



12/15/2021

ERM  
Mr. Shawn Wiggins  
804 Main Street  
Baton Rouge, LA, 70802

Ref: Report Number: 21-326-0006  
Project Description: Neumin  
Project # 0494259

Dear Mr. Shawn Wiggins:

Waypoint Analytical Louisiana, Inc. received sample(s) on 11/22/2021 for the analyses presented in the following report. The above referenced project has been analyzed per your instructions. Unless otherwise noted, the analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and /or 40 CFR part 136.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance. Analyses reported which indicate "Field" for these parameters were analyzed by the client in the field. Results for solid samples are reported on an as received or "wet weight" basis unless otherwise specified.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2021) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

All quality control measures undertaken in accordance with Waypoint Analytical Louisiana, Inc. CompQAP990807A and revisions under the terms of the Louisiana Environmental Laboratory Accreditation Program (Certificate #02041) are within acceptance ranges established in that document with the exception of the items indicated and/or discussed in a Case Narrative.

The results are shown on the attached analysis sheet(s). Be aware that the time analyzed for certain samples (e.g. - BOD, CBOD, etc.) refer to the time the sample batch was begun and not necessarily to the time an individual sample was begun. Thank you for allowing Waypoint Analytical Louisiana, Inc. to serve you. Should I be of further assistance, if you have any questions or need additional information please contact me or client services.

Sincerely,

Anthony J. Albert  
Laboratory Director

*Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis. This report may be reproduced in full only with the written permission of the laboratory and/or the entity to which it is addressed. Results contained herein relate only to the sample(s) submitted to the laboratory.*



## Certification Summary

**Laboratory ID: WP MLA: Waypoint Analytical Louisiana, Inc., Marrero, LA**

| State     | Program               | Lab ID | Expiration Date |
|-----------|-----------------------|--------|-----------------|
| Georgia   | State Program         | 02041  | 06/30/2022      |
| Louisiana | State Program - NELAP | 02041  | 06/30/2022      |

**Laboratory ID: WP MTN: Waypoint Analytical, LLC., Memphis, TN**

| State          | Program               | Lab ID     | Expiration Date |
|----------------|-----------------------|------------|-----------------|
| Alabama        | State Program         | 40750      | 02/28/2022      |
| Arkansas       | State Program         | 88-0650    | 02/07/2022      |
| California     | State Program         | 2904       | 06/30/2022      |
| Florida        | State Program - NELAP | E871157    | 06/30/2022      |
| Georgia        | State Program         | C044       | 02/18/2023      |
| Georgia        | State Program         | 04015      | 06/30/2022      |
| Illinois       | State Program - NELAP | 200078     | 10/10/2022      |
| Kentucky       | State Program         | 80215      | 06/30/2022      |
| Kentucky       | State Program         | KY90047    | 12/31/2021      |
| Louisiana      | State Program - NELAP | LA037      | 12/31/2021      |
| Louisiana      | State Program - NELAP | 04015      | 06/30/2022      |
| Mississippi    | State Program         | MS         | 02/11/2023      |
| North Carolina | State Program         | 415        | 12/31/2021      |
| Pennsylvania   | State Program - NELAP | 68-03195   | 05/31/2022      |
| South Carolina | State Program         | 84002      | 06/30/2022      |
| South Carolina | State Program         | 84002      | 06/30/2022      |
| Tennessee      | State Program         | 02027      | 02/11/2023      |
| Texas          | State Program - NELAP | T104704180 | 09/30/2022      |
| Virginia       | State Program         | 00106      | 06/30/2022      |
| Virginia       | State Program - NELAP | 460181     | 09/14/2022      |

**Laboratory ID: WP RMS: Waypoint Analytical Mississippi, Inc., Ridgeland, MS**

| State          | Program               | Lab ID  | Expiration Date |
|----------------|-----------------------|---------|-----------------|
| Arkansas       | State Program         | 88-1409 | 02/01/2022      |
| Kentucky       | State Program         | KY98013 | 12/31/2021      |
| Louisiana      | State Program - NELAP | 04023   | 06/30/2022      |
| North Carolina | State Program         | 694     | 12/31/2021      |

**Sample Summary Table**

**Report Number:** 21-326-0006  
**Client Project Description:** Neumin  
Project # 0494259

| Lab No | Client Sample ID | Matrix      | Date Collected   | Date Received | Method   | Lab ID |
|--------|------------------|-------------|------------------|---------------|----------|--------|
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    |          |        |
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    | MAEPH LA | WP MTN |
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    | 6020B    | WP MTN |
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    | 7470A    | WP MTN |
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    | MAVPH LA | WP RMS |
| 59259  | SE-SB36          | Groundwater | 11/18/2021 12:45 | 11/22/2021    | 8260B    | WP RMS |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    |          |        |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    | 6020B    | WP MTN |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    | MAEPH LA | WP MTN |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    | 7470A    | WP MTN |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    | 8260B    | WP RMS |
| 59260  | SE-SB35          | Groundwater | 11/18/2021 13:45 | 11/22/2021    | MAVPH LA | WP RMS |
| 59261  | SE-SB27 3'-5'    | Solids      | 11/16/2021 13:12 | 11/22/2021    | 8270D    | WP MTN |
| 59261  | SE-SB27 3'-5'    | Solids      | 11/16/2021 13:12 | 11/22/2021    | MAVPH LA | WP MTN |
| 59261  | SE-SB27 3'-5'    | Solids      | 11/16/2021 13:12 | 11/22/2021    | MAEPH LA | WP MTN |
| 59262  | SE-SB27 5'-7'    | Solids      | 11/16/2021 13:25 | 11/22/2021    | 8270D    | WP MTN |
| 59262  | SE-SB27 5'-7'    | Solids      | 11/16/2021 13:25 | 11/22/2021    | MAVPH LA | WP MTN |
| 59262  | SE-SB27 5'-7'    | Solids      | 11/16/2021 13:25 | 11/22/2021    | MAEPH LA | WP MTN |
| 59263  | SE-SB27 8'-10'   | Solids      | 11/16/2021 13:27 | 11/22/2021    | 8270D    | WP MTN |
| 59263  | SE-SB27 8'-10'   | Solids      | 11/16/2021 13:27 | 11/22/2021    | MAVPH LA | WP MTN |
| 59263  | SE-SB27 8'-10'   | Solids      | 11/16/2021 13:27 | 11/22/2021    | MAEPH LA | WP MTN |
| 59264  | SE-SB27 10'-12'  | Solids      | 11/16/2021 13:50 | 11/22/2021    | 8270D    | WP MTN |
| 59264  | SE-SB27 10'-12'  | Solids      | 11/16/2021 13:50 | 11/22/2021    | MAVPH LA | WP MTN |
| 59264  | SE-SB27 10'-12'  | Solids      | 11/16/2021 13:50 | 11/22/2021    | MAEPH LA | WP MTN |
| 59265  | SE-SB31 8'-10'   | Solids      | 11/17/2021 11:25 | 11/22/2021    | 8270D    | WP MTN |
| 59265  | SE-SB31 8'-10'   | Solids      | 11/17/2021 11:25 | 11/22/2021    | MAVPH LA | WP MTN |

WP MTN - Memphis, TN: Waypoint Analytical - TN, Memphis, TN

WP RMS - Ridgeland, MS: Waypoint Analytical - Mississippi, Inc., Ridgeland, MS



**Sample Summary Table**

**Report Number:** 21-326-0006  
**Client Project Description:** Neumin  
Project # 0494259

| Lab No | Client Sample ID | Matrix | Date Collected   | Date Received | Method   | Lab ID |
|--------|------------------|--------|------------------|---------------|----------|--------|
| 59265  | SE-SB31 8'-10'   | Solids | 11/17/2021 11:25 | 11/22/2021    | MAEPH LA | WP MTN |

Summary of Detected Analytes

**Project:** Neumin  
**Report Number:** 21-326-0006

| Client Sample ID | Lab Sample ID | Method         | Parameters             | Result | Units | Report Limit | Analyzed         | Qualifiers |
|------------------|---------------|----------------|------------------------|--------|-------|--------------|------------------|------------|
| <b>SE-SB36</b>   |               | <b>A 59259</b> |                        |        |       |              |                  |            |
| 2320B-2011       |               |                | Alkalinity (as CaCO3)  | 288    | mg/L  | 10           | 12/02/2021 09:35 |            |
| 2320B-2011       |               |                | Bicarbonate            | 288    | mg/L  | 10           | 12/02/2021 09:35 |            |
| 2540C-2011       |               |                | Total Dissolved Solids | 609    | mg/L  | 10           | 11/22/2021 14:25 |            |
| 6020B            |               |                | Arsenic                | 0.0025 | mg/L  | 0.0010       | 12/04/2021 00:34 |            |
| 6020B            |               |                | Barium                 | 0.247  | mg/L  | 0.010        | 12/09/2021 22:32 |            |
| 6020B            |               |                | Dissolved Barium       | 0.052  | mg/L  | 0.001        | 12/03/2021 00:58 |            |
| 6020B            |               |                | Chromium               | 0.012  | mg/L  | 0.001        | 12/04/2021 00:34 |            |
| 6020B            |               |                | Iron                   | 3.51   | mg/L  | 0.100        | 12/03/2021 01:19 |            |
| 6020B            |               |                | Lead                   | 0.0131 | mg/L  | 0.0010       | 12/03/2021 01:19 |            |
| 6020B            |               |                | Manganese              | 1.63   | mg/L  | 0.001        | 12/03/2021 01:19 |            |
| 6020B            |               |                | Dissolved Manganese    | 0.389  | mg/L  | 0.001        | 12/03/2021 00:58 |            |
| 6020B            |               |                | Strontium              | 0.676  | mg/L  | 0.010        | 12/09/2021 22:32 |            |
| 6020B            |               |                | Dissolved Strontium    | 0.546  | mg/L  | 0.010        | 12/09/2021 22:23 |            |
| 6020B            |               |                | Zinc                   | 0.029  | mg/L  | 0.010        | 12/03/2021 01:19 |            |
| EPA-300.0        |               |                | Chloride               | 56.8   | mg/L  | 2.00         | 11/22/2021 17:16 |            |
| EPA-300.0        |               |                | Sulfate                | 151    | mg/L  | 2.50         | 11/22/2021 17:16 |            |
| MAEPH LA         |               |                | Aliphatic >C16-C35     | 0.287  | mg/L  | 0.217        | 12/06/2021 14:59 |            |
| SM 3111B         |               |                | Calcium                | 28.3   | mg/L  | 10.0         | 12/08/2021 10:43 |            |
| SM 3111B         |               |                | Magnesium              | 52.5   | mg/L  | 10.0         | 12/08/2021 11:59 |            |
| SM 3111B         |               |                | Potassium              | 9.98   | mg/L  | 2.00         | 12/08/2021 15:26 |            |
| SM 3111B         |               |                | Sodium                 | 91.3   | mg/L  | 2.00         | 12/08/2021 16:07 |            |
| <b>SE-SB35</b>   |               | <b>A 59260</b> |                        |        |       |              |                  |            |
| 2320B-2011       |               |                | Alkalinity (as CaCO3)  | 194    | mg/L  | 10           | 12/02/2021 09:35 |            |
| 2320B-2011       |               |                | Bicarbonate            | 194    | mg/L  | 10           | 12/02/2021 09:35 |            |
| 2540C-2011       |               |                | Total Dissolved Solids | 629    | mg/L  | 10           | 11/22/2021 14:25 |            |
| 6020B            |               |                | Barium                 | 0.070  | mg/L  | 0.001        | 12/03/2021 01:24 |            |
| 6020B            |               |                | Dissolved Barium       | 0.062  | mg/L  | 0.001        | 12/03/2021 01:02 |            |
| 6020B            |               |                | Iron                   | 0.170  | mg/L  | 0.100        | 12/03/2021 01:24 |            |
| 6020B            |               |                | Manganese              | 0.154  | mg/L  | 0.001        | 12/03/2021 01:24 |            |
| 6020B            |               |                | Dissolved Manganese    | 0.109  | mg/L  | 0.001        | 12/03/2021 01:02 |            |
| 6020B            |               |                | Strontium              | 0.583  | mg/L  | 0.010        | 12/09/2021 22:36 |            |
| 6020B            |               |                | Dissolved Strontium    | 0.583  | mg/L  | 0.010        | 12/09/2021 22:36 |            |
| EPA-300.0        |               |                | Chloride               | 91.7   | mg/L  | 2.00         | 11/22/2021 17:29 |            |
| EPA-300.0        |               |                | Sulfate                | 179    | mg/L  | 2.50         | 11/22/2021 17:29 |            |
| MAEPH LA         |               |                | Aliphatic >C16-C35     | 0.265  | mg/L  | 0.227        | 12/06/2021 15:23 |            |
| SM 3111B         |               |                | Calcium                | 67.4   | mg/L  | 10.0         | 12/08/2021 10:44 |            |

**Summary of Detected Analytes**

**Project:** Neumin  
**Report Number:** 21-326-0006

| Client Sample ID       | Lab Sample ID    |        |       |              |                  |            |
|------------------------|------------------|--------|-------|--------------|------------------|------------|
| Method                 | Parameters       | Result | Units | Report Limit | Analyzed         | Qualifiers |
| <b>SE-SB35</b>         | <b>A 59260</b>   |        |       |              |                  |            |
| SM 3111B               | Magnesium        | 28.9   | mg/L  | 10.0         | 12/08/2021 12:00 |            |
| SM 3111B               | Sodium           | 73.4   | mg/L  | 2.00         | 12/08/2021 16:08 |            |
| <b>SE-SB27 5'-7'</b>   | <b>A 59262</b>   |        |       |              |                  |            |
| MAVPH LA               | Aliphatic >C6-C8 | 2.16   | mg/Kg | 2.14         | 11/30/2021 21:49 |            |
| <b>SE-SB27 8'-10'</b>  | <b>A 59263</b>   |        |       |              |                  |            |
| MAVPH LA               | Aliphatic >C6-C8 | 2.33   | mg/Kg | 2.26         | 11/30/2021 22:30 |            |
| <b>SE-SB27 10'-12'</b> | <b>A 59264</b>   |        |       |              |                  |            |
| MAVPH LA               | Aliphatic >C6-C8 | 2.19   | mg/Kg | 2.19         | 11/30/2021 23:11 |            |
| <b>SE-SB31 8'-10'</b>  | <b>A 59265</b>   |        |       |              |                  |            |
| MAVPH LA               | Aliphatic >C6-C8 | 2.86   | mg/Kg | 2.02         | 11/30/2021 23:52 |            |

01308  
 ERM  
 Mr. Shawn Wiggins  
 804 Main Street  
 Baton Rouge , LA 70802

Project Neumin  
 Information : Project # 0494259

Report Date : 12/15/2021  
 Received : 11/22/2021



Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
 Laboratory Director

Lab No : **59259**  
 Sample ID : **SE-SB36**

Matrix: **Groundwater**  
 Sampled: **11/18/2021 12:45**

| Test                            | Results       | Units | MQL    | DF | Date / Time Analyzed | By  | Analytical Method |
|---------------------------------|---------------|-------|--------|----|----------------------|-----|-------------------|
| Carbonate                       | <10           | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Bicarbonate                     | <b>288</b>    | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Hydroxide Alkalinity (as CaCO3) | <10           | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Aromatic >C8-C10 A              | <5.00         | µg/L  | 5.00   | 1  | 11/29/21 19:13       | CCK | MAVPH LA          |
| Aromatic >C8-C10 B              | <5.00         | µg/L  | 5.00   | 1  | 11/29/21 19:13       | CCK | MAVPH LA          |
| Sulfate                         | <b>151</b>    | mg/L  | 2.50   | 1  | 11/22/21 17:16       | MJM | EPA-300.0         |
| Aliphatic >C6-C8                | <5.00         | µg/L  | 5.00   | 1  | 11/29/21 19:13       | CCK | MAVPH LA          |
| Aliphatic >C8-C10               | <13.0         | µg/L  | 13.0   | 1  | 11/29/21 19:13       | CCK | MAVPH LA          |
| Aromatic >C8-C10                | <5.00         | µg/L  | 5.00   | 1  | 11/29/21 19:13       |     | MAVPH LA          |
| Aliphatic >C10-C12              | <0.130        | mg/L  | 0.130  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aliphatic >C12-C16              | <0.130        | mg/L  | 0.130  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aliphatic >C16-C35              | <b>0.287</b>  | mg/L  | 0.217  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aromatic >C10-C12               | <0.130        | mg/L  | 0.130  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aromatic >C12-C16               | <0.130        | mg/L  | 0.130  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aromatic >C16-C21               | <0.130        | mg/L  | 0.130  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Aromatic >C21-C35               | <0.152        | mg/L  | 0.152  | 1  | 12/06/21 14:59       | MMK | MAEPH LA          |
| Alkalinity (as CaCO3)           | <b>288</b>    | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Chloride                        | <b>56.8</b>   | mg/L  | 2.00   | 1  | 11/22/21 17:16       | MJM | EPA-300.0         |
| Total Dissolved Solids          | <b>609</b>    | mg/L  | 10     | 1  | 11/22/21 14:25       | MJM | 2540C-2011        |
| Arsenic                         | <b>0.0025</b> | mg/L  | 0.0010 | 1  | 12/04/21 00:34       | BKN | 6020B             |
| Dissolved Arsenic               | <0.0010       | mg/L  | 0.0010 | 1  | 12/03/21 15:29       | BKN | 6020B             |
| Barium                          | <b>0.247</b>  | mg/L  | 0.010  | 10 | 12/09/21 22:32       | JTR | 6020B             |
| Dissolved Barium                | <b>0.052</b>  | mg/L  | 0.001  | 1  | 12/03/21 00:58       | BKN | 6020B             |

| Qualifiers/Definitions | * | Outside QC Limit | DF  | Dilution Factor           |
|------------------------|---|------------------|-----|---------------------------|
|                        | L | Limit Exceeded   | MQL | Method Quantitation Limit |

01308  
ERM  
Mr. Shawn Wiggins  
804 Main Street  
Baton Rouge , LA 70802

Project Neumin  
Information : Project # 0494259

Report Date : 12/15/2021  
Received : 11/22/2021



Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59259**  
Sample ID : **SE-SB36**

Matrix: **Groundwater**  
Sampled: **11/18/2021 12:45**

| Test                | Results       | Units | MQL     | DF | Date / Time Analyzed | By  | Analytical Method |
|---------------------|---------------|-------|---------|----|----------------------|-----|-------------------|
| Calcium             | <b>28.3</b>   | mg/L  | 10.0    | 10 | 12/08/21 10:43       | APB | SM 3111B          |
| Cadmium             | <0.0010       | mg/L  | 0.0010  | 1  | 12/03/21 01:19       | BKN | 6020B             |
| Dissolved Cadmium   | <0.0010       | mg/L  | 0.0010  | 1  | 12/03/21 00:58       | BKN | 6020B             |
| Chromium            | <b>0.012</b>  | mg/L  | 0.001   | 1  | 12/04/21 00:34       | BKN | 6020B             |
| Dissolved Chromium  | <1.00         | µg/L  | 1.00    | 1  | 12/03/21 15:29       | BKN | 6020B             |
| Iron                | <b>3.51</b>   | mg/L  | 0.100   | 1  | 12/03/21 01:19       | BKN | 6020B             |
| Dissolved Iron      | <0.100        | mg/L  | 0.100   | 1  | 12/03/21 00:58       | BKN | 6020B             |
| Lead                | <b>0.0131</b> | mg/L  | 0.0010  | 1  | 12/03/21 01:19       | BKN | 6020B             |
| Dissolved Lead      | <1.00         | µg/L  | 1.00    | 1  | 12/03/21 00:58       | BKN | 6020B             |
| Magnesium           | <b>52.5</b>   | mg/L  | 10.0    | 10 | 12/08/21 11:59       | APB | SM 3111B          |
| Manganese           | <b>1.63</b>   | mg/L  | 0.001   | 1  | 12/03/21 01:19       | BKN | 6020B             |
| Dissolved Manganese | <b>0.389</b>  | mg/L  | 0.001   | 1  | 12/03/21 00:58       | BKN | 6020B             |
| Mercury             | <0.00020      | mg/L  | 0.00020 | 1  | 12/06/21 14:43       | TJS | 7470A             |
| Dissolved Mercury   | <0.00020      | mg/L  | 0.00020 | 1  | 12/14/21 12:06       | JW2 | 7470A             |
| Potassium           | <b>9.98</b>   | mg/L  | 2.00    | 2  | 12/08/21 15:26       | APB | SM 3111B          |
| Sodium              | <b>91.3</b>   | mg/L  | 2.00    | 2  | 12/08/21 16:07       | APB | SM 3111B          |
| Strontium           | <b>0.676</b>  | mg/L  | 0.010   | 10 | 12/09/21 22:32       | JTR | 6020B             |
| Dissolved Strontium | <b>546</b>    | µg/L  | 10.0    | 10 | 12/09/21 22:23       | JTR | 6020B             |
| Zinc                | <b>0.029</b>  | mg/L  | 0.010   | 1  | 12/03/21 01:19       | BKN | 6020B             |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded

DF Dilution Factor  
MQL Method Quantitation Limit





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ERM  
Mr. Shawn Wiggins  
804 Main Street  
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Project Neumin  
Information : Project # 0494259

Report Date : 12/15/2021  
Received : 11/22/2021



Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59260**  
Sample ID : **SE-SB35**

Matrix: **Groundwater**  
Sampled: **11/18/2021 13:45**

| Test                            | Results      | Units | MQL    | DF | Date / Time Analyzed | By  | Analytical Method |
|---------------------------------|--------------|-------|--------|----|----------------------|-----|-------------------|
| Carbonate                       | <10          | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Bicarbonate                     | <b>194</b>   | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Hydroxide Alkalinity (as CaCO3) | <10          | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Aromatic >C8-C10 A              | <5.00        | µg/L  | 5.00   | 1  | 11/29/21 19:36       | CCK | MAVPH LA          |
| Aromatic >C8-C10 B              | <5.00        | µg/L  | 5.00   | 1  | 11/29/21 19:36       | CCK | MAVPH LA          |
| Sulfate                         | <b>179</b>   | mg/L  | 2.50   | 1  | 11/22/21 17:29       | MJM | EPA-300.0         |
| Aliphatic >C6-C8                | <5.00        | µg/L  | 5.00   | 1  | 11/29/21 19:36       | CCK | MAVPH LA          |
| Aliphatic >C8-C10               | <13.0        | µg/L  | 13.0   | 1  | 11/29/21 19:36       | CCK | MAVPH LA          |
| Aromatic >C8-C10                | <5.00        | µg/L  | 5.00   | 1  | 11/29/21 19:36       |     | MAVPH LA          |
| Aliphatic >C10-C12              | <0.136       | mg/L  | 0.136  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aliphatic >C12-C16              | <0.136       | mg/L  | 0.136  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aliphatic >C16-C35              | <b>0.265</b> | mg/L  | 0.227  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aromatic >C10-C12               | <0.136       | mg/L  | 0.136  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aromatic >C12-C16               | <0.136       | mg/L  | 0.136  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aromatic >C16-C21               | <0.136       | mg/L  | 0.136  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Aromatic >C21-C35               | <0.159       | mg/L  | 0.159  | 1  | 12/06/21 15:23       | MMK | MAEPH LA          |
| Alkalinity (as CaCO3)           | <b>194</b>   | mg/L  | 10     | 1  | 12/02/21 09:35       | APB | 2320B-2011        |
| Chloride                        | <b>91.7</b>  | mg/L  | 2.00   | 1  | 11/22/21 17:29       | MJM | EPA-300.0         |
| Total Dissolved Solids          | <b>629</b>   | mg/L  | 10     | 1  | 11/22/21 14:25       | MJM | 2540C-2011        |
| Arsenic                         | <0.0010      | mg/L  | 0.0010 | 1  | 12/04/21 00:38       | BKN | 6020B             |
| Dissolved Arsenic               | <0.0010      | mg/L  | 0.0010 | 1  | 12/03/21 15:35       | BKN | 6020B             |
| Barium                          | <b>0.070</b> | mg/L  | 0.001  | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Barium                | <b>0.062</b> | mg/L  | 0.001  | 1  | 12/03/21 01:02       | BKN | 6020B             |

| Qualifiers/Definitions | * | Outside QC Limit | DF  | Dilution Factor           |
|------------------------|---|------------------|-----|---------------------------|
|                        | L | Limit Exceeded   | MQL | Method Quantitation Limit |

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Project Neumin  
Information : Project # 0494259

Report Date : 12/15/2021  
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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59260**  
Sample ID : **SE-SB35**

Matrix: **Groundwater**  
Sampled: **11/18/2021 13:45**

| Test                | Results      | Units | MQL     | DF | Date / Time Analyzed | By  | Analytical Method |
|---------------------|--------------|-------|---------|----|----------------------|-----|-------------------|
| Calcium             | <b>67.4</b>  | mg/L  | 10.0    | 10 | 12/08/21 10:44       | APB | SM 3111B          |
| Cadmium             | <0.0010      | mg/L  | 0.0010  | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Cadmium   | <0.0010      | mg/L  | 0.0010  | 1  | 12/03/21 01:02       | BKN | 6020B             |
| Chromium            | <0.001       | mg/L  | 0.001   | 1  | 12/04/21 00:38       | BKN | 6020B             |
| Dissolved Chromium  | <1.00        | µg/L  | 1.00    | 1  | 12/03/21 15:35       | BKN | 6020B             |
| Iron                | <b>0.170</b> | mg/L  | 0.100   | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Iron      | <0.100       | mg/L  | 0.100   | 1  | 12/03/21 01:02       | BKN | 6020B             |
| Lead                | <0.0010      | mg/L  | 0.0010  | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Lead      | <1.00        | µg/L  | 1.00    | 1  | 12/03/21 01:02       | BKN | 6020B             |
| Magnesium           | <b>28.9</b>  | mg/L  | 10.0    | 10 | 12/08/21 12:00       | APB | SM 3111B          |
| Manganese           | <b>0.154</b> | mg/L  | 0.001   | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Manganese | <b>0.109</b> | mg/L  | 0.001   | 1  | 12/03/21 01:02       | BKN | 6020B             |
| Mercury             | <0.00020     | mg/L  | 0.00020 | 1  | 12/06/21 14:45       | TJS | 7470A             |
| Dissolved Mercury   | <0.00020     | mg/L  | 0.00020 | 1  | 12/14/21 12:08       | JW2 | 7470A             |
| Potassium           | <2.00        | mg/L  | 2.00    | 2  | 12/08/21 15:27       | APB | SM 3111B          |
| Sodium              | <b>73.4</b>  | mg/L  | 2.00    | 2  | 12/08/21 16:08       | APB | SM 3111B          |
| Strontium           | <b>0.583</b> | mg/L  | 0.010   | 10 | 12/09/21 22:36       | JTR | 6020B             |
| Dissolved Strontium | <b>583</b>   | µg/L  | 10.0    | 10 | 12/09/21 22:36       | JTR | 6020B             |
| Zinc                | <0.010       | mg/L  | 0.010   | 1  | 12/03/21 01:24       | BKN | 6020B             |
| Dissolved Zinc      | <10.0        | µg/L  | 10.0    | 1  | 12/03/21 01:02       | BKN | 6020B             |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded

DF Dilution Factor  
MQL Method Quantitation Limit



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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59261**

Matrix: **Solids**

Sample ID : **SE-SB27 3'-5'**

Sampled: **11/16/2021 13:12**

| Test                        | Results | Units | MQL             | DF  | Date / Time Analyzed | By  | Analytical Method |
|-----------------------------|---------|-------|-----------------|-----|----------------------|-----|-------------------|
| Aliphatic >C10-C12          | <2000   | µg/Kg | 2000            | 1   | 12/02/21 13:40       | MMK | MAEPH LA          |
| Aliphatic >C6-C8            | <2190   | µg/Kg | 2190            | 100 | 11/30/21 21:08       | HRS | MAVPH LA          |
| Aliphatic >C12-C16          | <2000   | µg/Kg | 2000            | 1   | 12/02/21 13:40       | MMK | MAEPH LA          |
| Aliphatic >C8-C10           | <4390   | µg/Kg | 4390            | 100 | 11/30/21 21:08       | HRS | MAVPH LA          |
| Aliphatic >C16-C35          | <4000   | µg/Kg | 4000            | 1   | 12/02/21 13:40       | MMK | MAEPH LA          |
| Aromatic >C8-C10            | <2920   | µg/Kg | 2920            | 100 | 11/30/21 21:08       | HRS | MAVPH LA          |
| Aromatic >C10-C12           | <1000   | µg/Kg | 1000            | 1   | 12/02/21 11:53       | MMK | MAEPH LA          |
| Aromatic >C12-C16           | <2000   | µg/Kg | 2000            | 1   | 12/02/21 11:53       | MMK | MAEPH LA          |
| Aromatic >C16-C21           | <2000   | µg/Kg | 2000            | 1   | 12/02/21 11:53       | MMK | MAEPH LA          |
| Aromatic >C21-C35           | <2000   | µg/Kg | 2000            | 1   | 12/02/21 11:53       | MMK | MAEPH LA          |
| Surrogate: Chlorooctadecane | 58.0    |       | Limits: 40-140% | 1   | 12/02/21 13:40       | MMK | MAEPH LA          |
| Surrogate: OTP Surrogate    | 95.2    |       | Limits: 40-140% | 1   | 12/02/21 11:53       | MMK | MAEPH LA          |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded  
DF Dilution Factor  
MQL Method Quantitation Limit

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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59262**

Matrix: **Solids**

Sample ID : **SE-SB27 5'-7'**

Sampled: **11/16/2021 13:25**

| Test                        | Results     | Units | MQL             | DF  | Date / Time Analyzed | By  | Analytical Method |
|-----------------------------|-------------|-------|-----------------|-----|----------------------|-----|-------------------|
| Aliphatic >C10-C12          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 14:04       | MMK | MAEPH LA          |
| Aliphatic >C6-C8            | <b>2160</b> | µg/Kg | 2140            | 100 | 11/30/21 21:49       | HRS | MAVPH LA          |
| Aliphatic >C12-C16          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 14:04       | MMK | MAEPH LA          |
| Aliphatic >C8-C10           | <4290       | µg/Kg | 4290            | 100 | 11/30/21 21:49       | HRS | MAVPH LA          |
| Aliphatic >C16-C35          | <4000       | µg/Kg | 4000            | 1   | 12/02/21 14:04       | MMK | MAEPH LA          |
| Aromatic >C8-C10            | <2860       | µg/Kg | 2860            | 100 | 11/30/21 21:49       | HRS | MAVPH LA          |
| Aromatic >C10-C12           | <1000       | µg/Kg | 1000            | 1   | 12/02/21 12:17       | MMK | MAEPH LA          |
| Aromatic >C12-C16           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 12:17       | MMK | MAEPH LA          |
| Aromatic >C16-C21           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 12:17       | MMK | MAEPH LA          |
| Aromatic >C21-C35           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 12:17       | MMK | MAEPH LA          |
| Surrogate: Chlorooctadecane | 51.6        |       | Limits: 40-140% | 1   | 12/01/21 21:28       | MMK | MAEPH LA          |
| Surrogate: OTP Surrogate    | 84.8        |       | Limits: 40-140% | 1   | 12/02/21 12:17       | MMK | MAEPH LA          |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded  
DF Dilution Factor  
MQL Method Quantitation Limit

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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59263**

Matrix: **Solids**

Sample ID : **SE-SB27 8'-10'**

Sampled: **11/16/2021 13:27**

| Test                        | Results     | Units | MQL             | DF  | Date / Time Analyzed | By  | Analytical Method |
|-----------------------------|-------------|-------|-----------------|-----|----------------------|-----|-------------------|
| Aliphatic >C10-C12          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 14:27       | MMK | MAEPH LA          |
| Aliphatic >C6-C8            | <b>2330</b> | µg/Kg | 2260            | 100 | 11/30/21 22:30       | HRS | MAVPH LA          |
| Aliphatic >C12-C16          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 14:27       | MMK | MAEPH LA          |
| Aliphatic >C8-C10           | <4520       | µg/Kg | 4520            | 100 | 11/30/21 22:30       | HRS | MAVPH LA          |
| Aliphatic >C16-C35          | <4000       | µg/Kg | 4000            | 1   | 12/02/21 14:27       | MMK | MAEPH LA          |
| Aromatic >C8-C10            | <3010       | µg/Kg | 3010            | 100 | 11/30/21 22:30       | HRS | MAVPH LA          |
| Aromatic >C10-C12           | <1000       | µg/Kg | 1000            | 1   | 12/02/21 16:09       | MMK | MAEPH LA          |
| Aromatic >C12-C16           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:09       | MMK | MAEPH LA          |
| Aromatic >C16-C21           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:09       | MMK | MAEPH LA          |
| Aromatic >C21-C35           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:09       | MMK | MAEPH LA          |
| Surrogate: Chlorooctadecane | 41.5        |       | Limits: 40-140% | 1   | 12/02/21 14:27       | MMK | MAEPH LA          |
| Surrogate: OTP Surrogate    | 53.2        |       | Limits: 40-140% | 1   | 12/02/21 16:09       | MMK | MAEPH LA          |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded  
DF Dilution Factor  
MQL Method Quantitation Limit

