



March 17, 2015

Olsson Associates

Jason Davidson

4690 Table Mountain Drive

Golden

CO 80403

Project Name - Razor 27 J Spill

Project Number - 2013-2596

Attached are your analytical results for Razor 27 J Spill received by Origins Laboratory, Inc. March 10, 2015. This project is associated with Origins project number X503096-01.

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.
303.433.1322
o-squad@oelabinc.com



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

Olsson Associates

4690 Table Mountain Drive

Golden CO 80403

Jason Davidson

Project Number: 2013-2596

Project: Razor 27 J Spill

CROSS REFERENCE REPORT

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---------------|---------------|--------|---------------------|------------------|
| Razor 27 J-3R | X503096-01 | Soil | March 9, 2015 14:30 | 03/10/2015 13:15 |

Origins Laboratory, Inc.



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ORIGINS LABORATORY, INC

Client: Olsson Associates Project Manager/Send Report To: Jason Davidson

Address: 4690 Table Mountain Dr. Ste 200 Email Address: jason@olssonassociates.com

Golden, CO 80403 Project Name/Number: Razor 27 J Spill 013-2596

Telephone Number: 303-437-2072 Samples Collected By: Brendan Lee

| Sample ID Description | Date Sampled | Time Sampled | # of Containers | Preservative | | | | Matrix | | | Analysis/Method | Sample Instructions |
|--|----------------------|----------------------|------------------------------------|----------------------|----------------------|--|-------|-------------|------|-------------|-----------------|---------------------|
| | | | | Unpreserved | HCl | HNO ₃ | Other | Groundwater | Soil | Air Summa # | | |
| Razor 27 J-K | 3/9/15 | 2:30 pm | 1 | X | | | | | X | | pH | 1 |
| | | | | | | | | | | | | 2 |
| | | | | | | | | | | | | 3 |
| | | | | | | | | | | | | 4 |
| | | | | | | | | | | | | 5 |
| | | | | | | | | | | | | 6 |
| | | | | | | | | | | | | 7 |
| | | | | | | | | | | | | 8 |
| | | | | | | | | | | | | 9 |
| | | | | | | | | | | | | 10 |
| Relinquished By: <u>Brendan Lee</u> | Date: <u>3/10/15</u> | Time: <u>7:00 am</u> | Received By: <u>Jason Davidson</u> | Date: <u>3/10/15</u> | Time: <u>7:00 am</u> | Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 5.8 | | | | | | |
| Relinquished By: <u>Jason Davidson</u> | Date: <u>3/10/15</u> | Time: <u>1:15 PM</u> | Received By: <u>Jason Davidson</u> | Date: <u>3/10/15</u> | Time: <u>1:15 PM</u> | | | | | | | |

Date Results Needed:

Origins Laboratory, Inc.

Jefe Pellegrini

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Project Number: 2013-2596
Project: Razor 27 J Spill

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X503096

Client: Olsson Associates

Client Project ID: Razor 27 J Spill

Checklist Completed by: Jeff Smith

Shipped Via: H/D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 3/10/15

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 1 / 5.8 °C 1 / _____ °C 1 / _____ °C (Describe)

Thermometer ID: T003

| 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"/> | | | |
| 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 ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Was adequate sample volume provided ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ? | <input checked="" type="checkbox"/> | | | |
| Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ? | <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 ⁽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 checked="" 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) JP

3/11/15
Date/Time Reviewed

Origins Laboratory, Inc.

Jeff Pellegrini

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Razor 27 J-3R

3/9/2015 2:30:00PM

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

Origins Laboratory, Inc.

X503096-01 (Soil)

pH in Soil by EPA 9045D

| | | | | | | |
|----|------|----------|---|---------|------------|------------|
| pH | 8.97 | pH Units | 1 | 5C11005 | 03/11/2015 | 03/11/2015 |
|----|------|----------|---|---------|------------|------------|

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Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

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

Batch 5C11005 - NO PREP

Duplicate (5C11005-DUP1)

Source: X503105-01

Prepared: 03/11/2015 Analyzed: 03/11/2015

| | | | | | | | | | | |
|----|------|--|----------|--|------|--|--|-------|----|--|
| pH | 8.97 | | pH Units | | 8.93 | | | 0.447 | 25 | |
|----|------|--|----------|--|------|--|--|-------|----|--|

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Jen Pellegrini For Noelle Doyle Mathis, President

Olsson Associates

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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 at a wet weight basis.

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Jen Pellegrini For Noelle Doyle Mathis, President