9.58 | 0.902  | "     | 4.51 | 3.05   | 145 | 75-125 |  |  | QM-07 |

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**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 B4L0350 - EPA 3050B**

| <b>Matrix Spike (B4L0350-MS1)</b> |      | <b>Source: E4L0063-01</b> |       |      | <b>Prepared: 12/03/2024 Analyzed: 12/04/2024</b> |     |        |  |  |  |
|-----------------------------------|------|---------------------------|-------|------|--|-----|--------|--|--|--|
| Nickel                            | 8.15 | 0.902                     | mg/kg | 4.51 | 2.59   | 123 | 75-125 |  |  |  |
| Selenium                          | 4.87 | 0.235                     | "     | 4.51 | ND   | 108 | 75-125 |  |  |  |
| Silver                            | 5.18 | 0.0902                    | "     | 4.51 | ND   | 115 | 75-125 |  |  |  |
| Zinc                              | 66.5 | 33.4                      | "     | 45.1 | 14.7   | 115 | 75-125 |  |  |  |

| <b>Matrix Spike Dup (B4L0350-MSD1)</b> |      | <b>Source: E4L0063-01</b> |       |      | <b>Prepared: 12/03/2024 Analyzed: 12/04/2024</b> |     |        |      |    |       |
|--|------|---------------------------|-------|------|--|-----|--------|------|----|-------|
| Arsenic                                | 6.40 | 0.269                     | mg/kg | 4.63 | 1.02   | 116 | 75-125 | 11.1 | 20 |       |
| Barium                                 | 516  | 9.27                      | "     | 463  | 18.7   | 107 | 75-125 | 2.85 | 20 |       |
| Cadmium                                | 5.48 | 0.0927                    | "     | 4.63 | 0.0224   | 118 | 75-125 | 1.78 | 20 |       |
| Copper                                 | 57.8 | 9.27                      | "     | 46.3 | 1.72   | 121 | 75-125 | 4.64 | 20 |       |
| Lead                                   | 9.20 | 0.927                     | "     | 4.63 | 3.05   | 133 | 75-125 | 4.07 | 20 | QM-07 |
| Nickel                                 | 7.86 | 0.927                     | "     | 4.63 | 2.59   | 114 | 75-125 | 3.67 | 20 |       |
| Selenium                               | 5.13 | 0.241                     | "     | 4.63 | ND   | 111 | 75-125 | 5.10 | 20 |       |
| Silver                                 | 5.30 | 0.0927                    | "     | 4.63 | ND   | 114 | 75-125 | 2.41 | 20 |       |
| Zinc                                   | 68.8 | 34.3                      | "     | 46.3 | 14.7   | 117 | 75-125 | 3.36 | 20 |       |

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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 |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch B4L0915 - Saturated Paste pH/EC**

| Duplicate (B4L0915-DUP1) |      | Source: E4L0037-01 |          |  | Prepared: 12/09/2024 Analyzed: 12/09/2024 |  |  |       |    |  |
|--------------------------|------|--------------------|----------|--|---|--|--|-------|----|--|
| pH                       | 8.36 |                    | pH Units |  | 8.35                                      |  |  | 0.120 | 25 |  |

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### 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.

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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