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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59264**

Matrix: **Solids**

Sample ID : **SE-SB27 10'-12'**

Sampled: **11/16/2021 13:50**

| Test                        | Results       | Units | MQL             | DF  | Date / Time Analyzed | By  | Analytical Method |
|-----------------------------|---------------|-------|-----------------|-----|----------------------|-----|-------------------|
| Aliphatic >C10-C12          | <2000         | µg/Kg | 2000            | 1   | 12/02/21 14:51       | MMK | MAEPH LA          |
| Aliphatic >C6-C8            | <b>2190</b>   | µg/Kg | 2190            | 100 | 11/30/21 23:11       | HRS | MAVPH LA          |
| Aliphatic >C12-C16          | <2000         | µg/Kg | 2000            | 1   | 12/02/21 14:51       | MMK | MAEPH LA          |
| Aliphatic >C8-C10           | <4380         | µg/Kg | 4380            | 100 | 11/30/21 23:11       | HRS | MAVPH LA          |
| Aliphatic >C16-C35          | <4000         | µg/Kg | 4000            | 1   | 12/02/21 14:51       | MMK | MAEPH LA          |
| Aromatic >C8-C10            | <2920         | µg/Kg | 2920            | 100 | 11/30/21 23:11       | HRS | MAVPH LA          |
| Aromatic >C10-C12           | <1000         | µg/Kg | 1000            | 1   | 12/02/21 16:32       | MMK | MAEPH LA          |
| Aromatic >C12-C16           | <2000         | µg/Kg | 2000            | 1   | 12/02/21 16:32       | MMK | MAEPH LA          |
| Aromatic >C16-C21           | <2000         | µg/Kg | 2000            | 1   | 12/02/21 16:32       | MMK | MAEPH LA          |
| Aromatic >C21-C35           | <2000         | µg/Kg | 2000            | 1   | 12/02/21 16:32       | MMK | MAEPH LA          |
| Surrogate: Chlorooctadecane | <b>34.5 *</b> |       | Limits: 40-140% | 1   | 12/02/21 14:51       | MMK | MAEPH LA          |
| Surrogate: OTP Surrogate    | 79.4          |       | Limits: 40-140% | 1   | 12/02/21 16:32       | MMK | MAEPH LA          |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded  
DF Dilution Factor  
MQL Method Quantitation Limit



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Project Neumin  
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Report Number : **21-326-0006**

**REPORT OF ANALYSIS**

Anthony J. Albert  
Laboratory Director

Lab No : **59265**

Matrix: **Solids**

Sample ID : **SE-SB31 8'-10'**

Sampled: **11/17/2021 11:25**

| Test                        | Results     | Units | MQL             | DF  | Date / Time Analyzed | By  | Analytical Method |
|-----------------------------|-------------|-------|-----------------|-----|----------------------|-----|-------------------|
| Aliphatic >C10-C12          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 15:14       | MMK | MAEPH LA          |
| Aliphatic >C6-C8            | <b>2860</b> | µg/Kg | 2020            | 100 | 11/30/21 23:52       | HRS | MAVPH LA          |
| Aliphatic >C12-C16          | <2000       | µg/Kg | 2000            | 1   | 12/02/21 15:14       | MMK | MAEPH LA          |
| Aliphatic >C8-C10           | <4030       | µg/Kg | 4030            | 100 | 11/30/21 23:52       | HRS | MAVPH LA          |
| Aliphatic >C16-C35          | <4000       | µg/Kg | 4000            | 1   | 12/02/21 15:14       | MMK | MAEPH LA          |
| Aromatic >C8-C10            | <2690       | µg/Kg | 2690            | 100 | 11/30/21 23:52       | HRS | MAVPH LA          |
| Aromatic >C10-C12           | <1000       | µg/Kg | 1000            | 1   | 12/02/21 16:56       | MMK | MAEPH LA          |
| Aromatic >C12-C16           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:56       | MMK | MAEPH LA          |
| Aromatic >C16-C21           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:56       | MMK | MAEPH LA          |
| Aromatic >C21-C35           | <2000       | µg/Kg | 2000            | 1   | 12/02/21 16:56       | MMK | MAEPH LA          |
| Surrogate: Chlorooctadecane | 58.2        |       | Limits: 40-140% | 1   | 12/02/21 15:14       | MMK | MAEPH LA          |
| Surrogate: OTP Surrogate    | 54.5        |       | Limits: 40-140% | 1   | 12/02/21 16:56       | MMK | MAEPH LA          |

**Qualifiers/  
Definitions**

\* Outside QC Limit  
L Limit Exceeded  
DF Dilution Factor  
MQL Method Quantitation Limit

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Analytical Batch:** A70642  
**Analysis Method:** 2320B-2011  
**Analysis Description:** Alkalinity

**Lab Reagent Blank** LRB Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter             | Units | Blank Result | MQL | Analyzed       |
|-----------------------|-------|--------------|-----|----------------|
| Alkalinity (as CaCO3) | mg/L  | < 10         | 10  | 12/02/21 09:35 |

**Duplicate** A 59178-DUP

| Parameter             | Units | Result | DUP Result | RPD | Max RPD | Analyzed       |
|-----------------------|-------|--------|------------|-----|---------|----------------|
| Alkalinity (as CaCO3) | mg/L  | 360    | 360        | 0.0 | 10      | 12/02/21 09:35 |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Analytical Batch:** A70551  
**Analysis Method:** 2540C-2011  
**Analysis Description:** Total Dissolved Solids (TDS)

**Lab Reagent Blank** LRB Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter              | Units | Blank Result | MQL | Analyzed       |
|------------------------|-------|--------------|-----|----------------|
| Total Dissolved Solids | mg/L  | < 10         | 10  | 11/22/21 14:25 |

**Duplicate** A 59178-DUP

| Parameter              | Units | Result | DUP Result | RPD | Max RPD | Analyzed       |
|------------------------|-------|--------|------------|-----|---------|----------------|
| Total Dissolved Solids | mg/L  | 12500  | 12800      | 2.3 | 10      | 11/22/21 14:25 |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L586873  
**QC Prep Batch Method:** 3005A  
**QC Analytical Batch(es):** L587832,L588085  
**Analysis Method:** 6020B  
**Analysis Description:** Metals Analyses

**Lab Reagent Blank** LRB-L586873 Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter           | Units | Blank Result | MQL    | Analyzed       |
|---------------------|-------|--------------|--------|----------------|
| Dissolved Arsenic   | mg/L  | <0.0010      | 0.0010 | 12/03/21 14:59 |
| Dissolved Barium    | mg/L  | <0.001       | 0.001  | 12/03/21 00:32 |
| Dissolved Cadmium   | mg/L  | <0.0010      | 0.0010 | 12/03/21 00:32 |
| Dissolved Chromium  | mg/L  | <0.001       | 0.001  | 12/03/21 14:59 |
| Dissolved Iron      | mg/L  | <0.100       | 0.100  | 12/03/21 00:32 |
| Dissolved Lead      | mg/L  | <0.0010      | 0.0010 | 12/03/21 00:32 |
| Dissolved Manganese | mg/L  | <0.001       | 0.001  | 12/03/21 00:32 |
| Dissolved Strontium | mg/L  | <0.001       | 0.001  | 12/03/21 00:32 |
| Dissolved Zinc      | mg/L  | <0.010       | 0.010  | 12/03/21 00:32 |

**Laboratory Control Sample** LCS-L586873

| Parameter           | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|---------------------|-------|-------------|------------|----------|--------------|
| Dissolved Arsenic   | mg/L  | 0.0500      | 0.0481     | 96.0     | 80-120       |
| Dissolved Barium    | mg/L  | 0.100       | 0.098      | 98.0     | 80-120       |
| Dissolved Cadmium   | mg/L  | 0.0100      | 0.0096     | 97.0     | 80-120       |
| Dissolved Chromium  | mg/L  | 0.100       | 0.087      | 87.0     | 80-120       |
| Dissolved Iron      | mg/L  | 10.0        | 9.48       | 95.0     | 80-120       |
| Dissolved Lead      | mg/L  | 0.0500      | 0.0491     | 98.0     | 80-120       |
| Dissolved Manganese | mg/L  | 0.100       | 0.090      | 91.0     | 80-120       |
| Dissolved Strontium | mg/L  | 0.100       | 0.096      | 97.0     | 80-120       |
| Dissolved Zinc      | mg/L  | 0.500       | 0.481      | 96.0     | 80-120       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L586874      **QC Analytical Batch(es):** L587831,L588085,L588132,L589365  
**QC Prep Batch Method:** 3005A      **Analysis Method:** 6020B  
**Analysis Description:** Metals Analyses

**Lab Reagent Blank**      LRB-L586874      Matrix: AQU  
 Associated Lab Samples: 59259, 59260

| Parameter | Units | Blank Result | MQL    | Analyzed       |
|-----------|-------|--------------|--------|----------------|
| Arsenic   | mg/L  | <0.0010      | 0.0010 | 12/03/21 15:41 |
| Barium    | mg/L  | <0.001       | 0.001  | 12/03/21 01:07 |
| Cadmium   | mg/L  | <0.0010      | 0.0010 | 12/03/21 01:07 |
| Chromium  | mg/L  | <0.001       | 0.001  | 12/03/21 15:41 |
| Iron      | mg/L  | <0.100       | 0.100  | 12/03/21 01:07 |
| Lead      | mg/L  | <0.0010      | 0.0010 | 12/03/21 01:07 |
| Manganese | mg/L  | 0.002        | 0.001  | 12/03/21 01:07 |
| Strontium | mg/L  | 0.001        | 0.001  | 12/03/21 01:07 |
| Zinc      | mg/L  | <0.010       | 0.010  | 12/03/21 01:07 |

**Laboratory Control Sample**      LCS-L586874

| Parameter | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|-----------|-------|-------------|------------|----------|--------------|
| Arsenic   | mg/L  | 0.0500      | 0.0478     | 96.0     | 80-120       |
| Barium    | mg/L  | 0.100       | 0.102      | 102      | 80-120       |
| Cadmium   | mg/L  | 0.0100      | 0.0097     | 97.0     | 80-120       |
| Chromium  | mg/L  | 0.100       | 0.087      | 87.0     | 80-120       |
| Iron      | mg/L  | 10.0        | 9.51       | 95.0     | 80-120       |
| Lead      | mg/L  | 0.0500      | 0.0501     | 100      | 80-120       |
| Manganese | mg/L  | 0.100       | 0.093      | 94.0     | 80-120       |
| Strontium | mg/L  | 0.100       | 0.099      | 99.0     | 80-120       |
| Zinc      | mg/L  | 0.500       | 0.475      | 95.0     | 80-120       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L586874      **QC Analytical Batch(es):** L587831,L588085,L588132,L589365  
**QC Prep Batch Method:** 3005A      **Analysis Method:** 6020B  
**Analysis Description:** Metals Analyses

**Matrix Spike & Matrix Spike Duplicate**      A 59260-MS-L586874      A 59260-MSD-L586874

| Parameter | Units | Result  | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD | Max RPD |
|-----------|-------|---------|----------------|-----------------|-----------|------------|---------|----------|-------------|-----|---------|
| Arsenic   | mg/L  | <0.0010 | 0.0500         | 0.0500          | 0.0462    | 0.0486     | 92.0    | 97.0     | 75-125      | 5.0 | 20      |
| Barium    | mg/L  | 0.070   | 0.100          | 0.100           | 0.164     | 0.170      | 93.0    | 99.0     | 75-125      | 3.5 | 20      |
| Cadmium   | mg/L  | <0.0010 | 0.0100         | 0.0100          | 0.0094    | 0.0096     | 94.0    | 96.0     | 75-125      | 1.9 | 20      |
| Chromium  | mg/L  | <0.001  | 0.100          | 0.100           | 0.086     | 0.090      | 86.0    | 90.0     | 75-125      | 4.6 | 20      |
| Iron      | mg/L  | 0.170   | 10.0           | 10.0            | 9.40      | 9.83       | 92.0    | 97.0     | 75-125      | 4.4 | 20      |
| Lead      | mg/L  | <0.0010 | 0.0500         | 0.0500          | 0.0496    | 0.0505     | 99.0    | 101      | 75-125      | 1.7 | 20      |
| Manganese | mg/L  | 0.154   | 0.100          | 0.100           | 0.235     | 0.243      | 81.0    | 89.0     | 75-125      | 3.3 | 20      |
| Strontium | mg/L  | 0.583   | 0.100          | 0.100           | 0.653     | 0.671      | 70.0*   | 88.0     | 75-125      | 2.7 | 20      |
| Zinc      | mg/L  | <0.010  | 0.500          | 0.500           | 0.454     | 0.468      | 91.0    | 94.0     | 75-125      | 3.0 | 20      |

**Quality Control Data**

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L588173      **QC Analytical Batch(es):** L588361  
**QC Prep Batch Method:** 7470A      **Analysis Method:** 7470A  
**Analysis Description:** Total Aqueous Mercury Analysis - CVAA

**Lab Reagent Blank**      LRB-L588173      Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter | Units | Blank Result | MQL    | Analyzed       |
|-----------|-------|--------------|--------|----------------|
| Mercury   | mg/L  | <0.0002      | 0.0002 | 12/06/21 14:34 |

**Laboratory Control Sample**      LCS-L588173

| Parameter | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|-----------|-------|-------------|------------|----------|--------------|
| Mercury   | mg/L  | 0.0040      | 0.0044     | 110      | 80-120       |

**Matrix Spike & Matrix Spike Duplicate**      A 59260-MS-L588173      A 59260-MSD-L588173

| Parameter | Units | Result  | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD   | Max RPD |
|-----------|-------|---------|----------------|-----------------|-----------|------------|---------|----------|-------------|-------|---------|
| Mercury   | mg/L  | <0.0002 | 0.0040         | 0.0040          | 0.0023    | 0.0032     | 58.0*   | 80.0     | 80-120      | 32.7* | 20      |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

|                                    |  |
|------------------------------------|--|
| <b>QC Prep:</b> L589825            | <b>QC Analytical Batch(es):</b> L590005                            |
| <b>QC Prep Batch Method:</b> 7470A | <b>Analysis Method:</b> 7470A                                      |
|                                    | <b>Analysis Description:</b> Total Aqueous Mercury Analysis - CVAA |

**Lab Reagent Blank** LRB-L589825 Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter         | Units | Blank Result | MQL    | Analyzed       |
|-------------------|-------|--------------|--------|----------------|
| Dissolved Mercury | mg/L  | <0.0002      | 0.0002 | 12/14/21 12:00 |

**Laboratory Control Sample** LCS-L589825

| Parameter         | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|-------------------|-------|-------------|------------|----------|--------------|
| Dissolved Mercury | mg/L  | 0.0040      | 0.0042     | 106      | 80-120       |



### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** G165905      **QC Analytical Batch(es):** G165911  
**QC Prep Batch Method:** 5030B      **Analysis Method:** 8260B  
**Analysis Description:** Volatile Organic Compounds - GC/MS

**Lab Reagent Blank**      LRB-G165905      Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter      | Units | Blank Result | MQL   | Analyzed       | % Recovery | % Rec Limits |
|----------------|-------|--------------|-------|----------------|------------|--------------|
| Benzene        | mg/L  | <0.001       | 0.001 | 11/29/21 11:18 |            |              |
| Ethylbenzene   | mg/L  | <0.001       | 0.001 | 11/29/21 11:18 |            |              |
| Toluene        | mg/L  | <0.002       | 0.002 | 11/29/21 11:18 |            |              |
| o-Xylene       | mg/L  | <0.001       | 0.001 | 11/29/21 11:18 |            |              |
| m,p-Xylene     | mg/L  | <0.002       | 0.002 | 11/29/21 11:18 |            |              |
| Toluene-d8 (S) |       |              |       | 11/29/21 11:18 | 107        | 70-130       |

**Laboratory Control Sample**      LCS-G165905

| Parameter      | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|----------------|-------|-------------|------------|----------|--------------|
| Benzene        | mg/L  | 0.100       | 0.118      | 118      | 80-120       |
| Ethylbenzene   | mg/L  | 0.100       | 0.093      | 93.8     | 80-120       |
| Toluene        | mg/L  | 0.100       | 0.116      | 116      | 80-120       |
| o-Xylene       | mg/L  | 0.100       | 0.092      | 92.7     | 70-130       |
| m,p-Xylene     | mg/L  | 0.200       | 0.191      | 95.5     | 75-125       |
| Toluene-d8 (S) |       |             |            | 110      | 70-130       |

**Matrix Spike & Matrix Spike Duplicate**      G 65655-MS-G165905      G 65655-MSD-G165905

| Parameter    | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD | Max RPD |
|--------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|-----|---------|
| Benzene      | mg/L  | <0.001 | 0.100          | 0.100           | 0.121     | 0.117      | 121     | 117      | 70-130      | 3.3 | 30      |
| Ethylbenzene | mg/L  | <0.001 | 0.100          | 0.100           | 0.102     | 0.097      | 102     | 97.6     | 80-120      | 4.4 | 30      |
| Toluene      | mg/L  | <0.002 | 0.100          | 0.100           | 0.118     | 0.113      | 118     | 113      | 80-120      | 4.3 | 30      |
| o-Xylene     | mg/L  | <0.001 | 0.100          | 0.100           | 0.101     | 0.096      | 101     | 96.7     | 70-130      | 4.3 | 30      |
| m,p-Xylene   | mg/L  | <0.002 | 0.200          | 0.200           | 0.207     | 0.199      | 104     | 99.5     | 75-125      | 3.9 | 30      |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

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**QC Prep:** G165905      **QC Analytical Batch(es):** G165911  
**QC Prep Batch Method:** 5030B      **Analysis Method:** 8260B  
**Analysis Description:** Volatile Organic Compounds - GC/MS

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**Matrix Spike & Matrix Spike Duplicate**      G 65655-MS-G165905      G 65655-MSD-G165905

| Parameter      | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD | Max RPD |
|----------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|-----|---------|
| Toluene-d8 (S) |       |        |                |                 |           |            | 108     | 106      | 70-130      |     |         |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587165      **QC Analytical Batch(es):** L587382  
**QC Prep Batch Method:** 3546      **Analysis Method:** 8270D  
**Analysis Description:** Semivolatile Organic Compounds - GC/MS

**Lab Reagent Blank**      LRB-L587165      Matrix: SOL  
Associated Lab Samples: 59261, 59262, 59263, 59264, 59265

| Parameter              | Units | Blank Result | MQL  | Analyzed       |
|------------------------|-------|--------------|------|----------------|
| Acenaphthene           | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Acenaphthylene         | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Anthracene             | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Benzo(a)anthracene     | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Benzo(a)pyrene         | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Benzo(b)fluoranthene   | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Benzo(k)fluoranthene   | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Chrysene               | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Dibenz(a,h)anthracene  | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Fluoranthene           | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Fluorene               | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Indeno(1,2,3-cd)pyrene | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| 2-Methylnaphthalene    | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Naphthalene            | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Phenanthrene           | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |
| Pyrene                 | µg/Kg | < 66.7       | 66.7 | 11/30/21 22:40 |

**Laboratory Control Sample**      LCS-L587165

| Parameter            | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|----------------------|-------|-------------|------------|----------|--------------|
| Acenaphthene         | µg/Kg | 1670        | 993        | 59.4     | 10-146       |
| Acenaphthylene       | µg/Kg | 1670        | 964        | 57.7     | 10-146       |
| Anthracene           | µg/Kg | 1670        | 1080       | 64.6     | 10-146       |
| Benzo(a)anthracene   | µg/Kg | 1670        | 1170       | 70.0     | 10-146       |
| Benzo(a)pyrene       | µg/Kg | 1670        | 1070       | 64.0     | 10-146       |
| Benzo(b)fluoranthene | µg/Kg | 1670        | 1430       | 85.6     | 10-146       |
| Benzo(k)fluoranthene | µg/Kg | 1670        | 1300       | 77.8     | 10-146       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587165      **QC Analytical Batch(es):** L587382  
**QC Prep Batch Method:** 3546      **Analysis Method:** 8270D  
**Analysis Description:** Semivolatile Organic Compounds - GC/MS

**Laboratory Control Sample**      LCS-L587165

| Parameter              | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|------------------------|-------|-------------|------------|----------|--------------|
| Chrysene               | µg/Kg | 1670        | 1170       | 70.0     | 10-146       |
| Dibenz(a,h)anthracene  | µg/Kg | 1670        | 1140       | 68.2     | 10-146       |
| Fluoranthene           | µg/Kg | 1670        | 1360       | 81.4     | 10-146       |
| Fluorene               | µg/Kg | 1670        | 1590       | 95.2     | 10-146       |
| Indeno(1,2,3-cd)pyrene | µg/Kg | 1670        | 1140       | 68.2     | 10-146       |
| 2-Methylnaphthalene    | µg/Kg | 1670        | 925        | 55.3     | 10-146       |
| Naphthalene            | µg/Kg | 1670        | 951        | 56.9     | 37-148       |
| Phenanthrene           | µg/Kg | 1670        | 1170       | 70.0     | 10-146       |
| Pyrene                 | µg/Kg | 1670        | 1390       | 83.2     | 10-146       |

**Matrix Spike & Matrix Spike Duplicate**      A 59218-MS-L587165      A 59218-MSD-L587165

| Parameter              | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD  | Max RPD |
|------------------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|------|---------|
| Acenaphthene           | µg/Kg | < 66.7 | 1640           | 1660            | 1050      | 1030       | 64.0    | 62.0     | 10-146      | 1.9  | 30.0    |
| Acenaphthylene         | µg/Kg | < 66.7 | 1640           | 1660            | 1020      | 1010       | 62.1    | 60.8     | 10-146      | 0.9  | 30.0    |
| Anthracene             | µg/Kg | < 66.7 | 1640           | 1660            | 1110      | 1130       | 67.6    | 68.0     | 10-146      | 1.7  | 30.0    |
| Benzo(a)anthracene     | µg/Kg | < 66.7 | 1640           | 1660            | 1120      | 1120       | 68.2    | 67.4     | 10-146      | 0.0  | 30.0    |
| Benzo(a)pyrene         | µg/Kg | < 66.7 | 1640           | 1660            | 1100      | 854        | 67.0    | 51.4     | 10-146      | 25.1 | 30.0    |
| Benzo(b)fluoranthene   | µg/Kg | < 66.7 | 1640           | 1660            | 1190      | 1120       | 72.5    | 67.4     | 10-146      | 6.0  | 30.0    |
| Benzo(k)fluoranthene   | µg/Kg | < 66.7 | 1640           | 1660            | 1170      | 1050       | 71.3    | 63.2     | 10-146      | 10.8 | 30.0    |
| Chrysene               | µg/Kg | < 66.7 | 1640           | 1660            | 1160      | 1130       | 70.7    | 68.0     | 10-146      | 2.6  | 30.0    |
| Dibenz(a,h)anthracene  | µg/Kg | < 66.7 | 1640           | 1660            | 574       | 671        | 35.0    | 40.4     | 10-146      | 15.5 | 30.0    |
| Fluoranthene           | µg/Kg | < 66.7 | 1640           | 1660            | 1410      | 1400       | 85.9    | 84.3     | 10-146      | 0.7  | 30.0    |
| Fluorene               | µg/Kg | < 66.7 | 1640           | 1660            | 1140      | 986        | 69.5    | 59.3     | 10-146      | 14.4 | 30.0    |
| Indeno(1,2,3-cd)pyrene | µg/Kg | < 66.7 | 1640           | 1660            | 606       | 693        | 36.9    | 41.7     | 10-146      | 13.3 | 30.0    |
| 2-Methylnaphthalene    | µg/Kg | 89.1   | 1640           | 1660            | 996       | 1230       | 55.2    | 68.7     | 10-146      | 21.0 | 30.0    |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

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|                                   |   |
|-----------------------------------|---|
| <b>QC Prep:</b> L587165           | <b>QC Analytical Batch(es):</b> L587382                             |
| <b>QC Prep Batch Method:</b> 3546 | <b>Analysis Method:</b> 8270D                                       |
|                                   | <b>Analysis Description:</b> Semivolatile Organic Compounds - GC/MS |

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**Matrix Spike & Matrix Spike Duplicate**    A 59218-MS-L587165    A 59218-MSD-L587165

| Parameter    | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD  | Max RPD |
|--------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|------|---------|
| Naphthalene  | µg/Kg | < 66.7 | 1640           | 1660            | 1010      | 1010       | 61.5    | 60.8     | 37-148      | 0.0  | 30.0    |
| Phenanthrene | µg/Kg | < 66.7 | 1640           | 1660            | 1180      | 1180       | 71.9    | 71.0     | 10-146      | 0.0  | 30.0    |
| Pyrene       | µg/Kg | < 66.7 | 1640           | 1660            | 738       | 941        | 45.0    | 56.6     | 10-146      | 24.1 | 30.0    |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** A70550      **QC Analytical Batch(es):** A70585  
**QC Prep Batch Method:** EPA-300.0 (PREP)      **Analysis Method:** EPA-300.0  
**Analysis Description:** Anions by Ion Chromatography

**Lab Reagent Blank** LRB-A70550      Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter | Units | Blank Result | MQL   | Analyzed       |
|-----------|-------|--------------|-------|----------------|
| Chloride  | mg/L  | < 0.400      | 0.400 | 11/22/21 15:13 |
| Sulfate   | mg/L  | < 0.500      | 0.500 | 11/22/21 15:13 |

**Laboratory Control Sample** LCS-A70550

| Parameter | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|-----------|-------|-------------|------------|----------|--------------|
| Chloride  | mg/L  | 50.0        | 52.0       | 104      | 90-110       |
| Sulfate   | mg/L  | 62.5        | 63.5       | 102      | 90-110       |

**Matrix Spike & Matrix Spike Duplicate** A 59178-MS-A70550      A 59178-MSD-A70550

| Parameter | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD | Max RPD |
|-----------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|-----|---------|
| Chloride  | mg/L  | 6440   | 10000          | 10000           | 15900     | 15900      | 94.6    | 94.6     | 80-120      | 0.0 | 20.0    |
| Sulfate   | mg/L  | 788    | 12500          | 12500           | 13100     | 13100      | 98.4    | 98.4     | 80-120      | 0.0 | 20.0    |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587227  
**QC Prep Batch Method:** MAEPH LA (Soil)  
**QC Analytical Batch(es):** L587672  
**Analysis Method:** MAEPH LA  
**Analysis Description:** MADEP EPH Rev 1.1

**Lab Reagent Blank** LRB-L587227 Matrix: SOL  
 Associated Lab Samples: 59261, 59262, 59263, 59264, 59265

| Parameter            | Units | Blank Result | MQL  | Analyzed       | % Recovery | % Rec Limits |
|----------------------|-------|--------------|------|----------------|------------|--------------|
| Aliphatic >C10-C12   | mg/Kg | <2.00        | 2.00 | 12/02/21 10:41 |            |              |
| Aliphatic >C12-C16   | mg/Kg | <2.00        | 2.00 | 12/02/21 10:41 |            |              |
| Aliphatic >C16-C35   | mg/Kg | <4.00        | 4.00 | 12/02/21 10:41 |            |              |
| Aromatic >C10-C12    | mg/Kg | <1.00        | 1.00 | 12/02/21 09:53 |            |              |
| Aromatic >C12-C16    | mg/Kg | <2.00        | 2.00 | 12/02/21 09:53 |            |              |
| Aromatic >C16-C21    | mg/Kg | <2.00        | 2.00 | 12/02/21 09:53 |            |              |
| Aromatic >C21-C35    | mg/Kg | <2.00        | 2.00 | 12/02/21 09:53 |            |              |
| Chlorooctadecane (S) |       |              |      | 12/02/21 10:41 | 65.2       | 40-140       |
| OTP Surrogate (S)    |       |              |      | 12/02/21 09:53 | 71.2       | 40-140       |

**Laboratory Control Sample** LCS-L587227

| Parameter            | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|----------------------|-------|-------------|------------|----------|--------------|
| Aliphatic >C12-C16   | mg/Kg | 3.33        | 2.81       | 84.3     | 40-140       |
| Aliphatic >C16-C35   | mg/Kg | 10.0        | 9.47       | 94.7     | 40-140       |
| Aromatic >C10-C12    | mg/Kg | 3.33        | 1.68       | 50.4     | 40-140       |
| Aromatic >C12-C16    | mg/Kg | 6.67        | 3.83       | 57.4     | 40-140       |
| Aromatic >C16-C21    | mg/Kg | 3.33        | 3.81       | 114      | 40-140       |
| Chlorooctadecane (S) |       |             |            | 83.8     | 40-140       |
| OTP Surrogate (S)    |       |             |            | 89.2     | 40-140       |

**Matrix Spike & Matrix Spike Duplicate** A 59249-MS-L587227 A 59249-MSD-L587227

| Parameter          | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD  | Max RPD |
|--------------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|------|---------|
| Aliphatic >C12-C16 | mg/Kg | <2.00  | 3.31           | 3.32            | 3.24      | 2.94       | 97.8    | 88.5     | 40-140      | 9.7  | 25      |
| Aliphatic >C16-C35 | mg/Kg | <4.00  | 9.93           | 9.97            | 10.5      | 8.28       | 106     | 83.0     | 40-140      | 23.6 | 25      |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587227  
**QC Prep Batch Method:** MAEPH LA (Soil)  
**QC Analytical Batch(es):** L587672  
**Analysis Method:** MAEPH LA  
**Analysis Description:** MADEP EPH Rev 1.1

**Matrix Spike & Matrix Spike Duplicate** A 59249-MS-L587227 A 59249-MSD-L587227

| Parameter            | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD   | Max RPD |
|----------------------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|-------|---------|
| Aromatic >C10-C12    | mg/Kg | <1.00  | 3.31           | 3.32            | 2.14      | 2.40       | 64.6    | 72.2     | 40-140      | 11.4  | 25      |
| Aromatic >C12-C16    | mg/Kg | <2.00  | 6.62           | 6.64            | 3.92      | 5.26       | 59.2    | 79.2     | 40-140      | 29.1* | 25      |
| Aromatic >C16-C21    | mg/Kg | <2.00  | 3.31           | 3.32            | 3.20      | 4.82       | 96.6    | 145*     | 40-140      | 40.3* | 25      |
| Chlorooctadecane (S) |       |        |                |                 |           |            | 75.3    | 51.8     | 40-140      |       |         |
| OTP Surrogate (S)    |       |        |                |                 |           |            | 74.6    | 86.1     | 40-140      |       |         |



### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587464      **QC Analytical Batch(es):** L588062  
**QC Prep Batch Method:** MAEPH LA (Aqueous)      **Analysis Method:** MAEPH LA  
**Analysis Description:** MADEP EPH Rev 1.1

**Lab Reagent Blank**      LRB-L587464      Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter            | Units | Blank Result | MQL   | Analyzed       | % Recovery | % Rec Limits |
|----------------------|-------|--------------|-------|----------------|------------|--------------|
| Aliphatic >C10-C12   | mg/L  | <0.120       | 0.120 | 12/03/21 17:10 |            |              |
| Aliphatic >C12-C16   | mg/L  | <0.120       | 0.120 | 12/03/21 17:10 |            |              |
| Aliphatic >C16-C35   | mg/L  | <0.200       | 0.200 | 12/03/21 17:10 |            |              |
| Aromatic >C10-C12    | mg/L  | <0.120       | 0.120 | 12/03/21 17:10 |            |              |
| Aromatic >C12-C16    | mg/L  | <0.120       | 0.120 | 12/03/21 17:10 |            |              |
| Aromatic >C16-C21    | mg/L  | <0.120       | 0.120 | 12/03/21 17:10 |            |              |
| Aromatic >C21-C35    | mg/L  | <0.140       | 0.140 | 12/03/21 17:10 |            |              |
| Chlorooctadecane (S) |       |              |       | 12/03/21 17:10 | 43.3       | 40-140       |
| OTP Surrogate (S)    |       |              |       | 12/03/21 17:10 | 58.0       | 40-140       |

**Laboratory Control Sample**      LCS-L587464

| Parameter            | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|----------------------|-------|-------------|------------|----------|--------------|
| Aliphatic >C12-C16   | mg/L  | 0.400       | 0.296      | 74.0     | 40-140       |
| Aliphatic >C16-C35   | mg/L  | 1.20        | 0.917      | 76.4     | 40-140       |
| Aromatic >C10-C12    | mg/L  | 0.400       | 0.185      | 46.2     | 40-140       |
| Aromatic >C12-C16    | mg/L  | 0.800       | 0.493      | 61.6     | 40-140       |
| Aromatic >C16-C21    | mg/L  | 0.400       | 0.444      | 111      | 40-140       |
| Chlorooctadecane (S) |       |             |            | 74.5     | 40-140       |
| OTP Surrogate (S)    |       |             |            | 61.0     | 40-140       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** L587480  
**QC Prep Batch Method:** MAVPH LA (Soil)  
**QC Analytical Batch(es):** L587485  
**Analysis Method:** MAVPH LA  
**Analysis Description:** MADEP VPH Rev 1.1

**Lab Reagent Blank** LRB-L587480 Matrix: SOL  
Associated Lab Samples: 59261, 59262, 59263, 59264, 59265

| Parameter              | Units | Blank Result | MQL  | Analyzed       | % Recovery | % Rec Limits |
|------------------------|-------|--------------|------|----------------|------------|--------------|
| Aliphatic >C6-C8       | mg/Kg | <3.00        | 3.00 | 11/30/21 17:02 |            |              |
| Aliphatic >C8-C10      | mg/Kg | <6.00        | 6.00 | 11/30/21 17:02 |            |              |
| Aromatic >C8-C10       | mg/Kg | <4.00        | 4.00 | 11/30/21 17:02 |            |              |
| 2,5-Dibromotoluene (S) |       |              |      | 11/30/21 17:02 | 96.0       | 50-150       |

**Laboratory Control Sample** LCS-L587480

| Parameter              | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|------------------------|-------|-------------|------------|----------|--------------|
| Aliphatic >C6-C8       | mg/Kg | 60.0        | 70.3       | 117      | 50-150       |
| Aliphatic >C8-C10      | mg/Kg | 120         | 145        | 121      | 50-150       |
| Aromatic >C8-C10       | mg/Kg | 80.0        | 74.2       | 92.7     | 50-150       |
| 2,5-Dibromotoluene (S) |       |             |            | 120      | 50-150       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** G165907  
**QC Prep Batch Method:** MAVPH LA (GC/MS) (Aqueous)  
**QC Analytical Batch(es):** G165913  
**Analysis Method:** MAVPH LA  
**Analysis Description:** MADEP VPH Rev 1.1

**Lab Reagent Blank** LRB-G165907 Matrix: AQU  
Associated Lab Samples: 59259, 59260

| Parameter          | Units | Blank Result | MQL   | Analyzed       | % Recovery | % Rec Limits |
|--------------------|-------|--------------|-------|----------------|------------|--------------|
| Aliphatic >C6-C8   | mg/L  | <0.005       | 0.005 | 11/29/21 11:18 |            |              |
| Aliphatic >C8-C10  | mg/L  | <0.013       | 0.013 | 11/29/21 11:18 |            |              |
| Aromatic >C8-C10 A | mg/L  | <0.005       | 0.005 | 11/29/21 11:18 |            |              |
| Toluene-d8 (S)     |       |              |       | 11/29/21 11:18 | 107        | 70-130       |

**Laboratory Control Sample** LCS-G165907

| Parameter          | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|--------------------|-------|-------------|------------|----------|--------------|
| Aliphatic >C6-C8   | mg/L  | 0.500       | 0.594      | 119      | 70-130       |
| Aliphatic >C8-C10  | mg/L  | 1.30        | 1.23       | 94.6     | 70-130       |
| Aromatic >C8-C10 A | mg/L  | 0.500       | 0.447      | 89.4     | 70-130       |
| Toluene-d8 (S)     |       |             |            | 110      | 70-130       |

### Quality Control Data

**Client ID:** ERM  
**Project Description:** Neumin  
**Report No:** 21-326-0006

**QC Prep:** A70755      **QC Analytical Batch(es):** A70785  
**QC Prep Batch Method:** SM 3111B (Prep)      **Analysis Method:** SM 3111B  
**Analysis Description:** Metals by Flame AA

**Lab Reagent Blank** LRB-A70755      Matrix: AQU  
 Associated Lab Samples: 59259, 59260

| Parameter | Units | Blank Result | MQL  | Analyzed       |
|-----------|-------|--------------|------|----------------|
| Calcium   | mg/L  | <1.00        | 1.00 | 12/08/21 10:39 |
| Magnesium | mg/L  | <1.00        | 1.00 | 12/08/21 11:55 |
| Potassium | mg/L  | <1.00        | 1.00 | 12/08/21 13:31 |
| Sodium    | mg/L  | <1.00        | 1.00 | 12/08/21 16:04 |

**Laboratory Control Sample** LCS-A70755

| Parameter | Units | Spike Conc. | LCS Result | LCS %Rec | % Rec Limits |
|-----------|-------|-------------|------------|----------|--------------|
| Calcium   | mg/L  | 10.0        | 10.3       | 103      | 80-120       |
| Magnesium | mg/L  | 10.0        | 9.95       | 100      | 80-120       |
| Potassium | mg/L  | 10.0        | 9.87       | 99.0     | 80-120       |
| Sodium    | mg/L  | 10.0        | 9.64       | 96.0     | 80-120       |

**Matrix Spike & Matrix Spike Duplicate** A 59859-MS-A70755      A 59859-MSD-A70755

| Parameter | Units | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS %Rec | MSD %Rec | %Rec Limits | RPD | Max RPD |
|-----------|-------|--------|----------------|-----------------|-----------|------------|---------|----------|-------------|-----|---------|
| Calcium   | mg/L  | 96.1   | 10.0           | 10.0            | 105       | 105        | 89.0    | 89.0     | 75-125      | 0.0 | 20      |
| Magnesium | mg/L  | 43.8   | 10.0           | 10.0            | 53.7      | 54.2       | 99.0    | 104      | 75-125      | 0.9 | 20      |
| Potassium | mg/L  | 7.01   | 10.0           | 10.0            | 16.8      | 16.9       | 98.0    | 99.0     | 75-125      | 0.5 | 20      |
| Sodium    | mg/L  | 119    | 10.0           | 10.0            | 130       | 130        | 110     | 110      | 75-125      | 0.0 | 20      |

**Shipment Receipt Form**

Customer Number: **01308**  
 Customer Name: **ERM**  
 Report Number: **21-326-0006**

**Shipping Method**

Fed Ex       US Postal       Lab       Other :   
 UPS       Client       Courier      Thermometer ID:

Shipping container/cooler uncompromised?       Yes       No

---

Number of coolers/boxes received     

---

Custody seals intact on shipping container/cooler?       Yes       No       Not Present

---

Custody seals intact on sample bottles?       Yes       No       Not Present

---

Chain of Custody (COC) present?       Yes       No

---

COC agrees with sample label(s)?       Yes       No

---

COC properly completed       Yes       No

---

Samples in proper containers?       Yes       No

---

Sample containers intact?       Yes       No

---

Sufficient sample volume for indicated test(s)?       Yes       No

---

All samples received within holding time?       Yes       No

---

Cooler temperature in compliance?       Yes       No

---

Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.       Yes       No

---

Water - Sample containers properly preserved       Yes       No       N/A

---

Water - VOA vials free of headspace       Yes       No       N/A

---

Trip Blanks received with VOAs       Yes       No       N/A

---

Soil VOA method 5035 – compliance criteria met       Yes       No       N/A

---

High concentration container (48 hr)       Low concentration EnCore samplers (48 hr)  
 High concentration pre-weighed (methanol -14 d)       Low conc pre-weighed vials (Sod Bis -14 d)

---

Special precautions or instructions included?       Yes       No

Comments:

Signature:       Date & Time:



# Chain of Custody

Laboratory Number:

|   |  |  |  |   |  |  |  |
|---|--|--|--|---|--|--|--|
| <b>Client Information:</b><br>Company Name: <b>ERM</b><br>Contact Name: <b>Shawn Wiggins</b><br>Address: <b>210 West Sam Houston Pkwy</b><br><b>North Suite 600</b><br><b>Houston, TX 77024</b><br>Phone Number: <b>971 303 2385</b> Ext:<br>E-mail Address: <b>Shawn.Wiggins@ERM.COM</b> |  | <b>Billing Information:</b><br>PO Number:<br>Quote Number:<br>Required QC Level:<br>Bill Monthly: <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Shipping Method:<br>UPS / FedEx / NOW<br>DHL / Element / Hand / Mail |  | <b>Project Name/Number:</b><br>New Min<br>0494259<br>Sampler's Signature: <i>M...</i><br>Shipping Method: |  | <b>Page of</b><br><b>Matrix Code</b><br>DW = Drinking Water<br>WW = Waste Water<br>GW = Ground Water<br>AQ = Aqueous<br>OT = Other<br>SL = Sludge SOL = Solid<br>O = Oil SO = Soil<br>F = Food SW = Swab<br>NG = Natural Gas<br>NGL = Natural Gas Liquid<br>PW = Produced Water<br>CF = Completion Fluid |  |
|---|--|--|--|---|--|--|--|

| Sample ID/Description | Which Regulations Apply:<br><input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input checked="" type="checkbox"/> RECAP/RISC | Turn Time<br><input checked="" type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | Collection Information |      | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container<br>Type<br>Quantity | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests   | Comments  |
|-----------------------|---|--|------------------------|------|--|-------------------------------|---|---|---|
|                       |   |  | Date                   | Time |  |                               |   |   |   |
|                       |   |  | Matrix                 |      |  |                               |   |   |   |
| SE-SB36               | <input type="checkbox"/> Drinking Water<br><input type="checkbox"/> Distribution<br><input type="checkbox"/> Special<br><input type="checkbox"/> State<br><input checked="" type="checkbox"/> Other 24B             | <input checked="" type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other              | 11/18/21               | 1245 | grab   | GW                            | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/> Total Metals<br><input checked="" type="checkbox"/> Dissolved Metals<br><input checked="" type="checkbox"/> TD5/Chloride<br><input checked="" type="checkbox"/> Sulfate/Alkalinity<br><input checked="" type="checkbox"/> TPH fractions<br><input checked="" type="checkbox"/> VPH/EPH<br><input checked="" type="checkbox"/> PAHs (except Aro) | Total Metals = AS, BA, CD, Ca, Cr, Fe, Pb, Mg, Mn, Hg, K, Na, Sr, Zn<br>dissolved metals Ar, Ba, Cd, Cr, Fe, Pb, Hg, Si, Mn |
| SE-SB35               |   |  | 11/18/21               | 1345 | grab   | GW                            | <input checked="" type="checkbox"/>   |   |   |
| SE-SB27 3'-5'         |   |  | 11/16/21               | 1312 | grab   | SO                            | <input checked="" type="checkbox"/>   |   |   |
| SE-SB27 5'-7'         |   |  | 11/16/21               | 1325 | grab   | SO                            | <input checked="" type="checkbox"/>   |   |   |
| SE-SB27 8'-10'        |   |  | 11/16/21               | 1327 | grab   | SO                            | <input checked="" type="checkbox"/>   |   |   |
| SE-SB27 10'-12'       |   |  | 11/16/21               | 1350 | grab   | SO                            | <input checked="" type="checkbox"/>   |   |   |
| SE-SB31 8'-10'        |   |  | 11/17/21               | 1125 | grab   | SO                            | <input checked="" type="checkbox"/>   |   |   |

| Relinquished by      | Date/Time     | Received by        | Date/Time     | Field Notes:   |
|----------------------|---------------|--------------------|---------------|--|
| 1 Marcus Smith       | 11/19/21 0600 | <i>[Signature]</i> | 11-19-21 1050 | Received at lab on ice?  |
| 2 <i>[Signature]</i> | 11-19-21 1800 | <i>[Signature]</i> | 11-19-21 1800 | <input type="checkbox"/> Yes <input type="checkbox"/> No Temp: |
| 3                    |               |                    |               |  |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

8800 North US 31  
Columbus, IN 47201 USA  
P 812-375-0531  
F 812-375-0731

328 Ley Road, Suite 100  
Fort Wayne, IN 46825 USA  
P 260-471-7000  
F 260-471-7777

909 Executive Dr  
Warsaw, IN 46580 USA  
P 574-267-3305  
F 574-269-6569

3371 Cleveland Road, Suite 100A  
South Bend, IN 46628 USA  
P 574-277-0707  
F 574-273-5699

2417 W. Pinhook Rd  
Lafayette, LA 70508 USA  
P 337-235-0483  
F 337-233-6540

**Christina Varuso - [External] Re: Neumin Project # 0494259 \*\*Sample Issues\***


---

**From:** Shawn Wiggins <Shawn.Wiggins@erm.com>  
**To:** Kelly Evans <kevans@waypointanalytical.com>  
**Date:** 11/22/2021 11:54 AM  
**Subject:** [External] Re: Neumin Project # 0494259 \*\*Sample Issues\*  
**Cc:** Christina Varuso <cvaruso@waypointanalytical.com>

---

Kelly,

I please run the analyses from the plastic container included with the terracore kit. Please prioritize the eph/vph analysis, and extract and hold pahs if enough sample volume remains.

Thank you,  
 Shawn

Get [Outlook for Android](#)

---

**From:** Kelly Evans <kevans@waypointanalytical.com>  
**Sent:** Monday, November 22, 2021 11:30:02 AM  
**To:** Shawn Wiggins <Shawn.Wiggins@erm.com>  
**Cc:** Christina Varuso <cvaruso@waypointanalytical.com>  
**Subject:** Neumin Project # 0494259 \*\*Sample Issues\*

|   |
|---|
| <p><b>CAUTION:</b> This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.</p> |
|---|

Good Morning Shawn,

We are in receipt of samples for the subject referenced project. Samples identified as SE-SB27 and SE-SB 31 has noted to the COC (attached for your review) the analysis of EPH and PAH's extract and hold, however, there was no glass container received which is required for those analysis. All that was received is terracores for the EPH analysis.

Please advise how you wish for us to proceed.

*Kindest Regards,  
Kelly Evans  
Accounts/Project Manager*



*5041 Taravella Road  
Marrero, LA 70072-4244*

*Office: [504-371-8557](tel:504-371-8557)*

*Fax: [504-371-8560](tel:504-371-8560)*

*Email: [kellye@waypointanalytical.com](mailto:kellye@waypointanalytical.com)*

*Website: [www.waypointanalytical.com](http://www.waypointanalytical.com)*

---

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Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

December 27, 2021

Shawn Wiggins  
Environmental Resources Management  
CityCentre Four  
840 W. Sam Houston Pkwy North, Suite 600  
Houston, TX 77024  
TEL:  
FAX

RE: Neumin 0494259

Order No.: 21111049

Dear Shawn Wiggins:

Element Materials Technology Lafayette received 106 sample(s) on 11/18/2021 for the analyses presented in the following report.

In accordance with your instructions, Element Lafayette either conducted or subcontracted these analyses. Subcontracted analyses will be identified in the accompanying case narrative. All relevant sampling information can be found on the attached Chain-of-Custody form. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet the applicable requirements of TNI. Reported results relate only to the items tested.

Where applicable, all soil data, except for 29-B, are reported on a wet-weight basis unless otherwise indicated in the units field as –dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. LDHH Certification No.: LA023. ISDH Certification No.: C-LA-01. NDELCP Certification No.: R-226. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation. PA registration No.: 68-05967.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

A handwritten signature in blue ink, appearing to read 'Cristina Johnson'.

Cristina Thibeaux  
Customer Service Supervisor  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344



Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

## Case Narrative

WO#: 21111049  
Date: 12/27/2021

---

**CLIENT:** Environmental Resources Management  
**Project:** Neumin 0494259

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Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 8:48:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-001 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.55   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 0.97   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.39   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.36   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.32   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.88   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 8:50:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-002 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.67   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 0.72   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.10   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.74   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.75   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.82   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 13.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 8:58:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-003 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.49   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.07   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.71   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.77   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.02   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.02   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:00:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-004 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.66   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.18   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.11   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.03   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.26   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.71   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.5   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:08:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-005 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.64   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.26   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.38   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.96   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.22   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.00   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:10:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-006 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.98   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.48   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.39   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.18   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.00   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.84   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:13:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-007 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 15-17'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.76   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.60   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.68   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.20   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.50   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.64   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:17:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-008 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.72   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.53   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.89   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.96   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.41   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.75   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 24.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:30:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-009 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.89   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.71   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.47   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.22   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.71   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.87   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 27.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:38:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-010 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.82   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.89   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.87   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.78   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.43   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.90   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:45:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-011 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 25-27'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.75   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.57   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.04   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.36   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.15   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.53   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 12.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 9:50:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-012 **Matrix:** SOIL  
**Client Sample ID** SE-SB23 28-30'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.89   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.39   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.17   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.84   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.50   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.39   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:05:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-013 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 0-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.25   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.63   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.31   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.46   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.26   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.38   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:10:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-014 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.19   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.32   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.14   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.35   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.21   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.13   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:12:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-015 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.27   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.99   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.27   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.53   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.37   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.53   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:23:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-016 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.36   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.51   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.95   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.88   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.55   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.65   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 21.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:25:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-017 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.63   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.38   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.82   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.12   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.29   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.38   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.4   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:28:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-018 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 15-17'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.63   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.55   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.03   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.99   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.28   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.60   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 21.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:30:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-019 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.76   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.20   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.30   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.41   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.63   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.26   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 26.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:35:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-020 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.98   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:00:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.31   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.68   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.16   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.23   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.40   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 26.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:37:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-021 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.02   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.15   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.81   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.30   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.36   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.73   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 28.1   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:45:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-022 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 24-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.02   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.46   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.12   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.01   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.25   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.06   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 13.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 10:58:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-023 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 25-27'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.83   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.31   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.22   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.00   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.62   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.32   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 12.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:02:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-024 **Matrix:** SOIL  
**Client Sample ID** SE-SB24 28-30'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.03   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.42   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.88   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.43   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.11   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.85   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:20:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-025 **Matrix:** SOIL  
**Client Sample ID** SE-SB25 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.95   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.77   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.00   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.30   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.23   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.32   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:22:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-026 **Matrix:** SOIL  
**Client Sample ID** SE-SB25 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.43   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.90   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.42   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.07   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.57   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.19   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:28:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-027 **Matrix:** SOIL  
**Client Sample ID** SE-SB25 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.43   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.94   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.45   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.85   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.42   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.75   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.4   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:30:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-028 **Matrix:** SOIL  
**Client Sample ID** SE-SB25 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.59   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.94   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.01   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.27   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.56   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.83   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:45:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-029 **Matrix:** SOIL  
**Client Sample ID** SE-SB26 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.72   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.74   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.06   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.72   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.06   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.61   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.4   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:47:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-030 **Matrix:** SOIL  
**Client Sample ID** SE-SB26 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.48   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.65   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.29   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.62   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.76   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.49   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.1   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:55:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-031 **Matrix:** SOIL  
**Client Sample ID** SE-SB26 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.50   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.93   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.31   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.18   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.79   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.30   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.5   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 11:57:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-032 **Matrix:** SOIL  
**Client Sample ID** SE-SB26 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.55   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.51   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.54   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.28   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.89   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.65   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:10:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-033 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 3.07   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 11.9   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 15.9   | 0.10 | *    |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.33   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.32   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 24.3   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:12:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-034 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.30   | 0.10 | *    | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 8.73   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 15.7   | 0.10 | *    |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 5.55   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.54   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 31.5   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:25:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-035 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 5-7'

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed          |
|---|--------|------|------|----------|----|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>JMI</b>    |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    |                        |
| Electrical Conductivity                     | 3.85   | 0.10 |      | mmhos/cm | 1  | 12/7/2021 11:15:00 AM  |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>BXB</b>    |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    |                        |
| Exchangeable Sodium %                       | 10.5   | 0.10 |      | %        | 1  | 12/17/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>STS</b>    |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    |                        |
| Sodium Adsorption Ratio                     | 14.0   | 0.10 | *    |          | 1  | 12/8/2021              |
| Soluble Calcium                             | 5.42   | 0.02 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Magnesium                           | 2.77   | 0.05 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Sodium                              | 28.4   | 0.25 |      | meq/L    | 1  | 12/8/2021              |
| <b>PERCENT MOISTURE</b>                     |        |      |      |          |    | Analyst: <b>BXB</b>    |
| Percent Moisture                            | 16.2   | 1.00 |      | wt%      | 1  | 11/22/2021 10:00:00 AM |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:27:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-036 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.70   | 0.10 | *    | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 11.1   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 12.5   | 0.10 | *    |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 7.87   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 4.31   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 30.8   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:50:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-037 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 5.35   | 0.10 | *    | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 14.0   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 11.7   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 10.2   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 6.07   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 33.2   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 1:52:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-038 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 5.25   | 0.10 | *    | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 13.9   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 13.2   | 0.10 | *    |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 7.62   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 4.72   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 32.7   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 21.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:00:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-039 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 15-17'

| Analyses                                    | Result | RL   | Qual | Units    | DF               | Date Analyzed          |
|---|--------|------|------|----------|------------------|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>JMI</b>    |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> |                        |
| Electrical Conductivity                     | 4.44   | 0.10 | *    | mmhos/cm | 1                | 12/7/2021 11:15:00 AM  |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>BXB</b>    |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b>       |
| Exchangeable Sodium %                       | 5.90   | 0.10 |      | %        | 1                | 12/17/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>STS</b>    |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b>       |
| Sodium Adsorption Ratio                     | 4.82   | 0.10 |      |          | 1                | 12/8/2021              |
| Soluble Calcium                             | 14.5   | 0.02 |      | meq/L    | 1                | 12/8/2021              |
| Soluble Magnesium                           | 10.7   | 0.05 |      | meq/L    | 1                | 12/8/2021              |
| Soluble Sodium                              | 17.1   | 0.25 |      | meq/L    | 1                | 12/8/2021              |
| <b>PERCENT MOISTURE</b>                     |        |      |      |          |                  | Analyst: <b>BXB</b>    |
| Percent Moisture                            | 19.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:02:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-040 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.37   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.85   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.32   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.14   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.16   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.33   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 24.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:10:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-041 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.96   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 5.19   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.21   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.72   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.14   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.00   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 26.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:15:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-042 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.31   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.78   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.92   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.77   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.01   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.21   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:30:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-043 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 25-27'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.94   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.43   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.99   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.09   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.80   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.56   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 12.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:37:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-044 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 28-30'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.13   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.84   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.66   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.32   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.15   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.97   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.4   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 2:52:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-045 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 30-32'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.20   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.76   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.69   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.60   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.32   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.35   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.8   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:00:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-046 **Matrix:** SOIL  
**Client Sample ID** SE-SB27 33-35'

| Analyses                                    | Result | RL   | Qual | Units    | DF               | Date Analyzed          |
|---|--------|------|------|----------|------------------|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>JMI</b>    |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> |                        |
| Electrical Conductivity                     | 1.16   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM  |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>BXB</b>    |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b>       |
| Exchangeable Sodium %                       | 4.87   | 0.10 |      | %        | 1                | 12/17/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |                  | Analyst: <b>STS</b>    |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b>       |
| Sodium Adsorption Ratio                     | 5.36   | 0.10 |      |          | 1                | 12/8/2021              |
| Soluble Calcium                             | 2.13   | 0.02 |      | meq/L    | 1                | 12/8/2021              |
| Soluble Magnesium                           | 1.95   | 0.05 |      | meq/L    | 1                | 12/8/2021              |
| Soluble Sodium                              | 7.66   | 0.25 |      | meq/L    | 1                | 12/8/2021              |
| <b>PERCENT MOISTURE</b>                     |        |      |      |          |                  | Analyst: <b>BXB</b>    |
| Percent Moisture                            | 18.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:35:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-047 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.77   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.51   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.91   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.29   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.11   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.79   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:37:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-048 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.60   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.67   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.72   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.51   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.84   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.95   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.2   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:43:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-049 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.67   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.66   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.37   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.92   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.06   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.90   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:45:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-050 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.01   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.61   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.07   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.35   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.05   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.40   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:50:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-051 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.77   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.27   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.24   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.13   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.53   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.03   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.9   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 3:52:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-052 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.74   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.52   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.63   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.98   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.48   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.46   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 21.5   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 4:00:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-053 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 15-17'

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed          |
|---|--------|------|------|----------|----|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>JMI</b>    |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    |                        |
| Electrical Conductivity                     | 0.74   | 0.10 |      | mmhos/cm | 1  | 12/8/2021 11:15:00 AM  |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>BXB</b>    |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    |                        |
| Exchangeable Sodium %                       | 1.87   | 0.10 |      | %        | 1  | 12/17/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>STS</b>    |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    |                        |
| Sodium Adsorption Ratio                     | 2.54   | 0.10 |      |          | 1  | 12/8/2021              |
| Soluble Calcium                             | 2.25   | 0.02 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Magnesium                           | 1.67   | 0.05 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Sodium                              | 3.56   | 0.25 |      | meq/L    | 1  | 12/8/2021              |
| <b>PERCENT MOISTURE</b>                     |        |      |      |          |    | Analyst: <b>BXB</b>    |
| Percent Moisture                            | 22.2   | 1.00 |      | wt%      | 1  | 11/22/2021 10:30:00 AM |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 4:02:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-054 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.70   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.23   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.85   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.99   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.53   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.79   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 24.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 4:05:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-055 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.91   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.52   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.26   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.47   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.01   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.88   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 27.0   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/16/2021 4:12:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-056 **Matrix:** SOIL  
**Client Sample ID** SE-SB28 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.90   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.31   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.50   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.25   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.82   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.00   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 13.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:33:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-057 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.31   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.22   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.96   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.86   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.52   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.62   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.3   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:35:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-058 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.25   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.07   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.88   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.61   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.39   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.32   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:43:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-059 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.28   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.12   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.05   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.59   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.42   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.46   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.7   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:45:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-060 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.45   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:15:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.01   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.50   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.07   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.70   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.35   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.6   | 1.00 |      | wt%      | 1                | 11/22/2021 10:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:53:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-061 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.28   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.09   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.70   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.17   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.69   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.00   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.6   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 8:55:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-062 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.08   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.80   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.98   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.17   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.15   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.86   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.8   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:00:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-063 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 15-17'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.97   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.59   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.34   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.69   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.99   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.11   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.7   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:02:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-064 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.20   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.86   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.34   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.69   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.76   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.99   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 24.1   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:10:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-065 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.43   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.85   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.59   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.64   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.55   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.26   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 25.5   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:15:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-066 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.68   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.64   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.08   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 5.39   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 4.30   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 8.98   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.3   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:33:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-067 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 25-27'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.19   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.94   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.38   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.74   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.38   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.00   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 12.4   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 9:40:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-068 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 28-30'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.22   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 5.63   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.81   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.58   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.32   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.53   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.4   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:00:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-069 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.08   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.14   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.17   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.93   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.85   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 5.40   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.5   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:02:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-070 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.33   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.03   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.16   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.81   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.48   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.73   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 17.2   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:08:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-071 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.36   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.10   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.37   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.89   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.56   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.02   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.8   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:10:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-072 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.40   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.91   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.16   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.10   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.69   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.05   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:18:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-073 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.63   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.62   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.51   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.02   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.22   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.19   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.6   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:20:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-074 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.96   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.17   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.86   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.27   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.04   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.66   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.1   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:25:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-075 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 15-17'

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed          |
|---|--------|------|------|----------|----|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>JMI</b>    |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    |                        |
| Electrical Conductivity                     | 1.33   | 0.10 |      | mmhos/cm | 1  | 12/8/2021 11:30:00 AM  |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>BXB</b>    |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    |                        |
| Exchangeable Sodium %                       | 2.11   | 0.10 |      | %        | 1  | 12/21/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: <b>STS</b>    |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    |                        |
| Sodium Adsorption Ratio                     | 3.11   | 0.10 |      |          | 1  | 12/8/2021              |
| Soluble Calcium                             | 4.97   | 0.02 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Magnesium                           | 3.42   | 0.05 |      | meq/L    | 1  | 12/8/2021              |
| Soluble Sodium                              | 6.36   | 0.25 |      | meq/L    | 1  | 12/8/2021              |
| <b>PERCENT MOISTURE</b>                     |        |      |      |          |    | Analyst: <b>BXB</b>    |
| Percent Moisture                            | 26.1   | 1.00 |      | wt%      | 1  | 11/22/2021 11:00:00 AM |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:30:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-076 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 3.60   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 5.14   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.41   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 23.9   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 14.0   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 10.5   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 25.9   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:35:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-077 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.57   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.60   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.65   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 5.32   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 4.06   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 7.90   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 28.2   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 10:43:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-078 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.27   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 5.84   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.88   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.49   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.85   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.90   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.6   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:10:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-079 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 0-2'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.88   | 0.10 | *    | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.37   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.52   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 18.5   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 7.93   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 9.15   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:12:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-080 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.12   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.51   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.99   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.65   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.62   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.37   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 13.7   | 1.00 |      | wt%      | 1                | 11/22/2021 11:00:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:23:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-081 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 5-7'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.05   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.22   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.38   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.31   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.45   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.01   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.7   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:25:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-082 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.49   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.98   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 5.82   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.06   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.83   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 9.09   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.1   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:35:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-083 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 10-12'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.46   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.53   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 5.00   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 7.25   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 4.58   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 12.2   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.2   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:37:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-084 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.55   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.16   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.24   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 9.45   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 6.70   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 9.21   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.9   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:45:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-085 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 15-17'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.33   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.14   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.42   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.01   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.08   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.44   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.3   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:47:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-086 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.12   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.67   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.59   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.29   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.58   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.15   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 23.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 11:52:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-087 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 23-25'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.47   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.93   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.05   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.71   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.56   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 8.22   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 27.7   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 12:05:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-088 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 20-22'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.58   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.50   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.84   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 14.5   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 9.57   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 9.86   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 26.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 12:55:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-089 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 25-27'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.30   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.77   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.62   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.30   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.74   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 8.04   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 14.5   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 1:05:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-090 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 28-30'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.80   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.99   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 5.30   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.69   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.54   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 6.73   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.6   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 1:40:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-091 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.25   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.44   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.57   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.78   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.47   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.24   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.7   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 1:48:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-092 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.30   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.24   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.43   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.07   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.66   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.33   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.8   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 1:55:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-093 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.34   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.28   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.95   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.09   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.74   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.86   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.5   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 2:00:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-094 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.57   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.05   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.48   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.62   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.16   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.92   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 23.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 2:30:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-095 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.18   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 0.99   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.53   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.52   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.38   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.03   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 15.4   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 2:35:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-096 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.27   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.29   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.89   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.74   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.50   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 1.48   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 19.6   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 2:45:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-097 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.63   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.60   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.48   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.04   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.33   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.22   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 21.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 2:50:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-098 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.12   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.91   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.52   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 4.54   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 3.04   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.90   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 27.9   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 3:48:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-099 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 3-5'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.15   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.23   | 0.10 |      | %        | 1                | 12/21/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.01   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.42   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.28   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 0.60   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 16.5   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 3:55:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-100 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 8-10'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.20   | 0.10 |      | mmhos/cm | 1                | 12/8/2021 12:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.77   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.19   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 0.61   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.40   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 0.84   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 18.0   | 1.00 |      | wt%      | 1                | 11/22/2021 11:30:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 4:00:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-101 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.55   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.16   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.20   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.66   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.10   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.58   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 23.2   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/17/2021 4:05:00 PM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-102 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.97   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.66   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.84   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 3.18   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 2.12   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 4.62   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 24.1   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/18/2021 9:35:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-103 **Matrix:** SOIL  
**Client Sample ID** SE-SB35 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.59   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.19   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.93   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.06   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.33   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.52   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.9   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/18/2021 9:40:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-104 **Matrix:** SOIL  
**Client Sample ID** SE-SB35 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.83   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.63   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.32   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.95   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.95   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.63   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 25.7   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/18/2021 11:08:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-105 **Matrix:** SOIL  
**Client Sample ID** SE-SB36 13-15'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.44   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.22   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.04   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 1.40   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 0.80   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 2.14   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 20.9   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21111049

Date Reported: 12/27/2021

**CLIENT:** Environmental Resources Management **Collection Date:** 11/18/2021 11:00:00 AM  
**Project:** Neumin 0494259  
**Lab ID:** 21111049-106 **Matrix:** SOIL  
**Client Sample ID** SE-SB36 18-20'

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.77   | 0.10 |      | mmhos/cm | 1                | 12/7/2021 11:30:00 AM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.70   | 0.10 |      | %        | 1                | 12/22/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.46   | 0.10 |      |          | 1                | 12/8/2021                            |
| Soluble Calcium  | 2.65   | 0.02 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Magnesium  | 1.67   | 0.05 |      | meq/L    | 1                | 12/8/2021                            |
| Soluble Sodium   | 3.62   | 0.25 |      | meq/L    | 1                | 12/8/2021                            |
| <b>PERCENT MOISTURE</b>  |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>                  |
| Percent Moisture   | 25.6   | 1.00 |      | wt%      | 1                | 11/22/2021 1:00:00 PM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| R   | RPD outside accepted recovery limits                                  | RL | Reporting Limit                                    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41903

| Sample ID               | <b>21111049-001ADUP</b> | SampType: | <b>DUP</b>   | TestCode:   | <b>SAR_S</b>     | Units:           |           | Prep Date:     | <b>12/8/2021</b> | RunNo:   | <b>104944</b>  |
|-------------------------|-------------------------|-----------|--------------|-------------|------------------|------------------|-----------|----------------|------------------|----------|----------------|
| Client ID:              | <b>SE-SB23 0-2'</b>     | Batch ID: | <b>41903</b> | TestNo:     | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |           | Analysis Date: | <b>12/8/2021</b> | SeqNo:   | <b>2566378</b> |
| Analyte                 | Result                  | PQL       | SPK value    | SPK Ref Val | %REC             | LowLimit         | HighLimit | RPD Ref Val    | %RPD             | RPDLimit | Qual           |
| Sodium Adsorption Ratio | 1.44                    | 0.10      |              |             |                  |                  |           | 1.39           | 4.03             | 20       |                |
| Soluble Calcium         | 2.34                    | 0.02      |              |             |                  |                  |           | 2.36           | 0.57             | 20       |                |
| Soluble Magnesium       | 1.32                    | 0.05      |              |             |                  |                  |           | 1.32           | 0.32             | 20       |                |
| Soluble Sodium          | 1.95                    | 0.25      |              |             |                  |                  |           | 1.88           | 3.79             | 20       |                |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41904

| Sample ID               | <b>21111049-021ADUP</b> | SampType: | <b>DUP</b>   | TestCode:   | <b>SAR_S</b>     | Units:           |           | Prep Date:     | <b>12/8/2021</b> | RunNo:   | <b>104944</b>  |
|-------------------------|-------------------------|-----------|--------------|-------------|------------------|------------------|-----------|----------------|------------------|----------|----------------|
| Client ID:              | <b>SE-SB24 23-25'</b>   | Batch ID: | <b>41904</b> | TestNo:     | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |           | Analysis Date: | <b>12/8/2021</b> | SeqNo:   | <b>2567259</b> |
| Analyte                 | Result                  | PQL       | SPK value    | SPK Ref Val | %REC             | LowLimit         | HighLimit | RPD Ref Val    | %RPD             | RPDLimit | Qual           |
| Sodium Adsorption Ratio | 2.76                    | 0.10      |              |             |                  |                  |           | 2.81           | 1.85             | 20       |                |
| Soluble Calcium         | 3.30                    | 0.02      |              |             |                  |                  |           | 3.30           | 0.09             | 20       |                |
| Soluble Magnesium       | 2.35                    | 0.05      |              |             |                  |                  |           | 2.36           | 0.27             | 20       |                |
| Soluble Sodium          | 4.64                    | 0.25      |              |             |                  |                  |           | 4.73           | 1.93             | 20       |                |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41905

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111049-041ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/8/2021</b> | RunNo:      | <b>104944</b>  |          |      |
| Client ID:              | <b>SE-SB27 20-22'</b>   | Batch ID: | <b>41905</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2567288</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 3.22      |              | 0.10      |                  |                  |      |                |                  | 3.21        | 0.29           | 20       |      |
| Soluble Calcium         |                         | 2.73      |              | 0.02      |                  |                  |      |                |                  | 2.72        | 0.15           | 20       |      |
| Soluble Magnesium       |                         | 2.14      |              | 0.05      |                  |                  |      |                |                  | 2.14        | 0.28           | 20       |      |
| Soluble Sodium          |                         | 5.02      |              | 0.25      |                  |                  |      |                |                  | 5.00        | 0.40           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp





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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41907

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111049-061ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/8/2021</b> | RunNo:      | <b>104944</b>  |          |      |
| Client ID:              | <b>SE-SB29 10-12'</b>   | Batch ID: | <b>41907</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2567309</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 2.76      |              | 0.10      |                  |                  |      |                |                  | 2.70        | 2.34           | 20       |      |
| Soluble Calcium         |                         | 4.15      |              | 0.02      |                  |                  |      |                |                  | 4.17        | 0.45           | 20       |      |
| Soluble Magnesium       |                         | 2.68      |              | 0.05      |                  |                  |      |                |                  | 2.69        | 0.67           | 20       |      |
| Soluble Sodium          |                         | 5.10      |              | 0.25      |                  |                  |      |                |                  | 5.00        | 2.07           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41908

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111049-081ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/8/2021</b> | RunNo:      | <b>104944</b>  |          |      |
| Client ID:              | <b>SE-SB31 5-7'</b>     | Batch ID: | <b>41908</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2567330</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 4.35      |              | 0.10      |                  |                  |      |                |                  | 4.38        | 0.83           | 20       |      |
| Soluble Calcium         |                         | 2.32      |              | 0.02      |                  |                  |      |                |                  | 2.31        | 0.11           | 20       |      |
| Soluble Magnesium       |                         | 1.45      |              | 0.05      |                  |                  |      |                |                  | 1.45        | 0.04           | 20       |      |
| Soluble Sodium          |                         | 5.96      |              | 0.25      |                  |                  |      |                |                  | 6.01        | 0.79           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41909

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111049-101ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/8/2021</b> | RunNo:      | <b>104944</b>  |          |      |
| Client ID:              | <b>SE-SB34 13-15'</b>   | Batch ID: | <b>41909</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2567362</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 2.11      |              | 0.10      |                  |                  |      |                |                  | 2.20        | 4.21           | 20       |      |
| Soluble Calcium         |                         | 1.64      |              | 0.02      |                  |                  |      |                |                  | 1.66        | 1.07           | 20       |      |
| Soluble Magnesium       |                         | 1.09      |              | 0.05      |                  |                  |      |                |                  | 1.10        | 0.92           | 20       |      |
| Soluble Sodium          |                         | 2.46      |              | 0.25      |                  |                  |      |                |                  | 2.58        | 4.71           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
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- U Analyte not detected
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- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41957

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111049-001ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/13/2021</b> | RunNo:      | <b>105207</b>  |          |      |
| Client ID:            | <b>SE-SB23 0-2'</b>     | Batch ID: | <b>41957</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/17/2021</b> | SeqNo:      | <b>2574421</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 0.94      |              | 0.10      |                  |                  |      |                |                   | 0.97        | 3.14           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41959

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                    |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|--------------------|
| Sample ID             | <b>21111049-021ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/13/2021</b> | RunNo:      | <b>105207</b>      |
| Client ID:            | <b>SE-SB24 23-25'</b>   | Batch ID: | <b>41959</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/17/2021</b> | SeqNo:      | <b>2574442</b>     |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD RPDLimit Qual |
| Exchangeable Sodium % |                         | 4.30      |              | 0.10      |                  |                  |      |                |                   | 4.15        | 3.55 20            |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
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- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 41961

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                    |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|--------------------|
| Sample ID             | <b>21111049-041ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/13/2021</b> | RunNo:      | <b>105207</b>      |
| Client ID:            | <b>SE-SB27 20-22'</b>   | Batch ID: | <b>41961</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/17/2021</b> | SeqNo:      | <b>2574463</b>     |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD RPDLimit Qual |
| Exchangeable Sodium % |                         | 5.17      |              | 0.10      |                  |                  |      |                |                   | 5.19        | 0.39 20            |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 42045

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111275-001ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/20/2021</b> | RunNo:      | <b>105299</b>  |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: | <b>42045</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/21/2021</b> | SeqNo:      | <b>2577635</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 2.08      |              | 0.10      |                  |                  |      |                |                   | 1.34        | 43.3           | 20       | R    |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
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- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 42047

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111049-061ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/20/2021</b> | RunNo:      | <b>105299</b>  |          |      |
| Client ID:            | <b>SE-SB29 10-12'</b>   | Batch ID: | <b>42047</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/21/2021</b> | SeqNo:      | <b>2577568</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 2.04      |              | 0.10      |                  |                  |      |                |                   | 2.09        | 2.42           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp





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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 42049

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111049-081ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/20/2021</b> | RunNo:      | <b>105299</b>  |          |      |
| Client ID:            | <b>SE-SB31 5-7'</b>     | Batch ID: | <b>42049</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/21/2021</b> | SeqNo:      | <b>2577589</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 2.31      |              | 0.10      |                  |                  |      |                |                   | 4.22        | 58.5           | 20       | R    |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
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- U Analyte not detected
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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** 42068

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                    |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|--------------------|
| Sample ID             | <b>21111049-101ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/21/2021</b> | RunNo:      | <b>105347</b>      |
| Client ID:            | <b>SE-SB34 13-15'</b>   | Batch ID: | <b>42068</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/22/2021</b> | SeqNo:      | <b>2579122</b>     |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD RPDLimit Qual |
| Exchangeable Sodium % |                         | 1.11      |              | 0.10      |                  |                  |      |                |                   | 1.16        | 4.41 20            |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104706

|                  |                         |                          |                             |                                  |                       |   |
|------------------|-------------------------|--------------------------|-----------------------------|----------------------------------|-----------------------|---|
| Sample ID        | <b>21111049-101ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>PMOIST_29B</b> | Units: <b>wt%</b>                | Prep Date:            | RunNo: <b>104706</b>                              |
| Client ID:       | <b>SE-SB34 13-15'</b>   | Batch ID: <b>R104706</b> | TestNo: <b>LDNR 29-B</b>    | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2560186</b> |   |
| Analyte          | Result                  | PQL                      | SPK value                   | SPK Ref Val                      | %REC                  | LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual |
| Percent Moisture | 21.6                    | 1.00                     |                             |                                  |                       | 23.20 7.14 20                                     |

|                  |                         |                          |                             |                                  |                       |   |
|------------------|-------------------------|--------------------------|-----------------------------|----------------------------------|-----------------------|---|
| Sample ID        | <b>21111049-001ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>PMOIST_29B</b> | Units: <b>wt%</b>                | Prep Date:            | RunNo: <b>104706</b>                              |
| Client ID:       | <b>SE-SB23 0-2'</b>     | Batch ID: <b>R104706</b> | TestNo: <b>LDNR 29-B</b>    | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2560207</b> |   |
| Analyte          | Result                  | PQL                      | SPK value                   | SPK Ref Val                      | %REC                  | LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual |
| Percent Moisture | 17.9                    | 1.00                     |                             |                                  |                       | 18.20 1.66 20                                     |

|                  |                         |                          |                             |                                  |                       |   |
|------------------|-------------------------|--------------------------|-----------------------------|----------------------------------|-----------------------|---|
| Sample ID        | <b>21111049-021ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>PMOIST_29B</b> | Units: <b>wt%</b>                | Prep Date:            | RunNo: <b>104706</b>                              |
| Client ID:       | <b>SE-SB24 23-25'</b>   | Batch ID: <b>R104706</b> | TestNo: <b>LDNR 29-B</b>    | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2560228</b> |   |
| Analyte          | Result                  | PQL                      | SPK value                   | SPK Ref Val                      | %REC                  | LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual |
| Percent Moisture | 28.2                    | 1.00                     |                             |                                  |                       | 28.10 0.36 20                                     |

|                  |                         |                          |                             |                                  |                       |   |
|------------------|-------------------------|--------------------------|-----------------------------|----------------------------------|-----------------------|---|
| Sample ID        | <b>21111049-041ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>PMOIST_29B</b> | Units: <b>wt%</b>                | Prep Date:            | RunNo: <b>104706</b>                              |
| Client ID:       | <b>SE-SB27 20-22'</b>   | Batch ID: <b>R104706</b> | TestNo: <b>LDNR 29-B</b>    | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2560249</b> |   |
| Analyte          | Result                  | PQL                      | SPK value                   | SPK Ref Val                      | %REC                  | LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual |
| Percent Moisture | 29.2                    | 1.00                     |                             |                                  |                       | 26.30 10.5 20                                     |

**Qualifiers:** \* Value exceeds Maximum Contaminant Level. H Holding times for preparation or analysis exceeded M Matrix Interference  
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits RL Reporting Limit  
 SDL Sample detection limit U Analyte not detected W Sample container temperature is out of limit as per



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104706

|                  |                         |           |                |           |                   |             |            |                |                   |             |                |          |      |
|------------------|-------------------------|-----------|----------------|-----------|-------------------|-------------|------------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID        | <b>21111049-061ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>PMOIST_29B</b> | Units:      | <b>wt%</b> | Prep Date:     |                   | RunNo:      | <b>104706</b>  |          |      |
| Client ID:       | <b>SE-SB29 10-12'</b>   | Batch ID: | <b>R104706</b> | TestNo:   | <b>LDNR 29-B</b>  |             |            | Analysis Date: | <b>11/22/2021</b> | SeqNo:      | <b>2560270</b> |          |      |
| Analyte          |                         | Result    |                | PQL       | SPK value         | SPK Ref Val | %REC       | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Percent Moisture |                         | 20.8      |                | 1.00      |                   |             |            |                |                   | 20.60       | 0.97           | 20       |      |

|                  |                         |           |                |           |                   |             |            |                |                   |             |                |          |      |
|------------------|-------------------------|-----------|----------------|-----------|-------------------|-------------|------------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID        | <b>21111049-081ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>PMOIST_29B</b> | Units:      | <b>wt%</b> | Prep Date:     |                   | RunNo:      | <b>104706</b>  |          |      |
| Client ID:       | <b>SE-SB31 5-7'</b>     | Batch ID: | <b>R104706</b> | TestNo:   | <b>LDNR 29-B</b>  |             |            | Analysis Date: | <b>11/22/2021</b> | SeqNo:      | <b>2560291</b> |          |      |
| Analyte          |                         | Result    |                | PQL       | SPK value         | SPK Ref Val | %REC       | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Percent Moisture |                         | 17.1      |                | 1.00      |                   |             |            |                |                   | 18.70       | 8.94           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- U Analyte not detected
- M Matrix Interference
- RL Reporting Limit
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104867

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104865</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104867</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104867</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564216</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104865</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104867</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104867</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564217</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.52      |                | 0.10      | 0.50             | 0           | 102             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104865</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104867</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104867</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564218</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 52.2      |                | 0.10      | 53.00            | 0           | 98.5            | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-001ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104867</b>      |
| Client ID:              | <b>SE-SB23 0-2'</b>     | Batch ID: | <b>R104867</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564220</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 0.56      |                | 0.10      |                  |             |                 |                |                  | 0.55        | 0.36 20            |

**Qualifiers:** \* Value exceeds Maximum Contaminant Level. H Holding times for preparation or analysis exceeded M Matrix Interference  
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits RL Reporting Limit  
 SDL Sample detection limit U Analyte not detected W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104868

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104867</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104868</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104868</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564266</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104867</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104868</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104868</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564267</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.50      |                | 0.10      | 0.50             | 0           | 100             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104867</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104868</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104868</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564268</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 51.2      |                | 0.10      | 53.00            | 0           | 96.6            | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-021ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104868</b>      |
| Client ID:              | <b>SE-SB24 23-25'</b>   | Batch ID: | <b>R104868</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564270</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 1.03      |                | 0.10      |                  |             |                 |                |                  | 1.02        | 0.59 20            |

**Qualifiers:**

|     |  |   |  |    |  |
|-----|--|---|--|----|--|
| *   | Value exceeds Maximum Contaminant Level. | H | Holding times for preparation or analysis exceeded | M  | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | R | RPD outside accepted recovery limits               | RL | Reporting Limit                                    |
| SDL | Sample detection limit                   | U | Analyte not detected                               | W  | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104869

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104868</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104869</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104869</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564311</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104868</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104869</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104869</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564312</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.50      |                | 0.10      | 0.50             | 0           | 99.6            | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104868</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104869</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104869</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564313</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 50.5      |                | 0.10      | 53.00            | 0           | 95.3            | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-101ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104869</b>      |
| Client ID:              | <b>SE-SB34 13-15'</b>   | Batch ID: | <b>R104869</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/7/2021</b> | SeqNo:      | <b>2564315</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 0.55      |                | 0.10      |                  |             |                 |                |                  | 0.55        | 0.36 20            |

**Qualifiers:** \* Value exceeds Maximum Contaminant Level. H Holding times for preparation or analysis exceeded M Matrix Interference  
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits RL Reporting Limit  
 SDL Sample detection limit U Analyte not detected W Sample container temperature is out of limit as per



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104918

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104880</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104918</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104918</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565610</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104880</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104918</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104918</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565611</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.55      |                | 0.10      | 0.50             | 0           | 109             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104880</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104918</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104918</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565612</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 58.1      |                | 0.10      | 53.00            | 0           | 110             | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-041ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104918</b>      |
| Client ID:              | <b>SE-SB27 20-22'</b>   | Batch ID: | <b>R104918</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565614</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 0.97      |                | 0.10      |                  |             |                 |                |                  | 0.96        | 1.56 20            |

**Qualifiers:**

|     |  |   |  |    |  |
|-----|--|---|--|----|--|
| *   | Value exceeds Maximum Contaminant Level. | H | Holding times for preparation or analysis exceeded | M  | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | R | RPD outside accepted recovery limits               | RL | Reporting Limit                                    |
| SDL | Sample detection limit                   | U | Analyte not detected                               | W  | Sample container temperature is out of limit as sp |





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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104919

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104918</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104919</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104919</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565639</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104918</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104919</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104919</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565640</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.54      |                | 0.10      | 0.50             | 0           | 107             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104918</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104919</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104919</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565641</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 57.5      |                | 0.10      | 53.00            | 0           | 108             | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-061ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104919</b>      |
| Client ID:              | <b>SE-SB29 10-12'</b>   | Batch ID: | <b>R104919</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565643</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 1.28      |                | 0.10      |                  |             |                 |                |                  | 1.28        | 0.08 20            |

**Qualifiers:** \* Value exceeds Maximum Contaminant Level. H Holding times for preparation or analysis exceeded M Matrix Interference  
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits RL Reporting Limit  
 SDL Sample detection limit U Analyte not detected W Sample container temperature is out of limit as per



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# QC SUMMARY REPORT

WO#: 21111049  
 27-Dec-21

**Client:** Environmental Resources Management  
**Project:** Neumin 0494259

**BatchID:** R104921

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104919</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104921</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104921</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565723</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104919</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104921</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104921</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565724</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.53      |                | 0.10      | 0.50             | 0           | 106             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104919</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104921</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104921</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565725</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 56.8      |                | 0.10      | 53.00            | 0           | 107             | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111049-081ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104921</b>      |
| Client ID:              | <b>SE-SB31 5-7'</b>     | Batch ID: | <b>R104921</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565727</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 1.05      |                | 0.10      |                  |             |                 |                |                  | 1.05        | 0.48 20            |

**Qualifiers:**

|     |  |   |  |    |  |
|-----|--|---|--|----|--|
| *   | Value exceeds Maximum Contaminant Level. | H | Holding times for preparation or analysis exceeded | M  | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | R | RPD outside accepted recovery limits               | RL | Reporting Limit                                    |
| SDL | Sample detection limit                   | U | Analyte not detected                               | W  | Sample container temperature is out of limit as sp |






Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

## Sample Log-In Check List

Client Name: **ERM\_HOUSTON**

Work Order Number: **21111049**

RcptNo: **1**

|               |                      |                               |  |
|---------------|----------------------|-------------------------------|--|
| Logged by:    | <b>Rhonda David</b>  | <b>11/18/2021 5:40:00 PM</b>  |  |
| Completed By: | <b>Rhonda David</b>  | <b>11/19/2021 7:55:06 AM</b>  |  |
| Reviewed By:  | <b>Kelli Foreman</b> | <b>12/10/2021 11:05:43 AM</b> |  |

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? Client

### Log In

3. Coolers are present? Yes  No  NA   
 4. Shipping container/cooler in good condition? Yes  No   
 Custody seals intact on shipping container/cooler? Yes  No  Not Present   
 No. Seal Date: Signed By:  
 5. Was an attempt made to cool the samples? Yes  No  NA   
**Not Required**  
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
**Not required**  
 7. Sample(s) in proper container(s)? Yes  No   
 8. Sufficient sample volume for indicated test(s)? Yes  No   
 9. Are samples (except VOA and ONG) properly preserved? Yes  No   
 10. Was preservative added to bottles? Yes  No  NA   
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes  No  No VOA Vials   
 12. Were any sample containers received broken? Yes  No   
 13. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 14. Are matrices correctly identified on Chain of Custody? Yes  No   
 15. Is it clear what analyses were requested? Yes  No   
 16. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

|                      |                      |      |   |
|----------------------|----------------------|------|---|
| Person Notified:     | <input type="text"/> | Date | <input type="text"/>  |
| By Whom:             | <input type="text"/> | Via: | <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | <input type="text"/> |      |   |
| Client Instructions: | <input type="text"/> |      |   |

18. Additional remarks:  
 Improper error correction(s) made by client.

### Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
|-----------|---------|-----------|-------------|---------|-----------|-----------|



# Chain of Custody

11/19/21 1740  
 Laboratory Number: 21110499

**Client Information:**  
 Company Name: ERM  
 Contact Name: Shawn Wiggins  
 Address: 840 Sam Houston Pkwy North  
 Suite 600  
 Houston, TX 77024  
 Phone Number: 971 303-2823 Ext: 2823  
 Fax Number:  
 E-mail Address: Shawn.Wiggins@ERM.COM

**Billing Information:**  
 Billing Information: Same  
 PO Number:  
 Quote Number:  
 Required QC Level:  
 Bill Monthly:  Yes  No  
 Ext:

**Project Name/Number:** N évin  
 0494259  
**Sampler's Signature:** *[Signature]*  
**Shipping Method:** UPS / FedEx / NOW  
 DHL / Element / Hand / Mail

**Matrix Code:**  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 SOL = Solid  
 O = Oil  
 SC = Soil  
 F = Food  
 SW = Swab  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Turn Time                |                          | Collection Information |      | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container Type<br>G=Glass, V=Vial<br>P=Plastic | Pres.   | Requested Tests | Comments |                  |        |
|-----------------------|--------------------------|--------------------------|------------------------|------|--|--|---|-----------------|----------|------------------|--------|
|                       | Standard                 | RUSH                     | Date                   | Time |  |  |   |                 |          | Grab / Composite | Matrix |
|                       |                          |                          |                        |      |  |  |   |                 |          |                  |        |
| SE-SB 23 0'-2'        | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0848 | G  | SO   | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub><br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP    |          |                  |        |
| SE-SB 23 3'-5'        | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0850 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 5'-7'        | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0858 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 8'-10'       | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0900 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 10'-12'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0908 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 12'-15'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0910 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 15'-17'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0915 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 18'-20'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0917 | G  | SO   |   |                 | ✓        |                  |        |
| SE-SB 23 20'-22'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 0930 | G  | SO   |   |                 | ✓        |                  |        |

**Relinquished by:** *[Signature]* Date/Time: 11/16/21 1740  
**Received by:** *[Signature]* Date/Time: 11/18/21 1900  
 Field Notes:  
 Received at lab on ice?  Yes  No Temp:

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

8800 North US 31  
 Columbus, IN 47201 USA  
 P 812-375-0531  
 F 812-375-0731

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 F 260-471-7777

909 Executive Dr  
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 P 574-267-3305  
 F 574-269-6569

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 P 574-277-0707  
 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0483  
 F 337-233-6540



# Chain of Custody

Laboratory Number: 2111049

Company Name: **ERM**      PO Number: **0494259**      Page 2 of 2

Contact Name: **Shawn Wiggins**      Quote Number: **11/16/21**      Matrix Code: **DW = Drinking Water, WW = Wastewater, GW = Ground Water, AQ = Aqueous, OT = Other, SL = Sludge, SOL = Solid, O = Oil, SO = Soil, F = Food, SW = Swab, NG = Natural Gas, NGL = Natural Gas Liquid, PW = Produced Water, CF = Completion Fluid**

Address: **Shawn.Wiggins@ERM.com**      Required QC Level: **Hand**      Mail

City, State Zip:      Ext:      Bill Monthly:  Yes  No

Phone Number:      Ext:      Shipping Method: **UPS / FedEx / NOW**

Fax Number:      Ext:      DHL / Element / **Hand** / Mail

E-mail Address: **Shawn.Wiggins@ERM.com**

| Sample ID/Description | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | Collection Information |      | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container<br>Type<br>P=Plastic, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> O <sub>2</sub> | Requested Tests | Comments   |          |
|-----------------------|---|------------------------|------|--|--|--|-----------------|------------|----------|
|                       |   | Date                   | Time |  |  |  |                 |            | Quantity |
|                       |   | Matrix                 |      |  |  |  |                 |            |          |
| SE-SB23 23'-25'       | <input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC          | 11/16/21               | 0938 | 6  | 50                                     | 1  | EG, SAR, ESP    | % Moisture |          |
| SE-SB23 25-27'        |   | 11/16/21               | 0945 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB23 28-30'        |   | 11/16/21               | 0950 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 0-5'          |   | 11/16/21               | 1005 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 5-7'          |   | 11/16/21               | 1010 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 8-10'         |   | 11/16/21               | 1012 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 10-12'        |   | 11/16/21               | 1023 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 13-15'        |   | 11/16/21               | 1025 | 6  | 50                                     | 1  |                 |            |          |
| SE-SB24 15-17'        |   | 11/16/21               | 1028 | 6  | 50                                     | 1  |                 |            |          |

Relinquished by: **M. G.**      Date/Time: **11/16/21 12:40**      Received by: **M. G.**      Date/Time: **11/16/21 1740**

Field Notes: Received at lab on ice?  Yes  No Temp: \_\_\_\_\_

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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F 812-375-0731

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F 260-471-7777

909 Executive Dr  
Warsaw, IN 46580 USA  
P 574-267-3305  
F 574-269-6569

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F 574-273-5699

2417 W. Pinhook Rd  
Lafayette, LA 70506 USA  
P 337-235-0483  
F 337-233-6540



Chain of Custody

Laboratory Number: 2111049

Client Information: **ERM**  
 Billing Information: PO Number: \_\_\_\_\_ Quote Number: \_\_\_\_\_  
 Required QC Level: \_\_\_\_\_  
 Bill Monthly:  Yes  No  
 Ext: \_\_\_\_\_  
 E-mail Address: **Shawn.Wiggys@ERM.COM**  
 City, State Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_  
 Project Name/Number: **NUMM 049035** Page **3** of **8**  
 Matrix Code: **75, 1014**  
 Sampler's Signature: *[Signature]*  
 Shipping Method: **UPS / FedEx NOW**  
 DHL / Element / Hand / Mail

| Sample ID/Description | Which Regulations Apply: |      |          | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container Type<br>O = Glass, V = Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests | Comments |
|-----------------------|--------------------------|------|----------|---|---|---------------------------------------|---|-----------------|----------|
|                       | Collection Information   |      | Quantity |   |   |                                       |   |                 |          |
|                       | Date                     | Time |          |   |   |                                       |   |                 |          |
| SE-SB24 18'-20'       | 11/16/21                 | 1030 | Grab     | P-50  | 1   |                                       |   | EC, SAR, RSP    |          |
| SE-SB24 20'-22'       |                          | 1035 |          |   |   |                                       |   |                 | Moisture |
| SE-SB24 23'-25'       |                          | 1037 |          |   |   |                                       |   |                 |          |
| SE-SB24 24'-25'       |                          | 1045 |          |   |   |                                       |   |                 |          |
| SE-SB24 25'-27'       |                          | 1058 |          |   |   |                                       |   |                 |          |
| SE-SB24 28'-30'       |                          | 1102 |          |   |   |                                       |   |                 |          |
| SE-SB25 0-9'          |                          | 1120 |          |   |   |                                       |   |                 |          |
| SE-SB25 3'-5'         |                          | 1122 |          |   |   |                                       |   |                 |          |
| SE-SB25 5'-7'         |                          | 1128 |          |   |   |                                       |   |                 |          |

Relinquished by: *[Signature]* Date/Time: **11/16/21 1740**  
 Received by: *[Signature]* Date/Time: **11/18/21 1740**  
 Field Notes: Received at lab on ice?  Yes  No Temp: \_\_\_\_\_

8900 North US 31  
 Columbus, IN 47201 USA  
 P 812-375-0531  
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 F 574-260-5569

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 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0463  
 F 337-233-6540



Chain of Custody

Laboratory Number: 2111049

Client Information: **ERM**

Company Name: **ERM**

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

E-mail Address: **shawl.wiggins@ERM.COM**

Billing Information: \_\_\_\_\_

PO Number: \_\_\_\_\_

Quote Number: \_\_\_\_\_

Required QC Level: \_\_\_\_\_

Bill Monthly:  Yes  No

Ext: \_\_\_\_\_

Project Name/Number: **Newm-0494059**

Page 4 of 12

Matrix Code

DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

Sampler's Signature: *[Signature]*

Shipping Method: **UPS / FedEx / NOW**

DHL / Element / Hand / Mail

| Sample ID/Description | Turn Time                |                          | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container Type<br>P=Plastic, V=Vial | Pros. | Requested Tests | Comments   |                        |      |
|-----------------------|--------------------------|--------------------------|---|-------------------------------------|-------|-----------------|--|------------------------|------|
|                       | Standard                 | RUSH                     |   |                                     |       |                 |  | Collection Information |      |
|                       |                          |                          |   |                                     |       |                 |  | Date                   | Time |
| SE-SB25 8'-10'        | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21  | 1130                                | grab  | SO              | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> |                        |      |
| SE-SB26 0'-2'         | <input type="checkbox"/> | <input type="checkbox"/> | 1145  |                                     |       |                 |  |                        |      |
| SE-SB26 3'-5'         | <input type="checkbox"/> | <input type="checkbox"/> | 1147  |                                     |       |                 |  |                        |      |
| SE-SB26 5'-7'         | <input type="checkbox"/> | <input type="checkbox"/> | 1155  |                                     |       |                 |  |                        |      |
| SE-SB26 8'-10'        | <input type="checkbox"/> | <input type="checkbox"/> | 1157  |                                     |       |                 |  |                        |      |
| SE-SB27 0'-2'         | <input type="checkbox"/> | <input type="checkbox"/> | 1310  |                                     |       |                 |  |                        |      |
| SE-SB27 3'-5'         | <input type="checkbox"/> | <input type="checkbox"/> | 1312  |                                     |       |                 |  |                        |      |
| SE-SB27 5'-7'         | <input type="checkbox"/> | <input type="checkbox"/> | 1325  |                                     |       |                 |  |                        |      |
| SE-SB27 8'-10'        | <input type="checkbox"/> | <input type="checkbox"/> | 1327  |                                     |       |                 |  |                        |      |

Relinquished by: *[Signature]* Date/Time: **11/16/21 1740**

Received by: *[Signature]* Date/Time: **11/18/21 1740**

Field Notes: \_\_\_\_\_

Received at lab on ice?  Yes  No Temp: \_\_\_\_\_

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 70508 USA  
 P 337-235-0483  
 F 337-233-6540



# Chain of Custody

Laboratory Number: 2111049

Client Information: **ERM**  
 Billing Information:  
 PO Number:  
 Quote Number:  
 Required QC Level:  
 Bill Monthly:  Yes  No  
 Ext:  
 Ext:  
 E-mail Address: **Shawn.Wiggins@ERM.com**

Project Name: **Neumir 044259**  
 Date: **11/16/21**  
 Sampler's Signature: *[Signature]*  
 Shipping Method: **UPS / FedEx / NOW**  
**DHL / Element / Hand / Mail**

Matrix Code:  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Turn Time                |                          | Collection Information |      | Container Type<br>Q=Glass, V=Vial<br>P=Plastic | Pres. | Requested Tests  | Comments   |                  |        |
|-----------------------|--------------------------|--------------------------|------------------------|------|--|-------|--|------------|------------------|--------|
|                       | Standard                 | RUSH                     | Date                   | Time |  |       |  |            | Grab / Composite | Matrix |
|                       | <input type="checkbox"/> | <input type="checkbox"/> |                        |      |  |       |  |            |                  |        |
| SE-SB 27 10'-12'      | <input type="checkbox"/> | <input type="checkbox"/> | 11/16/21               | 1350 | Grab   | 50    | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> | EG SAR ESP |                  |        |
| SE-SB 27 13'-15'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1352 |  |       |  |            |                  |        |
| SE-SB 27 15'-17'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1400 |  |       |  |            |                  |        |
| SE-SB 27 18'-20'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1402 |  |       |  |            |                  |        |
| SE-SB 27 20'-22'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1410 |  |       |  |            |                  |        |
| SE-SB 27 23'-25'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1415 |  |       |  |            |                  |        |
| SE-SB 27 25'-27'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1430 |  |       |  |            |                  |        |
| SE-SB 27 28'-30'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1437 |  |       |  |            |                  |        |
| SE-SB 27 30'-32'      | <input type="checkbox"/> | <input type="checkbox"/> |                        | 1452 |  |       |  |            |                  |        |

Relinquished by: *[Signature]* Date/Time: **11/16/21 1740**  
 Received by: *[Signature]* Date/Time: **11/16/21 1740**  
 Field Notes: Received at lab on ice?  Yes  No Temp:

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2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0483  
 F 337-233-6540





# Chain of Custody

Laboratory Number: **2111049**

**Client Information:**  
 Company Name: **ERM**  
 Contact Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_  
 E-mail Address: **Shawn.Wiggins@ERM.com**

**Billing Information:**  
 PO Number: \_\_\_\_\_  
 Quote Number: \_\_\_\_\_  
 Required QC Level: \_\_\_\_\_  
 Bill Monthly:  Yes  No

**Project Name/Number:** **Newmin**  
**Sampler's Signature:** *[Signature]*  
**Shipping Method:** **UPS / FedEx / NOW**  
 DHL / Element /  Mail

**Matrix Code:**  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
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 O = Oil  
 SO = Soil  
 F = Food  
 SW = Swab  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | Collection Information |      |                  | Rush turn times will incur a surcharge and must be pre-approved by lab. | Container<br>Type<br>G=Glass, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub><br>NaOH, Na <sub>2</sub> SO <sub>3</sub> | Requested Tests            | Comments |
|-----------------------|---|------------------------|------|------------------|---|--------------------------------------|--|----------------------------|----------|
|                       |   | Date                   |      | Matrix           |   |                                      |  |                            |          |
|                       |   | Date                   | Time | Grab / Composite |   |                                      |  |                            |          |
| SE-SB 27 33'-35'      |   | 11/16/21               | 1500 | grab             | SO  | 1                                    | P  | EG, SAR, ESP<br>% moisture |          |
| SE-SB 28 0'-2'        |   |                        | 1535 |                  |   |                                      |  |                            |          |
| SE-SB 28 3'-5'        |   |                        | 1537 |                  |   |                                      |  |                            |          |
| SE-SB 28 5'-9'        |   |                        | 1543 |                  |   |                                      |  |                            |          |
| SE-SB 28 8'-10'       |   |                        | 1545 |                  |   |                                      |  |                            |          |
| SE-SB 28 10'-12'      |   |                        | 1550 |                  |   |                                      |  |                            |          |
| SE-SB 28 13'-15'      |   |                        | 1552 |                  |   |                                      |  |                            |          |
| SE-SB 28 15'-17'      |   |                        | 1600 |                  |   |                                      |  |                            |          |
| SE-SB 28 18'-20'      |   |                        | 1602 |                  |   |                                      |  |                            |          |

**Relinquished by:** *[Signature]* **Date/Time:** **11/18/21 1740**  
**Received by:** *[Signature]* **Date/Time:** **11/18/21 1740**  
 Field Notes: \_\_\_\_\_  
 Received at lab on ice?  Yes  No Temp: \_\_\_\_\_

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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47201 USA  
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F 812-375-0731

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P 260-471-7000  
F 260-471-7777

909 Executive Dr  
Warsaw, IN  
46580 USA  
P 574-267-3306  
F 574-289-6589

3371 Cleveland Road, Suite 100A  
South Bend, IN  
46626 USA  
P 574-277-0707  
F 574-273-5695

2417 W Pinhook Rd  
Lafayette, LA  
70508 USA  
P 337-235-0483  
F 337-233-6543



# Chain of Custody

Laboratory Number: 2111049

**Client Information:**  
 Company Name: ERM  
 Contact Name:  
 Address:  
 City, State Zip:  
 Phone Number:  
 Fax Number:  
 E-mail Address: showna.wiggins@ERM.COM

**Billing Information:**  
 PO Number:  
 Quote Number:  
 Required QC Level:  
 Bill Monthly:  Yes  No  
 Ext:

**Project Name/Number:** Newing 05142359 4ft 11/16/21  
**Matrix Code:**  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge SOL = Solid  
 O = Oil SC = Soil  
 F = Food SW = Swab  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

**Sampler's Signature:** [Signature]  
**Shipping Method:** UPS / FedEx / NOW  
 DHL / Element / Hand / Mail

| Sample ID/Description | Turn Time              |      |        | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container Type<br>G=Glass, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests | Comments |
|-----------------------|------------------------|------|--------|---|-----------------------------------|---|-----------------|----------|
|                       | Collection Information |      | Matrix |   |                                   |   |                 |          |
|                       | Date                   | Time |        |   |                                   |   |                 |          |
| SE-SB 28 20'-22'      | 11/16/21               | 1605 | grab   | SO  | P                                 |   | EC, SAR, ESP    |          |
| SE-SB 28 23'-25'      | 11/16/21               | 1612 |        |   |                                   |   |                 |          |
| SE-SB 29 0'-2'        | 11/17/21               | 0833 |        |   |                                   |   |                 |          |
| SE-SB 29 3'-5'        |                        | 0835 |        |   |                                   |   |                 |          |
| SE-SB 29 5'-7'        |                        | 0843 |        |   |                                   |   |                 |          |
| SE-SB 29 8'-10'       |                        | 0845 |        |   |                                   |   |                 |          |
| SE-SB 29 10'-12'      |                        | 0853 |        |   |                                   |   |                 |          |
| SE-SB 29 13'-15'      |                        | 0855 |        |   |                                   |   |                 |          |
| SE-SB 29 15'-17'      |                        | 0900 |        |   |                                   |   |                 |          |

**Relinquished by:** [Signature] **Date/Time:** 11/16/21 1740  
**Received by:** [Signature] **Date/Time:** 11/16/21 1740  
 Field Notes: Received at lab on ice?  Yes  No Temp:

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 F 260-471-7777

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 F 574-269-6569

3371 Cleveland Road, Suite 100A  
 South Bend, IN 46628 USA  
 P 574-277-0707  
 F 574-273-5899

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-233-0483  
 F 337-233-8540



Chain of Custody

Laboratory Number: 2111049

**Client Information:** Company Name: ERM PO Number:          Project Name/Number: Newman Page 8 of 12  
 Contact Name:          Quote Number:          Sampler's Signature: [Signature] Matrix Code:           
 Address:          Required QC Level:          Shipping Method: UPS / FedEx / NOW  
 City, State Zip:          Ext:          Bill Monthly:  Yes  No  
 Phone Number:          Ext:          DHL / Element / Hand Mail  
 Fax Number:          E-mail Address: Shawn.Wiggins@ERM.COM

| Sample ID/Description | Which Regulations Apply: |      | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Collection Information |                  | Container Type<br>G=Glass, V=Vial<br>P=Plastic | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests | Comments |        |
|-----------------------|--------------------------|------|---|---|------------------------|------------------|--|---|-----------------|----------|--------|
|                       | Date                     |      |   |   | Time                   | Grab / Composite |  |   |                 |          | Matrix |
|                       | Date                     | Time |   |   |                        |                  |  |   |                 |          |        |
| SE-SB 29 18'-20'      | 11/7/12                  | 0902 | grab  | SO  | ↓                      | P                | EC SAR, ESP                                    |   |                 |          |        |
| SE-SB 29 20'-22'      | 0910                     | 0915 | ↓   | ↓   | ↓                      | ↓                | ↓  |   |                 |          |        |
| SE-SB 29 25'-25'      | 0933                     | 0940 | ↓   | ↓   | ↓                      | ↓                | ↓  |   |                 |          |        |
| SE-SB 29 25'-27'      | 1000                     | 1002 | ↓   | ↓   | ↓                      | ↓                | ↓  |   |                 |          |        |
| SE-SB 29 28'-30'      | 1008                     | 1010 | ↓   | ↓   | ↓                      | ↓                | ↓  |   |                 |          |        |
| SE-SB 30 0'-2'        |                          |      |   |   |                        |                  |  |   |                 |          |        |
| SE-SB 30 3'-5'        |                          |      |   |   |                        |                  |  |   |                 |          |        |
| SE-SB 30 5'-7'        |                          |      |   |   |                        |                  |  |   |                 |          |        |
| SE-SB 30 8'-10'       |                          |      |   |   |                        |                  |  |   |                 |          |        |

**Relinquished by:** [Signature] **Date/Time:** 11/8/12 1740  
**Received by:** [Signature] **Date/Time:** 11/8/12 1740  
 Field Notes:           
 Received at lab on ice?  Yes  No Temp:         

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 P 574-277-0707  
 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0483  
 F 337-233-6540



# Chain of Custody

Laboratory Number: 2111049

**Client Information:**  
 Company Name: ERM  
 Contact Name: Shawn Williams  
 Address: Shawn.Williams@ERM.COM  
 City, State Zip: [blank]  
 Phone Number: [blank]  
 Fax Number: [blank]  
 E-mail Address: [blank]

**Billing Information:**  
 PO Number: [blank]  
 Quote Number: [blank]  
 Required QC Level: [blank]  
 Bill Monthly:  Yes  No  
 Ext: [blank]

**Project Name/Number:** Newborn 0494859  
**Sampler's Signature:** [Signature]  
**Shipping Method:** UPS / FedEx / NOW  
 DHL / Element / Hand / Mail

**Matrix Code:**  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Turn Time                |                                     | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container                 | Pres.   | Requested Tests | Comments |
|-----------------------|--------------------------|-------------------------------------|--|---------------------------|---|-----------------|----------|
|                       | Standard                 | RUSH                                |  |                           |   |                 |          |
|                       | 1 Day                    | 2 Day                               |  |                           |   |                 |          |
| SE-SB 30 10'-12'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  | Quantity                  | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub><br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP    |          |
| SE-SB 30 13'-15'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  | Type<br>P=Plastic, V=Vial |   |                 |          |
| SE-SB 30 15'-17'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 30 18'-20'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 30 20'-22'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 30 23'-25'      | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 31 0'-2'        | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 31 3'-5'        | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |
| SE-SB 31 5'-7'        | <input type="checkbox"/> | <input checked="" type="checkbox"/> |  |                           |   |                 |          |

**Relinquished by:** [Signature] **Date/Time:** 11/18/12 1740

**Received by:** [Signature] **Date/Time:** 11/18/12 1740

**Field Notes:**  
 Received at lab on ice?  Yes  No Temp: [blank]

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 F 574-273-5899

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0483  
 F 337-233-8540



# Chain of Custody

Laboratory Number: 2111049

Company Name: ERM  
 Contact Name: Shawn Wiggins  
 Address: Shawn.Wiggins@ERM.COM  
 City, State Zip: [blank]  
 Phone Number: [blank]  
 Fax Number: [blank]  
 E-mail Address: Shawn.Wiggins@ERM.COM

Client Information: [blank]  
 Billing Information: [blank]  
 PO Number: [blank]  
 Quote Number: [blank]  
 Required QC Level: [blank]  
 Bill Monthly:  Yes  No  
 Ext: [blank]

Project Name/Number: Newmex 049439 RT 11/12/14  
 Sampler's Signature: [Signature]  
 Shipping Method: UPS / FedEx / NOW  
 DHL / Element / Hand Mail

Matrix Code:  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 CT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid  
 SOL = Solid  
 SO = Soil  
 SW = Swab  
 GAS = Natural Gas

| Sample ID/Description | Which Regulations Apply: |      | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container<br>Type<br>G=Glass, V=Vial<br>F=Plastic | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests | Comments     |          |
|-----------------------|--------------------------|------|---|---|---|---|-----------------|--------------|----------|
|                       | Collection Information   |      |   |   |   |   |                 |              | Quantity |
|                       | Date                     | Time |   |   |   |   |                 |              |          |
| SE-SB 31 8'-10'       | 11/17/21                 | 1125 | Grab / Composite  | 50  | 1   |   | EC, SAR, ESP    | 1/6 moisture |          |
| SE-SB 31 10'-12'      |                          | 1135 |   |   |   |   |                 |              |          |
| SE-SB 31 13'-15'      |                          | 1137 |   |   |   |   |                 |              |          |
| SE-SB 31 15'-17'      |                          | 1145 |   |   |   |   |                 |              |          |
| SE-SB 31 18'-20'      |                          | 1147 |   |   |   |   |                 |              |          |
| SE-SB 31 23'-25'      |                          | 1152 |   |   |   |   |                 |              |          |
| SE-SB 31 20'-22'      |                          | 1205 |   |   |   |   |                 |              |          |
| SE-SB 31 25'-27'      |                          | 1255 |   |   |   |   |                 |              |          |
| SE-SB 31 28'-30'      |                          | 1305 |   |   |   |   |                 |              |          |

Relinquished by: [Signature] Date/Time: 11/18/21 1740

Received by: [Signature] Date/Time: 11/18/21 1740

Field Notes: [blank]

Received at lab on ice?  Yes  No Temp: [blank]

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 P 574-267-3305  
 F 574-269-8669

3371 Cleveland Road, Suite 100A  
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 P 574-277-0707  
 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508 USA  
 P 337-235-0683  
 F 337-233-6540



# Chain of Custody

Laboratory Number: 2111049

Client Information: Company Name: **ERM** PO Number: **1119121**

Contact Name: **Shawn Wiggins** Quote Number: **0494251**

Address: **ERM.com** Required QC Level: **1119121**

City, State Zip: **ERM.com** Ext: **1119121**

Phone Number: **ERM.com** Ext: **1119121**

Fax Number: **ERM.com** Ext: **1119121**

E-mail Address: **ERM.com** Ext: **1119121**

Project Name/Number: **ERM.com**

Sampler's Signature: **[Signature]**

Shipping Method: **UPS / FedEx / NOW**

DHL / Element / Hand Mail

Matrix Code

DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AO = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Which Regulations Apply: |      |        | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container<br>Type<br>Quantity | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ,<br>NaOH, Na <sub>2</sub> SO <sub>3</sub> | Requested Tests | Comments |
|-----------------------|--------------------------|------|--------|---|---|-------------------------------|--|-----------------|----------|
|                       | Collection Information   |      | Matrix |   |   |                               |  |                 |          |
|                       | Date                     | Time |        |   |   |                               |  |                 |          |
| SE-SB 32 3'-5'        | 11/7/21                  | 1340 | Grab   | SO  | P   |                               |  |                 |          |
| SE-SB 32 8'-10'       |                          | 1348 |        |   |   |                               |  |                 |          |
| SE-SB 32 13'-15'      |                          | 1355 |        |   |   |                               |  |                 |          |
| SE-SB 32 18'-20'      |                          | 1400 |        |   |   |                               |  |                 |          |
| SE-SB 33 3'-5'        |                          | 1436 |        |   |   |                               |  |                 |          |
| SE-SB 33 8'-10'       |                          | 1435 |        |   |   |                               |  |                 |          |
| SE-SB 33 13'-15'      |                          | 1445 |        |   |   |                               |  |                 |          |
| SE-SB 33 18'-20'      |                          | 1450 |        |   |   |                               |  |                 |          |
| SE-SB 34 3'-5'        |                          | 1548 |        |   |   |                               |  |                 |          |

Relinquished by: **[Signature]** Date/Time: **11/8/21 1740**

Received by: **[Signature]** Date/Time: **11/8/21 1740**

Field Notes:

Received at lab on ice?  Yes  No Temp: **11/8/21 1740**

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 P 337-235-0483  
 F 337-233-6540



# Chain of Custody

Laboratory Number: **2111049**

**Client Information:** Client Name: **ERM** PO Number: **12 of 12**

**Billing Information:** Project Name/Number: **Metonic Newm... 2111049**

**Quote Number:** **2111049**

**Required QC Level:** **100%**

**Bill Monthly:**  Yes  No

**Ext:** **Shawn.Wiggins@ERM.com**

**Shipping Method:** **UPS / FedEx / NOW**

**DHL / Element / Hand / Mail:** **Hand**

**Matrix Code:** **100%**

**Sampler's Signature:** *[Signature]*

**Shipping Method:** **UPS / FedEx / NOW**

**DHL / Element / Hand / Mail:** **Hand**

| Sample ID/Description | Which Regulations Apply:<br><input type="checkbox"/> RCRA <input type="checkbox"/> Drinking Water<br><input type="checkbox"/> POTW <input type="checkbox"/> Distribution<br><input type="checkbox"/> NPDES <input type="checkbox"/> Special<br><input type="checkbox"/> USDA/FDA <input type="checkbox"/> State<br><input type="checkbox"/> RECAP/RISC <input type="checkbox"/> Other | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Collection Information |      | Quantity | Container<br>Type<br>P=Plastic, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests | Comments |
|-----------------------|---|---|---|------------------------|------|----------|--|---|-----------------|----------|
|                       |   |   |   | Date                   | Time |          |  |   |                 |          |
|                       |   |   |   | Matrix                 |      |          |  |   |                 |          |
| SE-SB 34 8'-10'       |   | Standard  |   | 11/17/21               | 1555 | 9ab      | SO                                     |   |                 |          |
| SE-SB 34 13'-15'      |   | RUSH  |   | ↓                      | 1600 |          |  |   |                 |          |
| SE-SB 34 18'-20'      |   | 1 Day   |   | 11/18/21               | 0935 |          |  |   |                 |          |
| SE-SB 35 13'-15'      |   | 2 Day   |   | 11/18/21               | 0940 |          |  |   |                 |          |
| SE-SB 35 18'-20'      |   | Other   |   | 11/18/21               | 1108 |          |  |   |                 |          |
| SE-SB 36 13'-15'      |   |   |   | 11/18/21               | 1110 |          |  |   |                 |          |
| SE-SB 36 18'-20'      |   |   |   |                        |      |          |  |   |                 |          |

**Relinquished by:** *[Signature]* **Date/Time:** 11/18/21 1740

**Received by:** *[Signature]* **Date/Time:** 11/18/21 1740

**Field Notes:**

Received at lab on ice?  Yes  No Temp: \_\_\_\_\_

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F 574-273-5699

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Lafayette, LA 70508 USA  
P 337-235-0483  
F 337-233-6540



Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: www.element.com

December 01, 2021

Duane Piranio  
Southland Environmental  
510 Clarence St  
Lake Charles, LA 70601  
TEL: (337) 436-3248  
FAX: (337) 436-3641

RE: Drew Estate "15"/11397

Order No.: 21110970

Dear Duane Piranio:

Element Materials Technology Lafayette received 56 sample(s) on 11/17/2021 for the analyses presented in the following report.

In accordance with your instructions, Element Lafayette either conducted or subcontracted these analyses. Subcontracted analyses will be identified in the accompanying case narrative. All relevant sampling information can be found on the attached Chain-of-Custody form. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet the applicable requirements of TNI. Reported results relate only to the items tested.

Where applicable, all soil data, except for 29-B, are reported on a wet-weight basis unless otherwise indicated in the units field as –dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. LDHH Certification No.: LA023. ISDH Certification No.: C-LA-01. NDELCP Certification No.: R-226. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation. PA registration No.: 68-05967.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

A handwritten signature in blue ink that reads 'Cristina Thibeaux'.

Cristina Thibeaux  
Customer Service Supervisor  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344





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## Case Narrative

WO#: 21110970  
Date: 12/1/2021

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**CLIENT:** Southland Environmental

**Project:** Drew Estate "15"/11397

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Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 8:48:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-001 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 0-2

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.74   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.12   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.01   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 3.60   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.61   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.64   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 8:50:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-002 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 3-5

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.75   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 0.95   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.22   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 3.38   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.67   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.94   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 8:58:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-003 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 5-7

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.51   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.16   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.51   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.65   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.98   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.73   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:00:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-004 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 8-10

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.75   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.96   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.97   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.92   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.20   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.46   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:08:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-005 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 10-12

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.79   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.18   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.27   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.97   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.23   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.87   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-006 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.89   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.64   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.17   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.46   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.52   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.06   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:15:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-007 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 15-17

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.79   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.78   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.55   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.01   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.34   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.30   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:17:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-008 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 18-20

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.78   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.25   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.69   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.91   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.33   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.43   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:30:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-009 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 20-22

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.97   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.82   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.20   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.32   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.68   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.52   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:38:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-010 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 23-25

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.99   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.14   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.60   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.03   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.55   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.81   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



Element Materials Technology Lafayette  
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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:45:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-011 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 25-27

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.86   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.28   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.58   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.52   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.27   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.23   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 9:50:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-012 **Matrix:** SOIL  
**Client Sample ID** SE-SB 23 28-30

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.03   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.30   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.03   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.81   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.55   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 5.23   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:05:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-013 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 0-5

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.25   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.60   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.75   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.43   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.25   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.59   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-014 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 5-7

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed          |
|---|--------|------|------|----------|----|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: JMI           |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    |                        |
| Electrical Conductivity                     | 0.21   | 0.10 |      | mmhos/cm | 1  | 11/24/2021 12:45:00 PM |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: BXB           |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    |                        |
| Exchangeable Sodium %                       | 1.65   | 0.10 |      | %        | 1  | 11/30/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: STS           |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    |                        |
| Sodium Adsorption Ratio                     | 2.14   | 0.10 |      |          | 1  | 11/30/2021             |
| Soluble Calcium                             | 0.34   | 0.02 |      | meq/L    | 1  | 11/30/2021             |
| Soluble Magnesium                           | 0.21   | 0.05 |      | meq/L    | 1  | 11/30/2021             |
| Soluble Sodium                              | 1.12   | 0.25 |      | meq/L    | 1  | 11/30/2021             |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:12:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-015 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 8-10

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.26   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.59   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.45   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.42   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.26   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.43   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:23:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-016 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 10-12

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.29   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.74   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.77   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.64   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.47   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.32   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:25:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-017 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.58   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.58   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.60   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.71   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.04   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.88   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:28:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-018 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 15-17

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.67   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.61   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.20   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.77   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.15   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.66   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:30:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-019 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 18-20

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.86   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.09   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.36   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.31   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.60   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.30   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:35:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-020 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 20-22

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.91   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 12:45:00 PM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.35   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.39   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.50   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.73   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.47   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:37:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-021 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 23-24

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.12   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.82   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.78   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 3.01   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 2.11   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.45   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



Element Materials Technology Lafayette  
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 Website: www.element.com

# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:45:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-022 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 24-25

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.00   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.22   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.22   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.25   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.69   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.52   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 10:58:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-023 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 25-27

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.76   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.15   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.34   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.42   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.13   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.77   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:02:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-024 **Matrix:** SOIL  
**Client Sample ID** SE-SB 24 28-30

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.03   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.62   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.79   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.93   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.68   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 5.09   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:20:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-025 **Matrix:** SOIL  
**Client Sample ID** SE-SB 25 0-2

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.65   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.84   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.15   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.30   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.68   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.14   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:22:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-026 **Matrix:** SOIL  
**Client Sample ID** SE-SB 25 3-5

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.44   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.56   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.74   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.95   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.43   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.28   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:28:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-027 **Matrix:** SOIL  
**Client Sample ID** SE-SB 25 5-7

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.58   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.38   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.23   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.24   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.68   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.17   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:30:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-028 **Matrix:** SOIL  
**Client Sample ID** SE-SB 25 8-10

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.58   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.24   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.48   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.20   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.47   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.18   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:45:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-029 **Matrix:** SOIL  
**Client Sample ID** SE-SB 26 0-2

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.73   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 7.48   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 5.37   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 6.32   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 3.09   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 11.6   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:47:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-030 **Matrix:** SOIL  
**Client Sample ID** SE-SB 26 3-5

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.34   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.55   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.17   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.80   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.35   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 1.65   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:55:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-031 **Matrix:** SOIL  
**Client Sample ID** SE-SB 26 5-7

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.56   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.67   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.46   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.16   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.82   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.44   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |





Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 11:57:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-032 **Matrix:** SOIL  
**Client Sample ID** SE-SB 26 8-10

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.52   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.71   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.62   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 0.93   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.64   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.32   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |    |  |
|--------------------|---|----|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL Reporting Limit  | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL Sample detection limit  | U  | Analyte not detected                               |
|                    | W Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:10:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-033 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 0-2

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.53   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 9.80   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 14.4   | 0.10 | *    |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.83   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.75   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 16.4   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:12:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-034 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 3-5

| Analyses   | Result | RL       | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|----------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |          |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 2.89   | 0.10     |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 10.3   | 0.10     |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 14.3   | 0.10     | *    |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.48   | 0.02     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.16   | 0.05     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 19.2   | 0.25     |      | meq/L    | 1                | 11/30/2021                           |
| <b>TPH-D/O IN SOIL BY SW8015<br/>TPH DRO/ORO IN SOIL BY SW8015</b>       |        |          |      |          | <b>SW8015B</b>   | <b>SW3550C</b> Analyst: <b>CRM</b>   |
| TPH (Diesel Range)   | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 12:47:00 AM               |
| TPH (Oil Range)  | 12.2   | 10.0     |      | mg/Kg    | 1                | 11/24/2021 12:47:00 AM               |
| Surr: 4-Terphenyl-d14  | 91.1   | 33 - 152 |      | %Rec     | 1                | 11/24/2021 12:47:00 AM               |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:25:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-035 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 5-7

| Analyses   | Result | RL       | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|----------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |          |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 3.11   | 0.10     |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 9.91   | 0.10     |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 11.4   | 0.10     |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 3.49   | 0.02     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.86   | 0.05     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 18.6   | 0.25     |      | meq/L    | 1                | 11/30/2021                           |
| <b>TPH-D/O IN SOIL BY SW8015<br/>TPH DRO/ORO IN SOIL BY SW8015</b>       |        |          |      |          | <b>SW8015B</b>   | <b>SW3550C</b> Analyst: <b>CRM</b>   |
| TPH (Diesel Range)   | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 1:00:00 AM                |
| TPH (Oil Range)  | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 1:00:00 AM                |
| Surr: 4-Terphenyl-d14  | 88.8   | 33 - 152 |      | %Rec     | 1                | 11/24/2021 1:00:00 AM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:27:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-036 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 8-10

| Analyses   | Result | RL       | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|----------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |          |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.28   | 0.10     | *    | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 10.2   | 0.10     |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 12.2   | 0.10     | *    |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 5.47   | 0.02     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 2.97   | 0.05     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 25.0   | 0.25     |      | meq/L    | 1                | 11/30/2021                           |
| <b>TPH-D/O IN SOIL BY SW8015<br/>TPH DRO/ORO IN SOIL BY SW8015</b>       |        |          |      |          | <b>SW8015B</b>   | <b>SW3550C</b> Analyst: <b>CRM</b>   |
| TPH (Diesel Range)   | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 1:56:00 AM                |
| TPH (Oil Range)  | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 1:56:00 AM                |
| Surr: 4-Terphenyl-d14  | 90.2   | 33 - 152 |      | %Rec     | 1                | 11/24/2021 1:56:00 AM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:50:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-037 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 10-12

| Analyses   | Result | RL       | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|----------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |          |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.71   | 0.10     | *    | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 16.0   | 0.10     | *    | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |          |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 11.1   | 0.10     |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 7.20   | 0.02     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 4.44   | 0.05     |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 26.9   | 0.25     |      | meq/L    | 1                | 11/30/2021                           |
| <b>TPH-D/O IN SOIL BY SW8015<br/>TPH DRO/ORO IN SOIL BY SW8015</b>       |        |          |      |          | <b>SW8015B</b>   | <b>SW3550C</b> Analyst: <b>CRM</b>   |
| TPH (Diesel Range)   | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 2:09:00 AM                |
| TPH (Oil Range)  | < 10.0 | 10.0     |      | mg/Kg    | 1                | 11/24/2021 2:09:00 AM                |
| Surr: 4-Terphenyl-d14  | 81.0   | 33 - 152 |      | %Rec     | 1                | 11/24/2021 2:09:00 AM                |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 1:52:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-038 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 4.29   | 0.10 | *    | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 11.7   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 12.0   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 5.64   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 3.54   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 25.7   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:00:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-039 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 15-17

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 3.59   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.34   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.75   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 9.64   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 7.22   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 10.9   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:02:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-040 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 18-20

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.04   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:00:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.76   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.75   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.55   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.91   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.11   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



Element Materials Technology Lafayette  
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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:10:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-041 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 20-22

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.01   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.49   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.14   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.32   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.83   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.52   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:15:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-042 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 23-25

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.39   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.85   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.88   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 3.34   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 2.77   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 6.78   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:30:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-043 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 25-27

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.09   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.73   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.07   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.06   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.84   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 5.69   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:37:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-044 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 28-30

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.03   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.95   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.09   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.85   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.68   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 5.44   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 2:52:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-045 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 30-32

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.22   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.95   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.54   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.25   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 2.07   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 6.67   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:00:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-046 **Matrix:** SOIL  
**Client Sample ID** SE-SB 27 33-35

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.25   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 4.85   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 4.98   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.18   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 2.08   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 7.27   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:35:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-047 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 0-2

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.95   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.49   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.90   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.34   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.30   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.91   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:37:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-048 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 3-5

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.68   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.81   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.63   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.49   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.97   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.92   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:43:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-049 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 5-7

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.58   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.80   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.05   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.52   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 0.95   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.27   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:45:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-050 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 8-10

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.98   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.31   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 1.97   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.86   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.70   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.97   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:50:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-051 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 10-12

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.85   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.67   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.18   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.11   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.48   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 2.92   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 3:52:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-052 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.78   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 2.03   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.53   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.81   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.27   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.14   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 4:00:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-053 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 15-17

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.76   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.89   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.41   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 1.85   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.32   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.03   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |    |  |
|--------------------|---|----|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL Reporting Limit  | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL Sample detection limit  | U  | Analyte not detected                               |
|                    | W Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 4:02:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-054 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 18-20

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.89   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.63   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.53   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.16   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.60   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 3.47   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 4:05:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-055 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 20-22

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed         |
|---|--------|------|------|----------|----|-----------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: JMI          |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    |                       |
| Electrical Conductivity                     | 0.95   | 0.10 |      | mmhos/cm | 1  | 11/24/2021 1:15:00 PM |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: BXB          |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    |                       |
| Exchangeable Sodium %                       | 3.97   | 0.10 |      | %        | 1  | 11/30/2021            |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    | Analyst: STS          |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    |                       |
| Sodium Adsorption Ratio                     | 2.99   | 0.10 |      |          | 1  | 11/30/2021            |
| Soluble Calcium                             | 2.10   | 0.02 |      | meq/L    | 1  | 11/30/2021            |
| Soluble Magnesium                           | 1.61   | 0.05 |      | meq/L    | 1  | 11/30/2021            |
| Soluble Sodium                              | 4.07   | 0.25 |      | meq/L    | 1  | 11/30/2021            |

|                    |     |   |    |  |
|--------------------|-----|---|----|--|
| <b>Qualifiers:</b> | *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
|                    | M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
|                    | RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
|                    | SDL | Sample detection limit  | U  | Analyte not detected                               |
|                    | W   | Sample container temperature is out of limit as specified at testcode |    |  |





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# Analytical Report

(consolidated)

WO#: 21110970

Date Reported: 12/1/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/16/2021 4:12:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21110970-056 **Matrix:** SOIL  
**Client Sample ID** SE-SB 28 23-25

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 1.04   | 0.10 |      | mmhos/cm | 1                | 11/24/2021 1:15:00 PM                |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 3.52   | 0.10 |      | %        | 1                | 11/30/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 3.16   | 0.10 |      |          | 1                | 11/30/2021                           |
| Soluble Calcium  | 2.30   | 0.02 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Magnesium  | 1.83   | 0.05 |      | meq/L    | 1                | 11/30/2021                           |
| Soluble Sodium   | 4.54   | 0.25 |      | meq/L    | 1                | 11/30/2021                           |

|                    |   |  |
|--------------------|---|--|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.                            | H Holding times for preparation or analysis exceeded |
| M                  | Matrix Interference   | ND Not Detected at the Reporting Limit               |
| RL                 | Reporting Limit   | S Spike Recovery outside accepted recovery limits    |
| SDL                | Sample detection limit  | U Analyte not detected                               |
| W                  | Sample container temperature is out of limit as specified at testcode |  |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|                                     |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110679-002AMS-D</b> | SampType: <b>MS</b>    | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZZ</b>            | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556952</b> |          |           |             |      |          |      |
| Analyte                             | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)                  | 153                    | 10.0                       | 100.0               | 204.2                            | -50.8                 | 23.4     | 123       |             |      |          | SM   |
| Surr: 4-Terphenyl-d14               | 2.94                   |                            | 3.333               |                                  | 88.3                  | 33       | 152       |             |      |          |      |

|                                     |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110679-002AMSD-</b> | SampType: <b>MSD</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZZ</b>            | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556953</b> |          |           |             |      |          |      |
| Analyte                             | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)                  | 182                    | 10.0                       | 100.0               | 204.2                            | -22.6                 | 23.4     | 123       | 153.4       | 16.8 | 35.6     | SM   |
| Surr: 4-Terphenyl-d14               | 2.87                   |                            | 3.333               |                                  | 86.1                  | 33       | 152       |             | 0    | 40       |      |

|                                     |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110679-003AMS-M</b> | SampType: <b>MS</b>    | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZZ</b>            | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556955</b> |          |           |             |      |          |      |
| Analyte                             | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range)                     | 79.9                   | 10.0                       | 100.0               | 14.90                            | 65.0                  | 14.5     | 174       |             |      |          |      |
| Surr: 4-Terphenyl-d14               | 2.70                   |                            | 3.333               |                                  | 81.1                  | 33       | 152       |             |      |          |      |

|                                     |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110679-003AMSD-</b> | SampType: <b>MSD</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZZ</b>            | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556956</b> |          |           |             |      |          |      |
| Analyte                             | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range)                     | 88.7                   | 10.0                       | 100.0               | 14.90                            | 73.8                  | 14.5     | 174       | 79.87       | 10.5 | 48.8     |      |

**Qualifiers:**

- |  |  |  |
|--|--|--|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits    |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|                                     |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110679-003AMSD-</b> | SampType: <b>MSD</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZZ</b>            | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556956</b> |          |           |             |      |          |      |
| Analyte                             | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Surr: 4-Terphenyl-d14               | 2.91                   |                            | 3.333               |                                  | 87.4                  | 33       | 152       |             | 0    | 40       |      |

|                              |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS-D41703</b> | SampType: <b>LCS</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>LCSS</b>       | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556970</b> |          |           |             |      |          |      |
| Analyte                      | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)           | 79.7                   | 10.0                       | 100.0               | 0                                | 79.7                  | 63.4     | 109       |             |      |          |      |
| Surr: 4-Terphenyl-d14        | 2.93                   |                            | 3.333               |                                  | 87.8                  | 33       | 152       |             |      |          |      |

|                               |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCSD-D41703</b> | SampType: <b>LCSD</b>  | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>LCSS02</b>      | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556971</b> |          |           |             |      |          |      |
| Analyte                       | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)            | 80.5                   | 10.0                       | 100.0               | 0                                | 80.5                  | 63.4     | 109       | 79.68       | 1.03 | 21.9     |      |
| Surr: 4-Terphenyl-d14         | 3.02                   |                            | 3.333               |                                  | 90.7                  | 33       | 152       |             | 0    | 40       |      |

|                               |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCSD-M41703</b> | SampType: <b>LCSD</b>  | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>LCSS02</b>      | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556972</b> |          |           |             |      |          |      |
| Analyte                       | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range)               | 82.9                   | 10.0                       | 100.0               | 0                                | 82.9                  | 63.9     | 120       | 78.72       | 5.15 | 20.7     |      |
| Surr: 4-Terphenyl-d14         | 3.10                   |                            | 3.333               |                                  | 92.9                  | 33       | 152       |             | 0    | 40       |      |

**Qualifiers:**

- |  |  |  |
|--|--|--|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits    |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as sp |



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 Website: www.element.com

# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|                               |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|-------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCSD-M41703</b> | SampType: <b>LCSD</b>  | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>LCSS02</b>      | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556972</b> |          |           |             |      |          |      |
| Analyte                       | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|                              |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|------------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS-M41703</b> | SampType: <b>LCS</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>LCSS</b>       | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556973</b> |          |           |             |      |          |      |
| Analyte                      | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range)              | 78.7                   | 10.0                       | 100.0               | 0                                | 78.7                  | 63.9     | 120       |             |      |          |      |
| Surr: 4-Terphenyl-d14        | 3.18                   |                            | 3.333               |                                  | 95.5                  | 33       | 152       |             |      |          |      |

|                            |                        |                            |                     |                                  |                       |          |           |             |      |          |      |
|----------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-41703</b> | SampType: <b>MBLK</b>  | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>      | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556974</b> |          |           |             |      |          |      |
| Analyte                    | Result                 | PQL                        | SPK value           | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)         | < 10.0                 | 10.0                       |                     |                                  |                       |          |           |             |      |          |      |
| TPH (Oil Range)            | < 10.0                 | 10.0                       |                     |                                  |                       |          |           |             |      |          |      |
| Surr: 4-Terphenyl-d14      | 2.74                   |                            | 3.333               |                                  | 82.1                  | 33       | 152       |             |      |          |      |

**Qualifiers:**

- |  |  |   |
|--|--|---|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                 |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits     |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as per |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental

**Project:** Drew Estate "15"/11397

**BatchID:** 41793

|                                    |                        |                          |                  |                                  |                       |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-001ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>ESP_S</b>   | Units: %         | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104715</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 23 0-2</b>     | Batch ID: <b>41793</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2561097</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|                       |      |      |  |  |  |  |  |      |      |    |  |
|-----------------------|------|------|--|--|--|--|--|------|------|----|--|
| Exchangeable Sodium % | 1.01 | 0.10 |  |  |  |  |  | 1.12 | 10.3 | 20 |  |
|-----------------------|------|------|--|--|--|--|--|------|------|----|--|

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41795

| Sample ID: <b>21110930-001ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>SAR_S</b>   | Units:           | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104716</b>  |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Client ID: <b>ZZZZZZ</b>           | Batch ID: <b>41795</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2560742</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Sodium Adsorption Ratio            | 5.52                   | 0.10                     |                  |                                  |                       |          |           | 5.55        | 0.40 | 20       |      |
| Soluble Calcium                    | 112                    | 0.02                     |                  |                                  |                       |          |           | 112.6       | 0.41 | 20       |      |
| Soluble Magnesium                  | 0.96                   | 0.05                     |                  |                                  |                       |          |           | 0.97        | 0.53 | 20       |      |
| Soluble Sodium                     | 41.5                   | 0.25                     |                  |                                  |                       |          |           | 41.80       | 0.61 | 20       |      |

| Sample ID: <b>21110970-001ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>SAR_S</b>   | Units:           | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104716</b>  |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Client ID: <b>SE-SB 23 0-2</b>     | Batch ID: <b>41795</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2560744</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Sodium Adsorption Ratio            | 1.06                   | 0.10                     |                  |                                  |                       |          |           | 1.01        | 4.40 | 20       |      |
| Soluble Calcium                    | 3.61                   | 0.02                     |                  |                                  |                       |          |           | 3.60        | 0.22 | 20       |      |
| Soluble Magnesium                  | 1.61                   | 0.05                     |                  |                                  |                       |          |           | 1.61        | 0.33 | 20       |      |
| Soluble Sodium                     | 1.71                   | 0.25                     |                  |                                  |                       |          |           | 1.64        | 4.53 | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41796

|                                    |                        |                          |                  |                                  |                       |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-021ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>ESP_S</b>   | Units: %         | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104715</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 24 23-24</b>   | Batch ID: <b>41796</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2561118</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Exchangeable Sodium %              | 4.88                   | 0.10                     |                  |                                  |                       |          |           | 4.82        | 1.24 | 20       |      |

**Qualifiers:**

- |  |  |  |
|--|--|--|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits    |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental

**Project:** Drew Estate "15"/11397

**BatchID:** 41798

|                                    |                        |                          |                  |                                  |                       |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-041ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>ESP_S</b>   | Units: %         | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104715</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 27 20-22</b>   | Batch ID: <b>41798</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2561139</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Exchangeable Sodium %              | 3.39                   | 0.10                     |                  |                                  |                       |          |           | 3.49        | 2.91 | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp





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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental

**Project:** Drew Estate "15"/11397

**BatchID:** 41802

| Sample ID: <b>21110970-021ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>SAR_S</b>   | Units:           | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104716</b>  |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Client ID: <b>SE-SB 24 23-24</b>   | Batch ID: <b>41802</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2560765</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Sodium Adsorption Ratio            | 2.79                   | 0.10                     |                  |                                  |                       |          |           | 2.78        | 0.39 | 20       |      |
| Soluble Calcium                    | 3.03                   | 0.02                     |                  |                                  |                       |          |           | 3.01        | 0.51 | 20       |      |
| Soluble Magnesium                  | 2.13                   | 0.05                     |                  |                                  |                       |          |           | 2.11        | 0.61 | 20       |      |
| Soluble Sodium                     | 4.48                   | 0.25                     |                  |                                  |                       |          |           | 4.45        | 0.67 | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41803

| Sample ID: <b>21110970-041ADUP</b> | SampType: <b>DUP</b>   | TestCode: <b>SAR_S</b>   | Units:           | Prep Date: <b>11/29/2021</b>     | RunNo: <b>104716</b>  |          |           |             |      |          |      |
|------------------------------------|------------------------|--------------------------|------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Client ID: <b>SE-SB 27 20-22</b>   | Batch ID: <b>41803</b> | TestNo: <b>LDNR 29-B</b> | <b>LDNR 29-B</b> | Analysis Date: <b>11/30/2021</b> | SeqNo: <b>2560786</b> |          |           |             |      |          |      |
| Analyte                            | Result                 | PQL                      | SPK value        | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Sodium Adsorption Ratio            | 3.12                   | 0.10                     |                  |                                  |                       |          |           | 3.14        | 0.63 | 20       |      |
| Soluble Calcium                    | 2.31                   | 0.02                     |                  |                                  |                       |          |           | 2.32        | 0.22 | 20       |      |
| Soluble Magnesium                  | 1.82                   | 0.05                     |                  |                                  |                       |          |           | 1.83        | 0.35 | 20       |      |
| Soluble Sodium                     | 4.49                   | 0.25                     |                  |                                  |                       |          |           | 4.52        | 0.77 | 20       |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104588

|                              |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-R104585</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104588</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>        | Batch ID: <b>R104588</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557694</b> |          |           |             |      |          |      |
| Analyte                      | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity      | < 0.10                   | 0.10                     |                        |                                  |                       |          |           |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS1-R104585</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104588</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104588</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557695</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 0.48                     | 0.10                     | 0.50                   | 0                                | 95.0                  | 90       | 110       |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS2-R104585</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104588</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104588</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557696</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 51.6                     | 0.10                     | 53.00                  | 0                                | 97.4                  | 90       | 110       |             |      |          |      |

|                                    |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-001ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104588</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 23 0-2</b>     | Batch ID: <b>R104588</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557698</b> |          |           |             |      |          |      |
| Analyte                            | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity            | 0.75                     | 0.10                     |                        |                                  |                       |          |           | 0.74        | 0.67 | 20       |      |

**Qualifiers:**

- |  |  |   |
|--|--|---|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                 |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits     |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as per |



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 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: www.element.com

# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104589

|                              |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-R104588</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104589</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>        | Batch ID: <b>R104589</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557720</b> |          |           |             |      |          |      |
| Analyte                      | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity      | < 0.10                   | 0.10                     |                        |                                  |                       |          |           |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS1-R104588</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104589</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104589</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557721</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 0.48                     | 0.10                     | 0.50                   | 0                                | 95.0                  | 90       | 110       |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS2-R104588</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104589</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104589</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557722</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 51.1                     | 0.10                     | 53.00                  | 0                                | 96.4                  | 90       | 110       |             |      |          |      |

|                                    |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-021ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104589</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 24 23-24</b>   | Batch ID: <b>R104589</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557724</b> |          |           |             |      |          |      |
| Analyte                            | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity            | 1.11                     | 0.10                     |                        |                                  |                       |          |           | 1.12        | 0.18 | 20       |      |

**Qualifiers:**

- |  |  |   |
|--|--|---|
| * Value exceeds Maximum Contaminant Level. | H Holding times for preparation or analysis exceeded | M Matrix Interference                                 |
| ND Not Detected at the Reporting Limit     | RL Reporting Limit                                   | S Spike Recovery outside accepted recovery limits     |
| SDL Sample detection limit                 | U Analyte not detected                               | W Sample container temperature is out of limit as per |



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# QC SUMMARY REPORT

WO#: 21110970  
 04-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104591

|                              |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-R104589</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104591</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>        | Batch ID: <b>R104591</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557746</b> |          |           |             |      |          |      |
| Analyte                      | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity      | < 0.10                   | 0.10                     |                        |                                  |                       |          |           |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS1-R104589</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104591</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104591</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557747</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 0.48                     | 0.10                     | 0.50                   | 0                                | 94.7                  | 90       | 110       |             |      |          |      |

|                                |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|--------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS2-R104589</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104591</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>        | Batch ID: <b>R104591</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557748</b> |          |           |             |      |          |      |
| Analyte                        | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity        | 50.8                     | 0.10                     | 53.00                  | 0                                | 95.8                  | 90       | 110       |             |      |          |      |

|                                    |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|------------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>21110970-041ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>104591</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB 27 20-22</b>   | Batch ID: <b>R104591</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557750</b> |          |           |             |      |          |      |
| Analyte                            | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity            | 1.00                     | 0.10                     |                        |                                  |                       |          |           | 1.01        | 0.60 | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as per



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 Lafayette, LA 70508-3344  
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## Sample Log-In Check List

Client Name: SOUTHLAND\_ENV

Work Order Number: 21110970

RcptNo: 1

|               |                   |                       |                          |
|---------------|-------------------|-----------------------|--------------------------|
| Logged by:    | Tammy Thibodeaux  | 11/17/2021 2:26:00 PM | <i>Tammy Thibodeaux</i>  |
| Completed By: | Tammy Thibodeaux  | 11/17/2021 4:41:31 PM | <i>Tammy Thibodeaux</i>  |
| Reviewed By:  | Cristina Thibeaux | 12/1/2021 9:43:26 AM  | <i>Cristina Thibeaux</i> |

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? Element

### Log In

3. Coolers are present? Yes  No  NA   
 4. Shipping container/cooler in good condition? Yes  No   
 Custody seals intact on shipping container/cooler? Yes  No  Not Present   
 No. Seal Date: Signed By:  
 5. Was an attempt made to cool the samples? Yes  No  NA   
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 7. Sample(s) in proper container(s)? Yes  No   
 8. Sufficient sample volume for indicated test(s)? Yes  No   
 9. Are samples (except VOA and ONG) properly preserved? Yes  No   
 10. Was preservative added to bottles? Yes  No  NA   
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes  No  No VOA Vials   
 12. Were any sample containers received broken? Yes  No   
 13. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 14. Are matrices correctly identified on Chain of Custody? Yes  No   
 15. Is it clear what analyses were requested? Yes  No   
 16. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

|                      |                      |       |   |
|----------------------|----------------------|-------|---|
| Person Notified:     | <input type="text"/> | Date: | <input type="text"/>  |
| By Whom:             | <input type="text"/> | Via:  | <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | <input type="text"/> |       |   |
| Client Instructions: | <input type="text"/> |       |   |

18. Additional remarks:  
 Improper error correction(s) made by client

### Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 5.6     | Good      | Not Present |         |           |           |



# Chain of Custody

Laboratory Number: 2110970

Company Name:  
Contact Name:  
Address:  
City, State Zip:  
Phone Number:  
Fax Number:  
E-mail Address:

**Client Information:**  
Southland Environmental  
Duane Piranio  
510 Clarence St.  
Lake Charles, LA 70601  
337-436-3248 Ext:  
dpiranio@southlandenv.com

**Billing Information:**  
Hope Clark  
Ext:

PO Number:  
Quote Number:  
Required QC Level  
Bill Monthly  
 Yes  
 No

Project Name/Number:  
Drew Estate "15" / 11397  
Sampler's Signature  
Shipping Method:  
UPS / FedEx / Airborne  
DHL / ~~Element~~ / Hand / Mail

Page 1 of 2  
**Matrix Code**  
DW = Drinking Water  
WW = Waste Water  
GW = Ground Water  
AQ = Aqueous  
OT = Other  
SL = Sludge SOL = Solid  
O = Oil SO = Soil  
F = Food SW = Swab  
NG = Natural Gas  
NGL = Natural Gas Liquid  
PW = Produced Water  
CF = Completion Fluid

- Which Regulations Apply:**
- RCRA
  - POTW
  - NPDES
  - USDA/FDA
  - RECAP/RISC
  - Drinking Water
  - Distribution
  - Special
  - State 29-B
  - Other

**Turn Time**  
 Standard  
RUSH  
 1 Day  
 2 Day  
 Other  
(Rush turn times will incur a surcharge and must be pre-approved by lab.)

| Sample ID/Description | Collection Information |      |                  |        | Quantity | Type<br>P=Plastic,<br>G=Glass, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ,<br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests |                |                |             |  |  |  | Comments |
|-----------------------|------------------------|------|------------------|--------|----------|---------------------------------------|--|-----------------|----------------|----------------|-------------|--|--|--|----------|
|                       | Date                   | Time | Grab / Composite | Matrix |          |                                       |  | EC, SAR, ESP    | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |  |  |          |
| SE-5823 (0-2)         | 11/10/21               | 848  | G                | SO     | 1        | G                                     | None   | X               |                |                |             |  |  |  |          |
| 11 (3-5)              |                        | 850  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (5-7)              |                        | 858  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (8-10)             |                        | 900  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (10-12)            |                        | 908  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (13-15)            |                        | 910  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (15-17)            |                        | 915  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (18-20)            |                        | 917  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| 11 (20-22)            |                        | 930  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |

|   | Relinquished by    | Date/Time     | Received by        | Date/Time     | Field Notes:  |
|---|--------------------|---------------|--------------------|---------------|---|
| 1 | <i>[Signature]</i> | 11/17/21 1130 | <i>[Signature]</i> | 11/17/21 1130 |   |
| 2 | <i>[Signature]</i> |               |                    |               |   |
| 3 | <i>[Signature]</i> | 11/17/21 1426 | <i>[Signature]</i> | 11/17/21 1430 | Received at lab on ice?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 5.60 |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.



element™

# Chain of Custody

Laboratory Number: 21110970

Company Name:  
Contact Name:  
Address:  
City, State Zip:  
Phone Number:  
Fax Number:  
E-mail Address:

|   |   |
|---|---|
| <b>Client Information:</b><br>Southland Environmental | <b>Billing Information:</b><br>Hope Clark |
| Duane Piranio   | 510 Clarence St.                          |
| Lake Charles, LA 70601                                | 337-436-3248 Ext:                         |
| dpiranio@southlandenv.com                             |   |

PO Number:  
Quote Number:  
Required QC Level:  
Bill Monthly  
 Yes  
 No

Project Name/Number:  
Drew Estate "15" / 11397

Sampler's Signature  
*[Signature]*

Shipping Method:  
UPS / FedEx / Airborne  
DHL / Element / Hand / Mail

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**Matrix Code**

DW = Drinking Water  
WW = Waste Water  
GW = Ground Water  
AQ = Aqueous  
OT = Other  
SL = Sludge SOL = Solid  
O = Oil SO = Soil  
F = Food SW = Swab  
NG = Natural Gas  
NGL = Natural Gas Liquid  
PW = Produced Water  
CF = Completion Fluid

| Sample ID/Description | Collection Information |      |                  | Matrix | Quantity | Type<br>P=Plastic,<br>G=Glass, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ,<br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests |                |                |             |  |  |  | Comments |
|-----------------------|------------------------|------|------------------|--------|----------|---------------------------------------|--|-----------------|----------------|----------------|-------------|--|--|--|----------|
|                       | Date                   | Time | Grab / Composite |        |          |                                       |  | EC, SAR, ESP    | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |  |  |          |
| SE-51323 (23-25)      | 11/14/21               | 938  | G                | SO     | 1        | G                                     | None   | X               |                |                |             |  |  |  |          |
| " (25-27)             |                        | 945  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (28-30)             |                        | 950  |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| SE-51324 (0-5)        |                        | 1005 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (5-7)               |                        | 1010 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (8-10)              |                        | 1012 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (10-12)             |                        | 1023 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (13-15)             |                        | 1025 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |
| " (15-17)             |                        | 1028 |                  |        | 1        |                                       | None   | X               |                |                |             |  |  |  |          |

|   | Relinquished by    | Date/Time     | Received by        | Date/Time     | Field Notes:   |
|---|--------------------|---------------|--------------------|---------------|--|
| 1 | <i>[Signature]</i> | 11/17/21 1138 | <i>[Signature]</i> | 11/17/21 1138 |  |
| 2 |                    |               |                    |               | Received at lab on ice?  |
| 3 | <i>[Signature]</i> | 11/17/21 1426 | <i>[Signature]</i> | 11/17/21 1426 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 5.6c |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.





# Chain of Custody

Laboratory Number: 21110970

Company Name:  
Contact Name:  
Address:  
City, State Zip:  
Phone Number:  
Fax Number:  
E-mail Address:

**Client Information:**  
Southland Environmental  
Duane Piranio  
510 Clarence St.  
Lake Charles, LA 70601  
337-436-3248 Ext:  
dpiranio@southlandenv.com

**Billing Information:**  
Hope Clark  
Ext:

PO Number:  
Quote Number:  
Required QC Level  
Bill Monthly  
 Yes  
 No

Project Name/Number:  
Drew Estate "15" / 11397  
Sampler's Signature  
Shipping Method:  
UPS / FedEx / Airborne  
DHL / Element / Hand / Mail

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**Matrix Code**  
DW = Drinking Water  
WW = Waste Water  
GW = Ground Water  
AQ = Aqueous  
OT = Other  
SL = Sludge SOL = Solid  
O = Oil SO = Soil  
F = Food SW = Swab  
NG = Natural Gas  
NGL = Natural Gas Liquid  
PW = Produced Water  
CF = Completion Fluid

| Which Regulations Apply:   | Turn Time  | Collection Information   | Container        | Pres.  | Requested Tests |      |  |              |                |                |             |  | Comments |  |
|--|--|--|------------------|--------|-----------------|------|--|--------------|----------------|----------------|-------------|--|----------|--|
|  |  |  |                  |        | Quantity        | Type | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |          |  |
| <input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC<br><input type="checkbox"/> Drinking Water<br><input type="checkbox"/> Distribution<br><input type="checkbox"/> Special<br><input checked="" type="checkbox"/> State 29-B<br><input type="checkbox"/> Other | <input checked="" type="checkbox"/> Standard<br>RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | <input type="checkbox"/> Grab / Composite<br><input type="checkbox"/> Matrix |                  |        |                 |      |  |              |                |                |             |  |          |  |
| Sample ID/Description  | Date   | Time   | Grab / Composite | Matrix | Quantity        | Type |  |              |                |                |             |  |          |  |
| SE-SR24 (18-20)  | 11-16-21   | 1030   | G                | SO     | 1               | G    |  | None         | X              |                |             |  |          |  |
| " (20-22)  |  | 1035   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (23-24)  |  | 1037   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (24-25)  |  | 1045   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (25-27)  |  | 1058   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (28-30)  |  | 1102   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| SE-SR25 (0-2)  |  | 1120   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (3-5)  |  | 1122   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |
| " (5-7)  |  | 1128   |                  |        | 1               |      |  | None         | X              |                |             |  |          |  |

| Relinquished by    | Date/Time     | Received by        | Date/Time     | Field Notes:   |
|--------------------|---------------|--------------------|---------------|--|
| <i>[Signature]</i> | 11/17/21 1130 | <i>[Signature]</i> | 11/17/21 1130 |  |
| <i>[Signature]</i> | 11/17/21 1426 | <i>[Signature]</i> | 11/17/21 1426 | Received at lab on ice?<br><input type="checkbox"/> Yes <input type="checkbox"/> No Temp: 5.6c |

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# Chain of Custody

Laboratory Number: **2110970**

Company Name:  
Contact Name:  
Address:  
City, State Zip:  
Phone Number:  
Fax Number:  
E-mail Address:

**Client Information:**  
Southland Environmental  
Duane Piranio  
510 Clarence St.  
Lake Charles, LA 70601  
337-436-3248 Ext:  
dpiranio@southlandenv.com

**Billing Information:**  
Hope Clark  
Ext:

PO Number:  
Quote Number:  
Required QC Level  
Bill Monthly  
 Yes  
 No

**Project Name/Number:**  
Drew Estate "15" / 11397  
Sampler's Signature: *[Signature]*  
Shipping Method:  
UPS / FedEx / Airborne  
DHL ~~Element~~ / Hand / Mail

Page **4** of **7**  
**Matrix Code**  
DW = Drinking Water  
WW = Waste Water  
GW = Ground Water  
AQ = Aqueous  
OT = Other  
SL = Sludge SOL = Solid  
O = Oil SO = Soil  
F = Food SW = Swab  
NG = Natural Gas  
NGL = Natural Gas Liquid  
PW = Produced Water  
CF = Completion Fluid

| Which Regulations Apply:  | Turn Time   | Collection Information                               | Container   | Pres.  | Requested Tests   |      |  |              |                |                |             |  |  |  | Comments |  |
|---|---|--|---|--|---|------|--|--------------|----------------|----------------|-------------|--|--|--|----------|--|
|   |   |  |   |  | Quantity  | Type | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |  |  |          |  |
| <input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC<br><input type="checkbox"/> Drinking Water<br><input type="checkbox"/> Distribution<br><input type="checkbox"/> Special<br><input checked="" type="checkbox"/> State <b>29-B</b><br><input type="checkbox"/> Other | <input checked="" type="checkbox"/> Standard<br><b>RUSH</b><br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | Date:      Time:      Grab / Composite:      Matrix: | <input type="checkbox"/> P=Plastic, G=Glass, V=Vial | <input type="checkbox"/> None<br><input type="checkbox"/> HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | <input type="checkbox"/> EC, SAR, ESP<br><input type="checkbox"/> Sol. Chlorides<br><input type="checkbox"/> TPH-D/O (8015)<br><input type="checkbox"/> 29B Metals* |      |  |              |                |                |             |  |  |  |          |  |
| Sample ID/Description   |   |  |   |  |   |      |  |              |                |                |             |  |  |  |          |  |
| SE-5325 (8-10)  |   |  | 11/10/21  | 1130   | G   | G0   | 1  | G            | None           | X              |             |  |  |  |          |  |
| SE-5326 (0-2)   |   |  |   | 1145   |   |      | 1  |              | None           | X              |             |  |  |  |          |  |
| " (3-5)   |   |  |   | 1147   |   |      | 1  |              | None           | X              |             |  |  |  |          |  |
| " (5-7)   |   |  |   | 1155   |   |      | 1  |              | None           | X              |             |  |  |  |          |  |
| " (8-10)  |   |  |   | 1157   |   |      | 1  |              | None           | X              |             |  |  |  |          |  |
| SE-5327 (0-2)   |   |  |   | 1310   |   |      | 1  |              | None           | X              |             |  |  |  |          |  |
| " (3-5)   |   |  |   | 1312   |   |      | 2  |              | None           | X              | X           |  |  |  |          |  |
| " (5-7)   |   |  |   | 1325   |   |      | 2  |              | None           | X              | X           |  |  |  |          |  |
| " (8-10)  |   |  |   | 1327   |   |      | 2  |              | None           | X              | X           |  |  |  |          |  |

|   | Relinquished by    | Date/Time     | Received by        | Date/Time     | Field Notes:   |
|---|--------------------|---------------|--------------------|---------------|--|
| 1 | <i>[Signature]</i> | 11/17/21 1130 | <i>[Signature]</i> | 11/17/21 1130 |  |
| 2 |                    |               |                    |               | Received at lab on ice?  |
| 3 | <i>[Signature]</i> | 11/17/21 1426 | <i>[Signature]</i> | 11/17/21 1426 | <input type="checkbox"/> Yes <input type="checkbox"/> No Temp: <b>5.6c</b> |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.



# Chain of Custody

Laboratory Number: 2110970

|   |   |   |  |  |   |
|---|---|---|--|--|---|
| Company Name:<br>Contact Name:<br>Address:<br>City, State Zip:<br>Phone Number:<br>Fax Number:<br>E-mail Address: | <b>Client Information:</b><br>Southland Environmental | <b>Billing Information:</b><br>Hope Clark | PO Number:   | Project Name/Number:<br>Drew Estate "15" / 11397                                 | Page <u>5</u> of <u>7</u><br><b>Matrix Code</b><br>DW = Drinking Water<br>WW = Waste Water<br>GW = Ground Water<br>AQ = Aqueous<br>OT = Other<br>SL = Sludge SOL = Solid<br>O = Oil SO = Soil<br>F = Food SW = Swab<br>NG = Natural Gas<br>NGL = Natural Gas Liquid<br>PW = Produced Water<br>CF = Completion Fluid |
|   | Duane Piranio   | 510 Clarence St.                          | Quote Number:  | Sampler's Signature<br>  |   |
|   | Lake Charles, LA 70601                                | Required QC Level                         | Bill Monthly<br><input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | Shipping Method:<br>UPS / FedEx / Airborne<br>DHL / <u>Element</u> / Hand / Mail |   |
|   | 337-436-3248 Ext:                                     | Ext:                                      |  |  |   |
|   | dpiranio@southlandenv.com                             |   |  |  |   |

| Which Regulations Apply:  | Turn Time  | Collection Information  | Container        | Pres.  | Requested Tests |      |  |              |                |                |             |  |  |  | Comments |  |  |
|---|--|---|------------------|--------|-----------------|------|--|--------------|----------------|----------------|-------------|--|--|--|----------|--|--|
|   |  |   |                  |        | Quantity        | Type | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |  |  |          |  |  |
| <input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC<br><input type="checkbox"/> Drinking Water<br><input type="checkbox"/> Distribution<br><input type="checkbox"/> Special<br><input checked="" type="checkbox"/> State <u>29-B</u><br><input type="checkbox"/> Other | <input checked="" type="checkbox"/> Standard<br>RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) |                  |        |                 |      |  |              |                |                |             |  |  |  |          |  |  |
| Sample ID/Description   | Date   | Time  | Grab / Composite | Matrix | Quantity        | Type | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | EC, SAR, ESP | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |  |  |          |  |  |
| SE-5327 (10-12)   | 11/16/21   | 1350  | G                | SO     | 2               | G    | None   | X            |                | X              |             |  |  |  |          |  |  |
| " (13-15)   |  | 1352  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (15-17)   |  | 1400  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (18-20)   |  | 1402  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (20-22)   |  | 1410  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (23-25)   |  | 1415  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (25-27)   |  | 1430  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (28-30)   |  | 1437  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |
| " (30-32)   |  | 1452  |                  |        | 1               |      | None   | X            |                |                |             |  |  |  |          |  |  |

|   | Relinquished by | Date/Time     | Received by | Date/Time     | Field Notes:  |
|---|-----------------|---------------|-------------|---------------|---|
| 1 |                 | 11/17/21 1130 |             | 11/17/21 1130 |   |
| 2 |                 |               |             |               | Received at lab on ice?   |
| 3 |                 | 11/17/21 1426 |             | 11/17/21 1426 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: <u>5.6c</u> |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.



# Chain of Custody

Laboratory Number: 2116970

|   |   |  |  |  |   |
|---|---|--|--|--|---|
| Company Name:<br>Contact Name:<br>Address:<br>City, State Zip:<br>Phone Number:<br>Fax Number:<br>E-mail Address: | <b>Client Information:</b><br>Southland Environmental | <b>Billing Information:</b><br>Hope Clark  | PO Number:   | Project Name/Number:<br>Drew Estate "15" / 11397 | Page <u>6</u> of <u>7</u><br><b>Matrix Code</b><br>DW = Drinking Water<br>WW = Waste Water<br>GW = Ground Water<br>AQ = Aqueous<br>OT = Other<br>SL = Sludge SOL = Solid<br>O = Oil SO = Soil<br>F = Food SW = Swab<br>NG = Natural Gas<br>NGL = Natural Gas Liquid<br>PW = Produced Water<br>CF = Completion Fluid |
|   | Duane Piranio   | Hope Clark   | Quote Number:  | Sampler's Signature<br>                          |   |
|   | 510 Clarence St.                                      | Required QC Level  |  |  |   |
|   | Lake Charles, LA 70601                                | Bill Monthly<br><input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | Shipping Method:<br>UPS / FedEx / Airborne<br>DHL / <del>Element</del> / Hand / Mail |  |   |
|   | 337-436-3248 Ext:                                     | Ext:   |  |  |   |
|   | dpiranio@southlandenv.com                             |  |  |  |   |

| Which Regulations Apply:<br><input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC<br><input type="checkbox"/> Drinking Water<br><input type="checkbox"/> Distribution<br><input type="checkbox"/> Special<br><input checked="" type="checkbox"/> State <u>29-B</u><br><input type="checkbox"/> Other | Turn Time<br><input checked="" type="checkbox"/> Standard<br><u>RUSH</u><br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container |                                       | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ,<br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | Requested Tests |                |                |                |                |             |  | Comments |  |  |  |  |
|---|--|---|-----------|---------------------------------------|--|-----------------|----------------|----------------|----------------|----------------|-------------|--|----------|--|--|--|--|
|   |  |   | Quantity  | Type<br>P=Plastic,<br>G=Glass, V=Vial |  | EC, SAR, ESP    | Sol. Chlorides | TPH-D/O (8015) | 29B Metals*    |                |             |  |          |  |  |  |  |
| Sample ID/Description   | Collection Information   |   |           | Matrix                                | Quantity   | Type            | Pres.          | EC, SAR, ESP   | Sol. Chlorides | TPH-D/O (8015) | 29B Metals* |  |          |  |  |  |  |
| Date  | Time   | Grab / Composite  |           |                                       |  |                 |                |                |                |                |             |  |          |  |  |  |  |
| SE-5327 (33-35)   | 11/16/21   | 1500  | G         | SO                                    | 1  | G               | None           | X              |                |                |             |  |          |  |  |  |  |
| SE-5328 (0-2)   |  | 1535  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (3-5)   |  | 1537  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (5-7)   |  | 1543  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (8-10)  |  | 1545  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (10-12)   |  | 1550  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (13-15)   |  | 1552  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (15-17)   |  | 1600  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |
| " (18-20)   |  | 1602  |           |                                       | 1  |                 | None           | X              |                |                |             |  |          |  |  |  |  |

|   | Relinquished by | Date/Time     | Received by | Date/Time     | Field Notes:  |
|---|-----------------|---------------|-------------|---------------|---|
| 1 |                 | 11/17/21 1130 |             | 11/17/21 1130 |   |
| 2 |                 |               |             |               | Received at lab on ice?   |
| 3 |                 | 11/17/21 1426 |             | 11/17/21 1426 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: <u>5.6c</u> |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.





*Element Materials Technology Lafayette*  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

December 08, 2021

Duane Piranio  
Southland Environmental  
510 Clarence St  
Lake Charles, LA 70601  
TEL: (337) 436-3248  
FAX (337) 436-3641

RE: Drew Estate "15"/11397

Order No.: 21111048

Dear Duane Piranio:

Element Materials Technology Lafayette received 46 sample(s) on 11/18/2021 for the analyses presented in the following report.

In accordance with your instructions, Element Lafayette either conducted or subcontracted these analyses. Subcontracted analyses will be identified in the accompanying case narrative. All relevant sampling information can be found on the attached Chain-of-Custody form. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet the applicable requirements of TNI. Reported results relate only to the items tested.

Where applicable, all soil data, except for 29-B, are reported on a wet-weight basis unless otherwise indicated in the units field as –dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. LDHH Certification No.: LA023. ISDH Certification No.: C-LA-01. NDELCP Certification No.: R-226. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation. PA registration No.: 68-05967.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

Cristina Thibeaux  
Customer Service Supervisor  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344



Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

## Case Narrative

WO#: 21111048  
Date: 12/8/2021

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**CLIENT:** Southland Environmental

**Project:** Drew Estate "15"/11397

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Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



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 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 8:33:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-001 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 0-2  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.61   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.60   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.19   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.16   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.28   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.87   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
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 Website: [www.element.com](http://www.element.com)

# Analytical Report

WO#: 21111048

Date Reported: 12/8/2021

**CLIENT:** Southland Environmental

**Collection Date:** 11/17/2021 8:35:00 AM

**Project:** Drew Estate "15"/11397

**Lab ID:** 21111048-002

**Matrix:** SOIL

**Client Sample ID** SE-SB29 3-5

**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.33   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.77   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.44   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 0.79   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.52   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.98   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 8:43:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-003 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 5-7  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.39   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.14   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.53   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 0.84   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.63   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.17   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 8:45:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-004 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 8-10  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.66   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.70   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.70   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.76   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.27   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 3.32   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 8:53:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-005 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 10-12  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.14   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.80   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.82   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.57   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.36   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.86   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 8:55:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-006 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.08   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.96   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.94   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.11   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.17   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.77   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 9:00:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-007 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 15-17  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.02   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.72   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.31   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.94   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.18   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 5.29   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 9:02:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-008 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 18-20  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.20   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.53   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.35   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.66   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.78   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 6.01   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 9:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-009 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 20-22  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.65   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.43   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.77   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 5.46   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 4.26   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.32   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 9:15:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-010 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 23-25  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.57   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.15   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.09   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 4.80   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 3.81   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.49   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 9:33:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-011 **Matrix:** SOIL  
**Client Sample ID** SE-SB29 25-27  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.28   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.73   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.33   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.11   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.74   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 7.41   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048

Date Reported: 12/8/2021

**CLIENT:** Southland Environmental

**Collection Date:** 11/17/2021 9:40:00 AM

**Project:** Drew Estate "15"/11397

**Lab ID:** 21111048-012

**Matrix:** SOIL

**Client Sample ID** SE-SB29 28-30

**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL               | Date Analyzed         |
|---|--------|------|------|------------------|----|------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    |                  | Analyst: <b>JMI</b>   |
| Electrical Conductivity                     | 1.24   | 0.10 |      | mmhos/c          | 1  | 4                | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>   |
| Exchangeable Sodium %                       | 3.91   | 0.10 |      | %                | 1  | 15               | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>STS</b>   |
| Sodium Adsorption Ratio                     | 5.01   | 0.10 |      |                  | 1  | 12               | 12/2/2021             |
| Soluble Calcium                             | 2.62   | 0.02 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Magnesium                           | 2.33   | 0.05 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Sodium                              | 7.88   | 0.25 |      | meq/L            | 1  |                  | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:00:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-013 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 0-2  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.72   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.04   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.25   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.12   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.08   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.11   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:02:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-014 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 3-5  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.54   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.81   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.60   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.63   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.93   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.95   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:08:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-015 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 5-7  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL               | Date Analyzed         |
|---|--------|------|------|------------------|----|------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    |                  | Analyst: <b>JMI</b>   |
| Electrical Conductivity                     | 0.45   | 0.10 |      | mmhos/c          | 1  | 4                | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>   |
| Exchangeable Sodium %                       | 2.13   | 0.10 |      | %                | 1  | 15               | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>STS</b>   |
| Sodium Adsorption Ratio                     | 2.35   | 0.10 |      |                  | 1  | 12               | 12/2/2021             |
| Soluble Calcium                             | 1.32   | 0.02 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Magnesium                           | 0.81   | 0.05 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Sodium                              | 2.43   | 0.25 |      | meq/L            | 1  |                  | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-016 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 8-10  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.58   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.97   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.26   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.93   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.13   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.80   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:18:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-017 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 10-12  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.54   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.83   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.71   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.47   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.91   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.96   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
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- W Sample container temperature is out of limit as specified at testcode

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- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:20:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-018 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.21   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.85   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.46   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 5.08   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.99   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.94   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
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- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:25:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-019 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 15-17  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.22   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.48   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.73   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.61   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.43   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.75   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:30:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-020 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 18-20  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 2.97   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 10:40:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.05   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.47   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 18.3   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 11.3   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 9.52   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:35:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-021 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 20-22  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.77   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.77   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.85   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 6.16   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 4.72   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.98   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 10:43:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-022 **Matrix:** SOIL  
**Client Sample ID** SE-SB30 23-25  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.33   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.77   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.44   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.49   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.82   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 7.90   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-023 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 0-2  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units   | DF | PL               | Date Analyzed         |
|---|--------|------|------|---------|----|------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |         |    | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>   |
| Electrical Conductivity                     | 4.89   | 0.10 | *    | mmhos/c | 1  | 4                | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |         |    | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>   |
| Exchangeable Sodium %                       | 0.79   | 0.10 |      | %       | 1  | 15               | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |         |    | <b>LDNR 29-B</b> | Analyst: <b>STS</b>   |
| Sodium Adsorption Ratio                     | 2.58   | 0.10 |      |         | 1  | 12               | 12/2/2021             |
| Soluble Calcium                             | 30.3   | 0.02 |      | meq/L   | 1  |                  | 12/2/2021             |
| Soluble Magnesium                           | 11.7   | 0.05 |      | meq/L   | 1  |                  | 12/2/2021             |
| Soluble Sodium                              | 11.8   | 0.25 |      | meq/L   | 1  |                  | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:12:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-024 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 3-5  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.84   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.08   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.70   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.88   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.19   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 4.59   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:23:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-025 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 5-7  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.86   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.22   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.33   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.71   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.08   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 5.10   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:25:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-026 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 8-10  
**Sample Location:**

| Analyses                                    | Result | RL     | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|--------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |        |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.23   | 0.10   |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |        |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 5.14   | 0.10   |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |        |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 5.68   | 0.10   |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.16   | 0.02   |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.33   | 0.05   |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 7.50   | 0.25   |      | meq/L            | 1  |                                      | 12/2/2021             |
| <b>TPH DRO/ORO IN SOIL BY SW8015</b>        |        |        |      | <b>SW8015B</b>   |    | <b>SW3550C</b> Analyst: <b>CRM</b>   |                       |
| TPH (Diesel Range)                          | < 10.0 | 10.0   |      | mg/Kg            | 1  |                                      | 11/24/2021 2:51:00 AM |
| TPH (Oil Range)                             | < 10.0 | 10.0   |      | mg/Kg            | 1  |                                      | 11/24/2021 2:51:00 AM |
| Surr: 4-Terphenyl-d14                       | 82.0   | 33-152 |      | %Rec             | 1  |                                      | 11/24/2021 2:51:00 AM |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:35:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-027 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 10-12  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 2.58   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.37   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.88   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 7.14   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 4.53   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 11.8   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:37:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-028 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 2.57   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.06   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.24   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 8.89   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 6.21   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.89   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:45:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-029 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 15-17  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.53   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.50   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.62   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 4.58   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 3.48   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 7.27   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048

Date Reported: 12/8/2021

**CLIENT:** Southland Environmental

**Collection Date:** 11/17/2021 11:47:00 AM

**Project:** Drew Estate "15"/11397

**Lab ID:** 21111048-030

**Matrix:** SOIL

**Client Sample ID** SE-SB31 18-20

**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.14   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.46   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.69   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.24   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.50   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 6.26   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 11:52:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-031 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 22-24  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.61   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.70   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.08   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 5.15   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 3.93   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.70   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 12:05:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-032 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 20-22  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.36   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 5.26   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 3.65   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 4.23   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 3.27   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 7.06   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 12:55:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-033 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 25-27  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.35   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 5.50   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.72   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 3.15   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.74   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 8.09   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 1:05:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-034 **Matrix:** SOIL  
**Client Sample ID** SE-SB31 28-30  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.06   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 5.36   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 4.87   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.15   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.79   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 6.83   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 1:40:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-035 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 3-5  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.30   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.56   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 1.82   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 0.90   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.55   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.55   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 1:48:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-036 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 8-10  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.60   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.61   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 5.44   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 4.55   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 2.41   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 10.1   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 1:55:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-037 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.40   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.43   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 1.84   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.35   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.89   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.94   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 2:00:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-038 **Matrix:** SOIL  
**Client Sample ID** SE-SB32 18-20  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.58   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.47   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.44   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.59   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.18   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.87   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 2:30:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-039 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 3-5  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.34   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.24   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 1.97   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.09   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.73   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.88   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 2:35:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-040 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 8-10  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.28   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:30:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.41   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 1.93   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 0.75   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.51   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.53   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 2:45:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-041 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.51   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.99   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.30   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.51   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.98   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.57   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected





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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 2:50:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-042 **Matrix:** SOIL  
**Client Sample ID** SE-SB33 18-20  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 1.20   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 3.22   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.72   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 4.43   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 3.01   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 5.24   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 3:48:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-043 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 3-5  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.22   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 1.14   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 1.90   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 0.48   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.35   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 1.22   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 3:55:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-044 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 8-10  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.46   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 2.00   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.30   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 1.27   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 0.82   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 2.35   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 4:00:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-045 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 13-15  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL               | Date Analyzed         |
|---|--------|------|------|------------------|----|------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    |                  | Analyst: <b>JMI</b>   |
| Electrical Conductivity                     | 0.58   | 0.10 |      | mmhos/c          | 1  | 4                | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>BXB</b>   |
| Exchangeable Sodium %                       | 2.27   | 0.10 |      | %                | 1  | 15               | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> | Analyst: <b>STS</b>   |
| Sodium Adsorption Ratio                     | 2.01   | 0.10 |      |                  | 1  | 12               | 12/2/2021             |
| Soluble Calcium                             | 1.89   | 0.02 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Magnesium                           | 1.31   | 0.05 |      | meq/L            | 1  |                  | 12/2/2021             |
| Soluble Sodium                              | 2.55   | 0.25 |      | meq/L            | 1  |                  | 12/2/2021             |

**Qualifiers:**

|     |   |    |  |
|-----|---|----|--|
| *   | Value exceeds Maximum Contaminant Level.                              | H  | Holding times for preparation or analysis exceeded |
| M   | Matrix Interference   | ND | Not Detected at the Reporting Limit                |
| RL  | Reporting Limit   | S  | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit  | U  | Analyte not detected                               |
| W   | Sample container temperature is out of limit as specified at testcode |    |  |



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# Analytical Report

WO#: 21111048  
 Date Reported: 12/8/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/17/2021 4:05:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111048-046 **Matrix:** SOIL  
**Client Sample ID** SE-SB34 18-20  
**Sample Location:**

| Analyses                                    | Result | RL   | Qual | Units            | DF | PL                                   | Date Analyzed         |
|---|--------|------|------|------------------|----|--------------------------------------|-----------------------|
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      | <b>LDNR 29-B</b> |    | Analyst: <b>JMI</b>                  |                       |
| Electrical Conductivity                     | 0.80   | 0.10 |      | mmhos/c          | 1  | 4                                    | 12/2/2021 11:45:00 AM |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |                       |
| Exchangeable Sodium %                       | 4.16   | 0.10 |      | %                | 1  | 15                                   | 12/8/2021             |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      | <b>LDNR 29-B</b> |    | <b>LDNR 29-B</b> Analyst: <b>STS</b> |                       |
| Sodium Adsorption Ratio                     | 2.59   | 0.10 |      |                  | 1  | 12                                   | 12/2/2021             |
| Soluble Calcium                             | 2.56   | 0.02 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Magnesium                           | 1.73   | 0.05 |      | meq/L            | 1  |                                      | 12/2/2021             |
| Soluble Sodium                              | 3.80   | 0.25 |      | meq/L            | 1  |                                      | 12/2/2021             |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- M Matrix Interference
- RL Reporting Limit
- SDL Sample detection limit
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- U Analyte not detected



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|                       |                         |                        |                            |                     |                                  |                       |           |             |      |          |      |
|-----------------------|-------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|-----------|-------------|------|----------|------|
| Sample ID             | <b>21110679-002AMS-</b> | SampType: <b>MS</b>    | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |           |             |      |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556952</b> |           |             |      |          |      |
| Analyte               | Result                  | PQL                    | SPK value                  | SPK Ref Val         | %REC                             | LowLimit              | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)    | 153                     | 10.0                   | 100.0                      | 204.2               | -50.8                            | 23.4                  | 123       |             |      |          | SM   |
| Surr: 4-Terphenyl-d14 | 2.94                    |                        | 3.333                      |                     | 88.3                             | 33                    | 152       |             |      |          |      |

|                       |                         |                        |                            |                     |                                  |                       |           |             |      |          |      |
|-----------------------|-------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|-----------|-------------|------|----------|------|
| Sample ID             | <b>21110679-002AMSD</b> | SampType: <b>MSD</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |           |             |      |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556953</b> |           |             |      |          |      |
| Analyte               | Result                  | PQL                    | SPK value                  | SPK Ref Val         | %REC                             | LowLimit              | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)    | 182                     | 10.0                   | 100.0                      | 204.2               | -22.6                            | 23.4                  | 123       | 153.4       | 16.8 | 35.6     | SM   |
| Surr: 4-Terphenyl-d14 | 2.87                    |                        | 3.333                      |                     | 86.1                             | 33                    | 152       |             | 0    | 40       |      |

|                       |                         |                        |                            |                     |                                  |                       |           |             |      |          |      |
|-----------------------|-------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|-----------|-------------|------|----------|------|
| Sample ID             | <b>21110679-003AMS-</b> | SampType: <b>MS</b>    | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |           |             |      |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556955</b> |           |             |      |          |      |
| Analyte               | Result                  | PQL                    | SPK value                  | SPK Ref Val         | %REC                             | LowLimit              | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range)       | 79.9                    | 10.0                   | 100.0                      | 14.90               | 65.0                             | 14.5                  | 174       |             |      |          |      |
| Surr: 4-Terphenyl-d14 | 2.70                    |                        | 3.333                      |                     | 81.1                             | 33                    | 152       |             |      |          |      |

|                 |                         |                        |                            |                     |                                  |                       |           |             |      |          |      |
|-----------------|-------------------------|------------------------|----------------------------|---------------------|----------------------------------|-----------------------|-----------|-------------|------|----------|------|
| Sample ID       | <b>21110679-003AMSD</b> | SampType: <b>MSD</b>   | TestCode: <b>8015_DO_S</b> | Units: <b>mg/Kg</b> | Prep Date: <b>11/19/2021</b>     | RunNo: <b>104567</b>  |           |             |      |          |      |
| Client ID:      | <b>ZZZZZZ</b>           | Batch ID: <b>41703</b> | TestNo: <b>SW8015B</b>     | <b>SW3550C</b>      | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556956</b> |           |             |      |          |      |
| Analyte         | Result                  | PQL                    | SPK value                  | SPK Ref Val         | %REC                             | LowLimit              | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| TPH (Oil Range) | 88.7                    | 10.0                   | 100.0                      | 14.90               | 73.8                             | 14.5                  | 174       | 79.87       | 10.5 | 48.8     |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|                       |                         |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>21110679-003AMSD</b> | SampType: | <b>MSD</b>   | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556956</b> |      |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| Surr: 4-Terphenyl-d14 |                         | 2.91      |              |           | 3.333            |                |              | 87.4           | 33                | 152       |                | 0    | 40       |      |

|                       |                   |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|-------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>LCS-D41703</b> | SampType: | <b>LCS</b>   | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>LCSS</b>       | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556970</b> |      |          |      |
| Analyte               |                   | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)    |                   | 79.7      |              | 10.0      | 100.0            | 0              |              | 79.7           | 63.4              | 109       |                |      |          |      |
| Surr: 4-Terphenyl-d14 |                   | 2.93      |              |           | 3.333            |                |              | 87.8           | 33                | 152       |                |      |          |      |

|                       |                    |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|--------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>LCSD-D41703</b> | SampType: | <b>LCSD</b>  | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>LCSS02</b>      | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556971</b> |      |          |      |
| Analyte               |                    | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)    |                    | 80.5      |              | 10.0      | 100.0            | 0              |              | 80.5           | 63.4              | 109       | 79.68          | 1.03 | 21.9     |      |
| Surr: 4-Terphenyl-d14 |                    | 3.02      |              |           | 3.333            |                |              | 90.7           | 33                | 152       |                | 0    | 40       |      |

|                       |                    |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|--------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>LCSD-M41703</b> | SampType: | <b>LCSD</b>  | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>LCSS02</b>      | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556972</b> |      |          |      |
| Analyte               |                    | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| TPH (Oil Range)       |                    | 82.9      |              | 10.0      | 100.0            | 0              |              | 82.9           | 63.9              | 120       | 78.72          | 5.15 | 20.7     |      |
| Surr: 4-Terphenyl-d14 |                    | 3.10      |              |           | 3.333            |                |              | 92.9           | 33                | 152       |                | 0    | 40       |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41703

|            |                    |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|------------|--------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>LCSD-M41703</b> | SampType: | <b>LCSD</b>  | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID: | <b>LCSS02</b>      | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556972</b> |      |          |      |
| Analyte    |                    | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

|                       |                   |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|-------------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>LCS-M41703</b> | SampType: | <b>LCS</b>   | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>LCSS</b>       | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556973</b> |      |          |      |
| Analyte               |                   | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| TPH (Oil Range)       |                   | 78.7      |              | 10.0      | 100.0            | 0              |              | 78.7           | 63.9              | 120       |                |      |          |      |
| Surr: 4-Terphenyl-d14 |                   | 3.18      |              |           | 3.333            |                |              | 95.5           | 33                | 152       |                |      |          |      |

|                       |                 |           |              |           |                  |                |              |                |                   |           |                |      |          |      |
|-----------------------|-----------------|-----------|--------------|-----------|------------------|----------------|--------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID             | <b>MB-41703</b> | SampType: | <b>MBLK</b>  | TestCode: | <b>8015_DO_S</b> | Units:         | <b>mg/Kg</b> | Prep Date:     | <b>11/19/2021</b> | RunNo:    | <b>104567</b>  |      |          |      |
| Client ID:            | <b>PBS</b>      | Batch ID: | <b>41703</b> | TestNo:   | <b>SW8015B</b>   | <b>SW3550C</b> |              | Analysis Date: | <b>11/23/2021</b> | SeqNo:    | <b>2556974</b> |      |          |      |
| Analyte               |                 | Result    |              | PQL       | SPK value        | SPK Ref Val    |              | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| TPH (Diesel Range)    |                 | < 10.0    |              | 10.0      |                  |                |              |                |                   |           |                |      |          |      |
| TPH (Oil Range)       |                 | < 10.0    |              | 10.0      |                  |                |              |                |                   |           |                |      |          |      |
| Surr: 4-Terphenyl-d14 |                 | 2.74      |              |           | 3.333            |                |              | 82.1           | 33                | 152       |                |      |          |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp





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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41848

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111048-001ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/2/2021</b> | RunNo:      | <b>104796</b>  |          |      |
| Client ID:              | <b>SE-SB29 0-2</b>      | Batch ID: | <b>41848</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562776</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 2.29      |              | 0.10      |                  |                  |      |                |                  | 2.19        | 4.64           | 20       |      |
| Soluble Calcium         |                         | 2.13      |              | 0.02      |                  |                  |      |                |                  | 2.16        | 1.61           | 20       |      |
| Soluble Magnesium       |                         | 1.27      |              | 0.05      |                  |                  |      |                |                  | 1.28        | 0.34           | 20       |      |
| Soluble Sodium          |                         | 2.99      |              | 0.25      |                  |                  |      |                |                  | 2.87        | 4.07           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41849

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111048-021ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/2/2021</b> | RunNo:      | <b>104796</b>  |          |      |
| Client ID:              | <b>SE-SB30 20-22</b>    | Batch ID: | <b>41849</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562818</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 3.85      |              | 0.10      |                  |                  |      |                |                  | 3.85        | 0.14           | 20       |      |
| Soluble Calcium         |                         | 6.17      |              | 0.02      |                  |                  |      |                |                  | 6.16        | 0.11           | 20       |      |
| Soluble Magnesium       |                         | 4.74      |              | 0.05      |                  |                  |      |                |                  | 4.72        | 0.40           | 20       |      |
| Soluble Sodium          |                         | 9.00      |              | 0.25      |                  |                  |      |                |                  | 8.98        | 0.26           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41850

|                         |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111048-041ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/2/2021</b> | RunNo:      | <b>104796</b>  |          |      |
| Client ID:              | <b>SE-SB33 13-15</b>    | Batch ID: | <b>41850</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562839</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 2.49      |              | 0.10      |                  |                  |      |                |                  | 2.30        | 8.00           | 20       |      |
| Soluble Calcium         |                         | 1.52      |              | 0.02      |                  |                  |      |                |                  | 1.51        | 0.39           | 20       |      |
| Soluble Magnesium       |                         | 0.98      |              | 0.05      |                  |                  |      |                |                  | 0.98        | 0.34           | 20       |      |
| Soluble Sodium          |                         | 2.78      |              | 0.25      |                  |                  |      |                |                  | 2.57        | 8.19           | 20       |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41872

|                       |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111048-001ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/6/2021</b> | RunNo:      | <b>104901</b>  |          |      |
| Client ID:            | <b>SE-SB29 0-2</b>      | Batch ID: | <b>41872</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565089</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 1.35      |              | 0.10      |                  |                  |      |                |                  | 1.60        | 16.9           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41874

|                       |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111048-021ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/6/2021</b> | RunNo:      | <b>104901</b>  |          |      |
| Client ID:            | <b>SE-SB30 20-22</b>    | Batch ID: | <b>41874</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565110</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 4.76      |              | 0.10      |                  |                  |      |                |                  | 4.77        | 0.21           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41876

|                       |                         |           |              |           |                  |                  |      |                |                  |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111048-041ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/6/2021</b> | RunNo:      | <b>104901</b>  |          |      |
| Client ID:            | <b>SE-SB33 13-15</b>    | Batch ID: | <b>41876</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/8/2021</b> | SeqNo:      | <b>2565131</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit        | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 1.80      |              | 0.10      |                  |                  |      |                |                  | 1.99        | 10.0           | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- SDL Sample detection limit
- H Holding times for preparation or analysis exceeded
- RL Reporting Limit
- U Analyte not detected
- M Matrix Interference
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104768

|                         |                   |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>MB-R104767</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104768</b>      |
| Client ID:              | <b>PBS</b>        | Batch ID: | <b>R104768</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562067</b>     |
| Analyte                 |                   | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                   | < 0.10    |                | 0.10      |                  |             |                 |                |                  |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS1-R104767</b> | SampType: | <b>LCS1</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104768</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104768</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562068</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 0.53      |                | 0.10      | 0.50             | 0           | 105             | 90             | 110              |             |                    |

|                         |                     |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|---------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>LCS2-R104767</b> | SampType: | <b>LCS2</b>    | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104768</b>      |
| Client ID:              | <b>ZZZZZ</b>        | Batch ID: | <b>R104768</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562069</b>     |
| Analyte                 |                     | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                     | 56.4      |                | 0.10      | 53.00            | 0           | 106             | 90             | 110              |             |                    |

|                         |                         |           |                |           |                  |             |                 |                |                  |             |                    |
|-------------------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-----------------|----------------|------------------|-------------|--------------------|
| Sample ID               | <b>21111048-001ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>EC_S</b>      | Units:      | <b>mmhos/cm</b> | Prep Date:     |                  | RunNo:      | <b>104768</b>      |
| Client ID:              | <b>SE-SB29 0-2</b>      | Batch ID: | <b>R104768</b> | TestNo:   | <b>LDNR 29-B</b> |             |                 | Analysis Date: | <b>12/2/2021</b> | SeqNo:      | <b>2562071</b>     |
| Analyte                 |                         | Result    |                | PQL       | SPK value        | SPK Ref Val | %REC            | LowLimit       | HighLimit        | RPD Ref Val | %RPD RPDLimit Qual |
| Electrical Conductivity |                         | 0.61      |                | 0.10      |                  |             |                 |                |                  | 0.61        | 0.49 20            |

**Qualifiers:** \* Value exceeds Maximum Contaminant Level. H Holding times for preparation or analysis exceeded M Matrix Interference  
 ND Not Detected at the Reporting Limit RL Reporting Limit S Spike Recovery outside accepted recovery limits  
 SDL Sample detection limit U Analyte not detected W Sample container temperature is out of limit as sp



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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104773

|                             |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-----------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>MB-R104768</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104773</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>       | Batch ID: <b>R104773</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562258</b> |          |           |             |      |          |      |
| Analyte                     | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity     | < 0.10                   | 0.10                     |                        |                                 |                       |          |           |             |      |          |      |

|                               |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS1-R104768</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104773</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104773</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562259</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 0.53                     | 0.10                     | 0.50                   | 0                               | 104                   | 90       | 110       |             |      |          |      |

|                               |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS2-R104768</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104773</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104773</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562260</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 55.3                     | 0.10                     | 53.00                  | 0                               | 104                   | 90       | 110       |             |      |          |      |

|                                   |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-----------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>21111048-021ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104773</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB30 20-22</b>   | Batch ID: <b>R104773</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562262</b> |          |           |             |      |          |      |
| Analyte                           | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity           | 1.77                     | 0.10                     |                        |                                 |                       |          |           | 1.77        | 0.40 | 20       |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |





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# QC SUMMARY REPORT

WO#: 21111048  
 08-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104774

|                             |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-----------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>MB-R104773</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104774</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>       | Batch ID: <b>R104774</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562284</b> |          |           |             |      |          |      |
| Analyte                     | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity     | < 0.10                   | 0.10                     |                        |                                 |                       |          |           |             |      |          |      |

|                               |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS1-R104773</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104774</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104774</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562285</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 0.52                     | 0.10                     | 0.50                   | 0                               | 102                   | 90       | 110       |             |      |          |      |

|                               |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS2-R104773</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104774</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104774</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562286</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 53.2                     | 0.10                     | 53.00                  | 0                               | 100                   | 90       | 110       |             |      |          |      |

|                                   |                          |                          |                        |                                 |                       |          |           |             |      |          |      |
|-----------------------------------|--------------------------|--------------------------|------------------------|---------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>21111048-041ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                      | RunNo: <b>104774</b>  |          |           |             |      |          |      |
| Client ID: <b>SE-SB33 13-15</b>   | Batch ID: <b>R104774</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/2/2021</b> | SeqNo: <b>2562289</b> |          |           |             |      |          |      |
| Analyte                           | Result                   | PQL                      | SPK value              | SPK Ref Val                     | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity           | 0.51                     | 0.10                     |                        |                                 |                       |          |           | 0.51        | 0.39 | 20       |      |

**Qualifiers:**

|     |  |    |  |   |  |
|-----|--|----|--|---|--|
| *   | Value exceeds Maximum Contaminant Level. | H  | Holding times for preparation or analysis exceeded | M | Matrix Interference                                |
| ND  | Not Detected at the Reporting Limit      | RL | Reporting Limit                                    | S | Spike Recovery outside accepted recovery limits    |
| SDL | Sample detection limit                   | U  | Analyte not detected                               | W | Sample container temperature is out of limit as sp |



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## Sample Log-In Check List

Client Name: **SOUTHLAND\_ENV** Work Order Number: **21111048** RcptNo: **1**

|               |                         |                              |                         |
|---------------|-------------------------|------------------------------|-------------------------|
| Logged by:    | <b>Tammy Thibodeaux</b> | <b>11/18/2021 2:30:00 PM</b> | <i>Tammy Thibodeaux</i> |
| Completed By: | <b>Tammy Thibodeaux</b> | <b>11/19/2021 6:11:21 AM</b> | <i>Tammy Thibodeaux</i> |
| Reviewed By:  | <b>Kelli Foreman</b>    | <b>11/22/2021 4:34:21 PM</b> | <i>Kelli Foreman</i>    |

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? Element

### Log In

3. Coolers are present? Yes  No  NA   
 4. Shipping container/cooler in good condition? Yes  No   
 Custody seals intact on shipping container/cooler? Yes  No  Not Present   
 No. Seal Date: Signed By:  
 5. Was an attempt made to cool the samples? Yes  No  NA   
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 7. Sample(s) in proper container(s)? Yes  No   
 8. Sufficient sample volume for indicated test(s)? Yes  No   
 9. Are samples (except VOA and ONG) properly preserved? Yes  No   
 10. Was preservative added to bottles? Yes  No  NA   
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes  No  No VOA Vials   
 12. Were any sample containers received broken? Yes  No   
 13. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 14. Are matrices correctly identified on Chain of Custody? Yes  No   
 15. Is it clear what analyses were requested? Yes  No   
 16. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

|                      |   |       |  |
|----------------------|---|-------|--|
| Person Notified:     | <input type="text" value="Duane Piranio"/>  | Date: | <input type="text" value="11/19/2021"/>  |
| By Whom:             | <input type="text" value="Buffy Bryant"/>   | Via:  | <input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | <input type="text" value="Page 5 has no testing for samples SE-SB33 and SE-SB34 all depths"/> |       |  |
| Client Instructions: | <input type="text" value="run 29B EC, SAR, &amp; ESP"/>                                       |       |  |

18. Additional remarks:  
 Improper error correction(s) made by client.  
 Indicated collection time, matrix, and container information (pg 5 of 6) as per containers received.

### Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 1.3     | Good      | Not Present |         |           |           |



# Chain of Custody

Laboratory Number: **2111048**

Client Information: **Southland Environmental**  
 Billing Information: **Hope Clark**  
 PO Number: **11397**  
 Project Name/Number: **Drew Estate "15" / 11397**  
 Matrix Code: **DW = Drinking Water, WW = Waste Water, GW = Ground Water, AQ = Aqueous, OT = Other, SL = Sludge, SOL = Solid, O = Oil, SO = Soil, F = Food, SW = Swab, NG = Natural Gas, NGL = Natural Gas Liquid, PW = Produced Water, CF = Completion Fluid**

Company Name: **Southland Environmental**  
 Contact Name: **Duane Piranio**  
 Address: **510 Clarence St., Lake Charles, LA 70601**  
 Phone Number: **337-436-3248** Ext: **Ext:**  
 E-mail Address: **dpiranio@southlandenv.com**

Quote Number:  
 Required QC Level  
 Bill Monthly:  Yes  No  
 Shipping Method: **UPS / FedEx / Airborne**  
 DHL  Element  Hand / Mail

Page / of **6**

| Sample ID/Description | Which Regulations Apply:<br><input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC | Turn Time<br><input type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | Collection Information |      | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container<br>Type<br>Quantity | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ,<br>NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> | Requested Tests<br>TPH-D/O (8015)<br>29B Metals* | Comments |
|-----------------------|--|---|------------------------|------|--|-------------------------------|--|--|----------|
|                       |  |   | Date                   | Time |  |                               |  |  |          |
|                       |  |   | Matrix                 |      |  |                               |  |  |          |
| SE-5B29 (0-2)         |  |   | 11-17-21               | 4:33 | 50   |                               |  |  |          |
| 11 (1-5)              |  |   |                        | 8:55 |  |                               |  |  |          |
| 11 (5-7)              |  |   |                        | 8:43 |  |                               |  |  |          |
| 11 (8-10)             |  |   |                        | 8:45 |  |                               |  |  |          |
| 11 (10-12)            |  |   |                        | 8:53 |  |                               |  |  |          |
| 11 (17-15)            |  |   |                        | 8:55 |  |                               |  |  |          |
| 11 (15-17)            |  |   |                        | 9:00 |  |                               |  |  |          |
| 11 (18-20)            |  |   |                        | 9:02 |  |                               |  |  |          |
| 11 (20-22)            |  |   |                        | 9:10 |  |                               |  |  |          |

| Relinquished by    | Date/Time     | Received by        | Date/Time     | Field Notes   |
|--------------------|---------------|--------------------|---------------|---|
| <i>[Signature]</i> | 11/18/21 1200 | <i>[Signature]</i> | 11/18/21 1200 | Received at lab on ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 13C |
| <i>[Signature]</i> | 11/18/21 1430 | <i>[Signature]</i> | 11/18/21 1430 |   |

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560 South Zimmer Road  
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 P 574-267-3305 F 574-269-6569

3371 Cleveland Road, Suite 100A  
 South Bend, IN 46628-9780 USA  
 P 574-277-0707 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508-3344 USA  
 P 337-235-0483 F 337-233-6540



# Chain of Custody

Laboratory Number: 21111048

Client Information:  
 Southland Environmental  
 Duane Piranio  
 510 Clarence St.  
 Lake Charles, LA 70601  
 337-436-3248 Ext:  
 dpiranio@southlandenv.com

Billing Information:  
 Hope Clark  
 EXT:  
 EXT:

Company Name: Southland Environmental  
 Contact Name: Duane Piranio  
 Address: 510 Clarence St.  
 City, State Zip: Lake Charles, LA 70601  
 Phone Number: 337-436-3248 Ext:  
 Fax Number:  
 E-mail Address: dpiranio@southlandenv.com

Project Name/Number: Drew Estate "15" / 11397  
 Sampler's Signature: *[Signature]*  
 Shipping Method: UPS / FedEx / Airborne  
 DHL / ~~Element~~ / Hand / Mail

PO Number:  
 Quote Number:  
 Required QC Level  
 Bill Monthly  
 Yes  
 No

Page 2 of 6  
 Matrix Code  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Which Regulations Apply:<br><input type="checkbox"/> RCRA<br><input type="checkbox"/> POTW<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> USDA/FDA<br><input type="checkbox"/> RECAP/RISC | Turn Time<br><input type="checkbox"/> Standard<br><input checked="" type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Collection Information |      | Container<br>Type<br>F=Plastic, V=Vial | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub><br>NaOH, Na <sub>2</sub> SO <sub>4</sub> | Requested Tests                                 | Comments |
|-----------------------|--|--|---|------------------------|------|--|--|---|----------|
|                       |  |  |   | Date                   | Time |  |  |   |          |
| SE-5B29 (25-25)       |  |  |   | 11-17-21               | 9:15 | G                                      | None   | 29B Metals*<br>TPH-D/O (8015)<br>Sol. Chlorides |          |
| " (25-27)             |  |  |   | 9:33                   |      | G                                      | None   |   |          |
| " (28-30)             |  |  |   | 9:40                   |      | G                                      | None   |   |          |
| SE-5B30 (0-2)         |  |  |   | 10:00                  |      | G                                      | None   |   |          |
| " (3-5)               |  |  |   | 10:02                  |      | G                                      | None   |   |          |
| " (5-7)               |  |  |   | 10:08                  |      | G                                      | None   |   |          |
| " (8-10)              |  |  |   | 10:10                  |      | G                                      | None   |   |          |
| " (10-12)             |  |  |   | 10:18                  |      | G                                      | None   |   |          |
| " (13-15)             |  |  |   | 10:20                  |      | G                                      | None   |   |          |

Relinquished by: *[Signature]* Date/Time: 11/18/21 12:01  
 Received by: *[Signature]* Date/Time: 11/18/21 14:30  
 Field Notes: Received at lab on ice?  Yes  No Temp: 1.3C

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 F 574-259-6568

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 South Bend, IN 46628-3700 USA  
 P 574-277-0707  
 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508-3344 USA  
 P 337-235-0483  
 F 337-230-6540



# Chain of Custody

Laboratory Number: 211108

Client Information:  
 Southland Environmental  
 Duane Piranio  
 510 Clarence St.  
 Lake Charles, LA 70601  
 337-436-3248 Ext:  
 dpiranio@southlandenv.com

Billing Information:  
 Hope Clark  
 Ext:  
 Bill Monthly  Yes  No

Project Name/Number:  
 Drew Estate "15" / 11397

Quote Number:  
 Required QC Level

Sampler's Signature: *[Signature]*

Shipping Method:  
 UPS / FedEx / Airborne  
 DHL / ~~Freight~~ / Hand / Mail

Page 3 of 6

Matrix Code  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge SOL = Solid  
 O = Oil SO = Soil  
 F = Food SW = Swab  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Which Regulations Apply:            |  | Turn Time                         |                                | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container       |          | Pres. | Requested Tests  |              | Comments |
|-----------------------|-------------------------------------|--|-----------------------------------|--------------------------------|---|-----------------|----------|-------|--|--------------|----------|
|                       | <input type="checkbox"/> RCRA       | <input type="checkbox"/> Drinking Water        | <input type="checkbox"/> Standard | <input type="checkbox"/> RUSH  |   | Type            | Quantity |       | HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> | EC, SAR, ESP |          |
| SE-SB20 (15-12)       | <input type="checkbox"/> POTW       | <input type="checkbox"/> Distribution          | <input type="checkbox"/> 1 Day    | <input type="checkbox"/> 2 Day |   | G-Glass, V-Vial | 1        | None  | X  |              |          |
| " (18-20)             | <input type="checkbox"/> NPDES      | <input type="checkbox"/> Special               | <input type="checkbox"/> Other    |                                |   | P-Plastic       | 1        | None  | X  |              |          |
| " (20-23)             | <input type="checkbox"/> USDA/FDA   | <input checked="" type="checkbox"/> State 29-A |                                   |                                |   |                 | 1        | None  | X  |              |          |
| SE-SB31 (0-2)         | <input type="checkbox"/> RECAP/RISC | <input type="checkbox"/> Other                 |                                   |                                |   |                 | 1        | None  | X  |              |          |
| " (3-5)               |                                     |  |                                   |                                |   |                 | 1        | None  | X  |              |          |
| " (5-7)               |                                     |  |                                   |                                |   |                 | 1        | None  | X  |              |          |
| " (8-10)              |                                     |  |                                   |                                |   |                 | 1        | None  | X  |              |          |
| " (10-12)             |                                     |  |                                   |                                |   |                 | 2        | None  | X  | X            |          |

Relinquished by: *[Signature]* Date/Time: 11/18/12 12:00

Received by: *[Signature]* Date/Time: 11/18/12 14:30

Field Notes: Received at lab on ice?  Yes  No Temp: 1.3C

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 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA 70508-3344 USA  
 P 337-235-0483  
 F 337-233-6340



Chain of Custody

Laboratory Number: 2111048

Client Information: Southland Environmental  
 Duane Piranio  
 510 Clarence St.  
 Lake Charles, LA 70601  
 337-436-3248  
 dpiranio@southlandenv.com

Billing Information: PO Number: Drew Estate "15" / 11397  
 Quote Number:  
 Required QC Level

Company Name: Southland Environmental  
 Contact Name: Duane Piranio  
 Address: 510 Clarence St.  
 City, State, Zip: Lake Charles, LA 70601  
 Phone Number: 337-436-3248  
 Fax Number:  
 E-mail Address: dpiranio@southlandenv.com

Which Regulations Apply:  
 RCRA  
 POTW  
 NPDES  
 USDA/FDA  
 RECAP/RISC  
 Drinking Water  
 Distribution  
 Special  
 Slate 29.9  
 Other

Turn Time:  
 Standard  
 RUSH  
 1 Day  
 2 Day  
 Other

(Rush turn times will incur a surcharge and must be pre-approved by lab.)

Container: Quantity, Type, Pres., Requested Tests, Comments

Shipping Method: UPS / FedEx / Airborne  
 DHL / Element / Hand / Mail

Matrix Code:  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AO = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Collection Information |      | Turn Time | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container | Pres. | Requested Tests   | Comments |
|-----------------------|------------------------|------|-----------|---|-----------|-------|---|----------|
|                       | Date                   | Time |           |   |           |       |   |          |
| SE-SB31 (13-15)       | 11-17-21               | 1137 | 6         | So  | G         | None  | 29B Metals*<br>TPH-D/O (8015)<br>Sol. Chlorides<br>EC, SAR, ESP |          |
| " (15-17)             |                        | 1145 |           |   |           | None  |   |          |
| " (18-20)             |                        | 1147 |           |   |           | None  |   |          |
| " (22-24)             |                        | 1152 |           |   |           | None  |   |          |
| " (20-22)             |                        | 1205 |           |   |           | None  |   |          |
| " (25-27)             |                        | 1255 |           |   |           | None  |   |          |
| " (28-30)             |                        | 1305 |           |   |           | None  |   |          |
| SE-SB32 (3-5)         |                        | 1340 |           |   |           | None  |   |          |
| " (8-10)              |                        | 1348 |           |   |           | None  |   |          |

Requisitioned by: [Signature]  
 Date/Time: 11/18/21 1200

Received by: [Signature]  
 Date/Time: 11/18/21 1430

Field Notes: Received at lab on ice?  Yes  No Temp: 1.3C

samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 F 574-273-5699

2417 W. Pinhook Rd  
 Lafayette, LA  
 70568-3344 USA  
 P 337-235-0483  
 F 337-233-6540



# Chain of Custody

Laboratory Number: **21111048**

**Client Information:**  
 Southland Environmental  
 Duane Piranio  
 510 Clarence St.  
 Lake Charles, LA 70601  
 337-436-3248 Ext:  
 dpiranio@southlandenv.com

**Billing Information:**  
 Hope Clark  
 Ext:

**Company Name:** Southland Environmental  
**Contact Name:** Duane Piranio  
**Address:** 510 Clarence St.  
**City, State Zip:** Lake Charles, LA 70601  
**Phone Number:** 337-436-3248 Ext:  
**Fax Number:**  
**E-mail Address:** dpiranio@southlandenv.com

**PO Number:**  
**Quote Number:**  
**Required QC Level:**  
**Bill Monthly:**  Yes  No  
**Shipping Method:** UPS / FedEx / Airborne  
 DHL / Element / Hand / Mail

**Project Name/Number:** Drew Estate "15" / 11397  
**Sampler's Signature:**  
**Shipping Method:**

**Page 5 of 6**  
**Matrix Code**  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 PW = Produced Water  
 CF = Completion Fluid  
 SOL = Solid  
 SO = Soil  
 SW = Swab  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Which Regulations Apply: |      | Turn Time<br><input checked="" type="checkbox"/> Standard<br><input type="checkbox"/> RUSH<br><input type="checkbox"/> 1 Day<br><input type="checkbox"/> 2 Day<br><input type="checkbox"/> Other | (Rush turn times will incur a surcharge and must be pre-approved by lab.) | Quantity | Container Type<br>P-Plastic, V=Val | Pres.<br>HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> | Requested Tests | Comments |                |                |              |             |
|-----------------------|--------------------------|------|--|---|----------|------------------------------------|---|-----------------|----------|----------------|----------------|--------------|-------------|
|                       | Collection Information   |      |  |   |          |                                    |   |                 |          | TPH-D/O (8015) | Sol. Chlorides | EC, SAR, ESP | 29B Metals* |
|                       | Date                     | Time |  |   |          |                                    |   |                 |          |                |                |              |             |
| SE-5832 (13-15)       | 11-17-21                 | 1355 | 6  | 50  | 6        |                                    | None  | X               |          |                |                |              |             |
| " (18-20)             |                          | 1400 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| SE-5833 (3-5)         |                          | 1430 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| " (18-10)             |                          | 1435 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| " (13-15)             |                          | 1445 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| " (18-20)             |                          | 1410 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| SE-5834 (3-5)         |                          | 1548 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| " (8-10)              |                          | 1555 |  |   |          |                                    | None  | X               |          |                |                |              |             |
| " (13-15)             |                          | 1600 |  | KF 11/22/21   |          |                                    | None  | X               |          |                |                |              |             |

**Relinquished by:** [Signature] **Date/Time:** 11/18/21 1200

**Received by:** [Signature] **Date/Time:** 11/18/21 1430

**Field Notes:** Received at lab on ice?  Yes  No Temp: 1.3c

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 Lafayette, LA 70508-3344 USA  
 P 337-235-0483  
 F 337-233-0540



element

# Chain of Custody

Laboratory Number: **2111048**

Company Name: **Southeast Environmental**  
 Contact Name: **Duane Piranio**  
 Address: **510 Clarence St.**  
 City, State Zip: **Lake Charles, LA 70601**  
 Phone Number: **337-436-3248** Ext:   
 Fax Number:   
 E-mail Address: **dpiranio@southlandenv.com**

### Client Information:

Billing Information: **Hope Clark**  
 PC Number:   
 Quote Number:   
 Required QC Level:

### Project Name/Number:

**Drew Estate "15" / 11397**

Page **6** of **6**

### Matrix Code

DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge SOL = Solid  
 O = Oil SO = Soil  
 F = Food SW = Swab  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

### Sampler's Signature

*[Signature]*

### Shipping Method:

UPS / FedEx / Airborne  
 DHL / Element / Hand / Mail

### Which Regulations Apply:

RCRA  
 POTW  
 NPDES  
 USDA/FDA  
 RECAP/RISC  
 Drinking Water  
 Distribution  
 Special  
 State Z-β  
 Other

### Turn Time

Standard  
 RUSH  
 1 Day  
 2 Day  
 Other

### (Rush turn times will incur a surcharge and must be pre-approved by lab.)

Quantity: **1**  
 Container Type: **G**  
 Pres.: **None**

### Collection Information

Date: **11-17-21** Time: **1605** Matrix: **So**

### Sample ID/Description

**SE-5B34 (1B-20)**

### Requested Tests

| Requested Tests  | Comments |
|--|----------|
| 298 Metals*  |          |
| TPH-D/O (8015)   |          |
| Sol. Chlorides   |          |
| EC, SAR, ESP   |          |
| HCl, HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |
| None   |          |

### Relinquished by

*[Signature]*

### Date/Time

**11/18/21 200**

### Received by

*[Signature]*

### Date/Time

**11/18/21 200**

### Field Notes:

Received at lab on ice?  Yes  No Temp: **1.3C**

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 P 337-235-0483  
 F 337-233-6540

JC 7110





Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

December 17, 2021

Duane Piranio  
Southland Environmental  
510 Clarence St  
Lake Charles, LA 70601  
TEL: (337) 436-3248  
FAX (337) 436-3641

RE: Drew Estate "15"/11397

Order No.: 21111099

Dear Duane Piranio:

Element Materials Technology Lafayette received 6 sample(s) on 11/19/2021 for the analyses presented in the following report.

In accordance with your instructions, Element Lafayette either conducted or subcontracted these analyses. Subcontracted analyses will be identified in the accompanying case narrative. All relevant sampling information can be found on the attached Chain-of-Custody form. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet the applicable requirements of TNI. Reported results relate only to the items tested.

Where applicable, all soil data, except for 29-B, are reported on a wet-weight basis unless otherwise indicated in the units field as –dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. LDHH Certification No.: LA023. ISDH Certification No.: C-LA-01. NDELCP Certification No.: R-226. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation. PA registration No.: 68-05967.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

Cristina Thibeaux  
Customer Service Supervisor  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344



Element Materials Technology Lafayette  
2417 W. Pinhook Road  
Lafayette, LA 70508-3344  
TEL: (337) 235-0483 FAX: (337) 233-6540  
Website: [www.element.com](http://www.element.com)

## Case Narrative

WO#: 21111099  
Date: 12/17/2021

---

**CLIENT:** Southland Environmental  
**Project:** Drew Estate "15"/11397

---

Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



Element Materials Technology Lafayette  
 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 9:35:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-001 **Matrix:** SOIL  
**Client Sample ID** SE-SB 35 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.62   | 0.10 |      | mmhos/cm | 1                | 12/10/2021 11:05:00 AM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 0.96   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.07   | 0.10 |      |          | 1                | 12/10/2021                           |
| Soluble Calcium  | 2.12   | 0.02 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Magnesium  | 1.40   | 0.05 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Sodium   | 2.74   | 0.25 |      | meq/L    | 1                | 12/10/2021                           |

|                    |   |   |     |   |
|--------------------|---|---|-----|---|
| <b>Qualifiers:</b> | B | Analyte detected in the associated Method Blank | H   | Holding times for preparation or analysis exceeded                    |
|                    | M | Matrix Interference                             | ND  | Not Detected at the Reporting Limit                                   |
|                    | R | RPD outside accepted recovery limits            | RL  | Reporting Limit   |
|                    | S | Spike Recovery outside accepted recovery limits | SDL | Sample detection limit  |
|                    | U | Analyte not detected                            | W   | Sample container temperature is out of limit as specified at testcode |



Element Materials Technology Lafayette  
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# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 9:40:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-002 **Matrix:** SOIL  
**Client Sample ID** SE-SB 35 18-20

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.99   | 0.10 |      | mmhos/cm | 1                | 12/10/2021 11:05:00 AM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.68   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.48   | 0.10 |      |          | 1                | 12/10/2021                           |
| Soluble Calcium  | 3.88   | 0.02 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Magnesium  | 2.60   | 0.05 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Sodium   | 4.47   | 0.25 |      | meq/L    | 1                | 12/10/2021                           |

|                    |   |   |     |   |
|--------------------|---|---|-----|---|
| <b>Qualifiers:</b> | B | Analyte detected in the associated Method Blank | H   | Holding times for preparation or analysis exceeded                    |
|                    | M | Matrix Interference                             | ND  | Not Detected at the Reporting Limit                                   |
|                    | R | RPD outside accepted recovery limits            | RL  | Reporting Limit   |
|                    | S | Spike Recovery outside accepted recovery limits | SDL | Sample detection limit  |
|                    | U | Analyte not detected                            | W   | Sample container temperature is out of limit as specified at testcode |



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# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 11:08:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-003 **Matrix:** SOIL  
**Client Sample ID** SE-SB 36 13-15

| Analyses   | Result | RL   | Qual | Units    | DF               | Date Analyzed                        |
|--|--------|------|------|----------|------------------|--------------------------------------|
| <b>29B SALTS (EC, ESP, SAR)<br/>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          | <b>LDNR 29-B</b> | Analyst: <b>JMI</b>                  |
| Electrical Conductivity  | 0.63   | 0.10 |      | mmhos/cm | 1                | 12/10/2021 11:05:00 AM               |
| <b>29B SALTS (EC, ESP, SAR)<br/>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>BXB</b> |
| Exchangeable Sodium %  | 1.09   | 0.10 |      | %        | 1                | 12/17/2021                           |
| <b>29B SALTS (EC, ESP, SAR)<br/>SODIUM ADSORPTION RATIO</b>              |        |      |      |          | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> Analyst: <b>STS</b> |
| Sodium Adsorption Ratio  | 2.18   | 0.10 |      |          | 1                | 12/10/2021                           |
| Soluble Calcium  | 2.33   | 0.02 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Magnesium  | 1.32   | 0.05 |      | meq/L    | 1                | 12/10/2021                           |
| Soluble Sodium   | 2.94   | 0.25 |      | meq/L    | 1                | 12/10/2021                           |

**Qualifiers:**

|   |   |     |   |
|---|---|-----|---|
| B | Analyte detected in the associated Method Blank | H   | Holding times for preparation or analysis exceeded                    |
| M | Matrix Interference                             | ND  | Not Detected at the Reporting Limit                                   |
| R | RPD outside accepted recovery limits            | RL  | Reporting Limit   |
| S | Spike Recovery outside accepted recovery limits | SDL | Sample detection limit  |
| U | Analyte not detected                            | W   | Sample container temperature is out of limit as specified at testcode |



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# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 11:10:00 AM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-004 **Matrix:** SOIL  
**Client Sample ID** SE-SB 36 18-20

| Analyses                                    | Result | RL   | Qual | Units    | DF | Date Analyzed          |
|---|--------|------|------|----------|----|------------------------|
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    |                        |
| <b>ELECTRICAL CONDUCTIVITY @ SATURATION</b> |        |      |      |          |    | Analyst: JMI           |
| Electrical Conductivity                     | 0.80   | 0.10 |      | mmhos/cm | 1  | 12/10/2021 11:05:00 AM |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    |                        |
| <b>EXCHANGEABLE SODIUM PERCENTAGE</b>       |        |      |      |          |    | Analyst: BXB           |
| Exchangeable Sodium %                       | 1.59   | 0.10 |      | %        | 1  | 12/17/2021             |
| <b>29B SALTS (EC, ESP, SAR)</b>             |        |      |      |          |    |                        |
| <b>SODIUM ADSORPTION RATIO</b>              |        |      |      |          |    | Analyst: STS           |
| Sodium Adsorption Ratio                     | 2.43   | 0.10 |      |          | 1  | 12/10/2021             |
| Soluble Calcium                             | 2.87   | 0.02 |      | meq/L    | 1  | 12/10/2021             |
| Soluble Magnesium                           | 1.80   | 0.05 |      | meq/L    | 1  | 12/10/2021             |
| Soluble Sodium                              | 3.72   | 0.25 |      | meq/L    | 1  | 12/10/2021             |

|                    |   |   |     |   |
|--------------------|---|---|-----|---|
| <b>Qualifiers:</b> | B | Analyte detected in the associated Method Blank | H   | Holding times for preparation or analysis exceeded                    |
|                    | M | Matrix Interference                             | ND  | Not Detected at the Reporting Limit                                   |
|                    | R | RPD outside accepted recovery limits            | RL  | Reporting Limit   |
|                    | S | Spike Recovery outside accepted recovery limits | SDL | Sample detection limit  |
|                    | U | Analyte not detected                            | W   | Sample container temperature is out of limit as specified at testcode |



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# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 12:45:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-005 **Matrix:** GROUNDWATER  
**Client Sample ID** SE-SB 36

| Analyses                                     | Result    | RL         | Qual | Units          | DF            | Date Analyzed          |
|--|-----------|------------|------|----------------|---------------|------------------------|
| <b>SPECIFIC CONDUCTANCE AT 25°C</b>          |           |            |      | <b>E120.1</b>  |               | Analyst: <b>HXW</b>    |
| Specific Conductance                         | 1,220     | 10.0       |      | µmhos/cm       | 1             | 11/23/2021 10:18:00 AM |
| <b>TPH-D/O IN WATER BY SW8015</b>            |           |            |      | <b>SW8015B</b> | <b>SW3511</b> | Analyst: <b>CRM</b>    |
| <b>TPH DRO/ORO IN WATER BY SW8015</b>        |           |            |      |                |               |                        |
| TPH (Diesel Range)                           | < 0.138   | 0.138      |      | mg/L           | 1             | 12/9/2021 1:52:00 AM   |
| TPH (Oil Range)                              | < 0.118   | 0.118      |      | mg/L           | 1             | 12/9/2021 1:52:00 AM   |
| Surr: 4-Terphenyl-d14                        | 97.7      | 51.4 - 146 |      | %Rec           | 1             | 12/9/2021 1:52:00 AM   |
| <b>MERCURY IN GROUND WATER,TOTAL</b>         |           |            |      | <b>SW7470A</b> |               | Analyst: <b>BXB</b>    |
| Mercury                                      | 0.00224   | 0.000200   |      | mg/L           | 1             | 11/30/2021 8:15:57 AM  |
| <b>INORGANIC ANIONS IN WATER BY IC</b>       |           |            |      | <b>SW9056A</b> |               | Analyst: <b>SGP</b>    |
| Chloride                                     | 49.1      | 5.00       |      | mg/L           | 20            | 11/22/2021 12:36:38 PM |
| <b>METALS IN WATER BY ICP, TOTALS</b>        |           |            |      | <b>SW6010B</b> |               | Analyst: <b>STS</b>    |
| Arsenic                                      | 0.0152    | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Barium                                       | 0.149     | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Cadmium                                      | < 0.00500 | 0.00500    |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Chromium                                     | 0.0231    | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Iron   | 20.2      | 0.0500     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Lead   | < 0.0100  | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Manganese                                    | 0.857     | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Sodium                                       | 93.3      | 10.0       |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Strontium                                    | 0.563     | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| Zinc   | 0.0493    | 0.0100     |      | mg/L           | 1             | 11/24/2021 2:08:37 PM  |
| <b>TOTAL DISSOLVED SOLIDS</b>                |           |            |      | <b>SM2540C</b> |               | Analyst: <b>GMS</b>    |
| Total Dissolved Solids (Residue, Filterable) | 670       | 10.0       |      | mg/L           | 1             | 11/24/2021 8:42:00 AM  |

|                    |   |   |
|--------------------|---|---|
| <b>Qualifiers:</b> | B Analyte detected in the associated Method Blank | H Holding times for preparation or analysis exceeded                    |
|                    | M Matrix Interference                             | ND Not Detected at the Reporting Limit                                  |
|                    | R RPD outside accepted recovery limits            | RL Reporting Limit  |
|                    | S Spike Recovery outside accepted recovery limits | SDL Sample detection limit  |
|                    | U Analyte not detected                            | W Sample container temperature is out of limit as specified at testcode |



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# Analytical Report

(consolidated)

WO#: 21111099

Date Reported: 12/17/2021

**CLIENT:** Southland Environmental **Collection Date:** 11/18/2021 1:45:00 PM  
**Project:** Drew Estate "15"/11397  
**Lab ID:** 21111099-006 **Matrix:** GROUNDWATER  
**Client Sample ID** SE-SB 35

| Analyses                                     | Result    | RL         | Qual | Units          | DF | Date Analyzed          |
|--|-----------|------------|------|----------------|----|------------------------|
| <b>SPECIFIC CONDUCTANCE AT 25°C</b>          |           |            |      |                |    |                        |
|  |           |            |      | <b>E120.1</b>  |    | Analyst: <b>HXW</b>    |
| Specific Conductance                         | 1,150     | 10.0       |      | µmhos/cm       | 1  | 11/23/2021 10:18:00 AM |
| <b>TPH-D/O IN WATER BY SW8015</b>            |           |            |      |                |    |                        |
| <b>TPH DRO/ORO IN WATER BY SW8015</b>        |           |            |      |                |    |                        |
| TPH (Diesel Range)                           | < 0.143   | 0.143      |      | mg/L           | 1  | 12/9/2021 2:21:00 AM   |
| TPH (Oil Range)                              | < 0.123   | 0.123      |      | mg/L           | 1  | 12/9/2021 2:21:00 AM   |
| Surr: 4-Terphenyl-d14                        | 99.1      | 51.4 - 146 |      | %Rec           | 1  | 12/9/2021 2:21:00 AM   |
| <b>MERCURY IN GROUND WATER,TOTAL</b>         |           |            |      |                |    |                        |
|  |           |            |      | <b>SW7470A</b> |    | Analyst: <b>BXB</b>    |
| Mercury                                      | 0.00140   | 0.000200   |      | mg/L           | 1  | 11/30/2021 8:18:50 AM  |
| <b>INORGANIC ANIONS IN WATER BY IC</b>       |           |            |      |                |    |                        |
|  |           |            |      | <b>SW9056A</b> |    | Analyst: <b>SGP</b>    |
| Chloride                                     | 84.1      | 5.00       |      | mg/L           | 20 | 11/22/2021 12:50:26 PM |
| <b>METALS IN WATER BY ICP, TOTALS</b>        |           |            |      |                |    |                        |
|  |           |            |      | <b>SW6010B</b> |    | Analyst: <b>STS</b>    |
| Arsenic                                      | < 0.0100  | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Barium                                       | 0.0599    | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Cadmium                                      | < 0.00500 | 0.00500    |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Chromium                                     | < 0.0100  | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Iron   | 0.138     | 0.0500     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Lead   | < 0.0100  | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Manganese                                    | 0.0779    | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Sodium                                       | 84.7      | 10.0       |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Strontium                                    | 0.555     | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| Zinc   | < 0.0100  | 0.0100     |      | mg/L           | 1  | 11/24/2021 2:10:55 PM  |
| <b>TOTAL DISSOLVED SOLIDS</b>                |           |            |      |                |    |                        |
|  |           |            |      | <b>SM2540C</b> |    | Analyst: <b>GMS</b>    |
| Total Dissolved Solids (Residue, Filterable) | 656       | 10.0       |      | mg/L           | 1  | 11/24/2021 8:42:00 AM  |

|                    |   |   |
|--------------------|---|---|
| <b>Qualifiers:</b> | B Analyte detected in the associated Method Blank | H Holding times for preparation or analysis exceeded                    |
|                    | M Matrix Interference                             | ND Not Detected at the Reporting Limit                                  |
|                    | R RPD outside accepted recovery limits            | RL Reporting Limit  |
|                    | S Spike Recovery outside accepted recovery limits | SDL Sample detection limit  |
|                    | U Analyte not detected                            | W Sample container temperature is out of limit as specified at testcode |





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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41727

|            |                   |                        |  |             |                                 |                              |           |                       |                      |          |      |
|------------|-------------------|------------------------|--|-------------|---------------------------------|------------------------------|-----------|-----------------------|----------------------|----------|------|
| Sample ID  | <b>LCS-D41727</b> | SampType: <b>LCS</b>   | TestCode: <b>8015_DO_W_</b> Units: <b>mg/L</b> |             |                                 | Prep Date: <b>11/22/2021</b> |           |                       | RunNo: <b>104969</b> |          |      |
| Client ID: | <b>LCSW</b>       | Batch ID: <b>41727</b> | TestNo: <b>SW8015B SW3511</b>                  |             | Analysis Date: <b>12/8/2021</b> |                              |           | SeqNo: <b>2567046</b> |                      |          |      |
| Analyte    | Result            | PQL                    | SPK value                                      | SPK Ref Val | %REC                            | LowLimit                     | HighLimit | RPD Ref Val           | %RPD                 | RPDLimit | Qual |

|                       |        |       |         |   |     |      |     |  |  |  |  |
|-----------------------|--------|-------|---------|---|-----|------|-----|--|--|--|--|
| TPH (Diesel Range)    | 2.30   | 0.136 | 1.792   | 0 | 128 | 70   | 130 |  |  |  |  |
| Surr: 4-Terphenyl-d14 | 0.0667 |       | 0.05972 |   | 112 | 51.4 | 146 |  |  |  |  |

|            |                    |                        |  |             |                                 |                              |           |                       |                      |          |      |
|------------|--------------------|------------------------|--|-------------|---------------------------------|------------------------------|-----------|-----------------------|----------------------|----------|------|
| Sample ID  | <b>LCSD-D41727</b> | SampType: <b>LCSD</b>  | TestCode: <b>8015_DO_W_</b> Units: <b>mg/L</b> |             |                                 | Prep Date: <b>11/22/2021</b> |           |                       | RunNo: <b>104969</b> |          |      |
| Client ID: | <b>LCSS02</b>      | Batch ID: <b>41727</b> | TestNo: <b>SW8015B SW3511</b>                  |             | Analysis Date: <b>12/8/2021</b> |                              |           | SeqNo: <b>2567047</b> |                      |          |      |
| Analyte    | Result             | PQL                    | SPK value                                      | SPK Ref Val | %REC                            | LowLimit                     | HighLimit | RPD Ref Val           | %RPD                 | RPDLimit | Qual |

|                       |        |       |         |   |     |      |     |       |      |      |  |
|-----------------------|--------|-------|---------|---|-----|------|-----|-------|------|------|--|
| TPH (Diesel Range)    | 2.21   | 0.135 | 1.782   | 0 | 124 | 70   | 130 | 2.301 | 4.12 | 14.1 |  |
| Surr: 4-Terphenyl-d14 | 0.0616 |       | 0.05940 |   | 104 | 51.4 | 146 |       | 0    | 40   |  |

|            |                    |                        |  |             |                                 |                              |           |                       |                      |          |      |
|------------|--------------------|------------------------|--|-------------|---------------------------------|------------------------------|-----------|-----------------------|----------------------|----------|------|
| Sample ID  | <b>LCSD-M41727</b> | SampType: <b>LCSD</b>  | TestCode: <b>8015_DO_W_</b> Units: <b>mg/L</b> |             |                                 | Prep Date: <b>11/22/2021</b> |           |                       | RunNo: <b>104969</b> |          |      |
| Client ID: | <b>LCSS02</b>      | Batch ID: <b>41727</b> | TestNo: <b>SW8015B SW3511</b>                  |             | Analysis Date: <b>12/8/2021</b> |                              |           | SeqNo: <b>2567048</b> |                      |          |      |
| Analyte    | Result             | PQL                    | SPK value                                      | SPK Ref Val | %REC                            | LowLimit                     | HighLimit | RPD Ref Val           | %RPD                 | RPDLimit | Qual |

|                       |        |       |         |   |     |      |     |       |      |      |   |
|-----------------------|--------|-------|---------|---|-----|------|-----|-------|------|------|---|
| TPH (Oil Range)       | 1.88   | 0.124 | 1.777   | 0 | 106 | 70   | 130 | 1.277 | 38.0 | 23.2 | R |
| Surr: 4-Terphenyl-d14 | 0.0626 |       | 0.05924 |   | 106 | 51.4 | 146 |       | 0    | 40   |   |

**NOTES:**  
 R - LCS/LCSD RPD above the control limit. Recovery of the analyte was within the acceptance limits in both LCS/LCSD. Due to hold time limitations, any associated sample with a positive detection could not be re-extracted with additional QC.

|                    |   |  |                        |
|--------------------|---|--|------------------------|
| <b>Qualifiers:</b> | B Analyte detected in the associated Method Blank                       | H Holding times for preparation or analysis exceeded | M Matrix Interference  |
|                    | ND Not Detected at the Reporting Limit                                  | R RPD outside accepted recovery limits               | RL Reporting Limit     |
|                    | S Spike Recovery outside accepted recovery limits                       | SDL Sample detection limit                           | U Analyte not detected |
|                    | W Sample container temperature is out of limit as specified at testcode |  |                        |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41727

| Sample ID <b>MB-41727</b> | SampType: <b>MBLK</b>  | TestCode: <b>8015_DO_W_</b> Units: <b>mg/L</b> |           |                                 |      | Prep Date: <b>11/22/2021</b> |                       |             | RunNo: <b>104969</b> |          |      |
|---------------------------|------------------------|--|-----------|---------------------------------|------|------------------------------|-----------------------|-------------|----------------------|----------|------|
| Client ID: <b>PBW</b>     | Batch ID: <b>41727</b> | TestNo: <b>SW8015B SW3511</b>                  |           | Analysis Date: <b>12/8/2021</b> |      |                              | SeqNo: <b>2567050</b> |             |                      |          |      |
| Analyte                   | Result                 | PQL  | SPK value | SPK Ref Val                     | %REC | LowLimit                     | HighLimit             | RPD Ref Val | %RPD                 | RPDLimit | Qual |
| TPH (Diesel Range)        | < 0.136                | 0.136  |           |                                 |      |                              |                       |             |                      |          |      |
| TPH (Oil Range)           | < 0.126                | 0.126  |           |                                 |      |                              |                       |             |                      |          |      |
| Surr: 4-Terphenyl-d14     | 0.0396                 |  | 0.05979   |                                 | 66.2 | 51.4                         | 146                   |             |                      |          |      |

| Sample ID <b>LCS-M41727</b> | SampType: <b>LCS</b>   | TestCode: <b>8015_DO_W_</b> Units: <b>mg/L</b> |           |                                  |      | Prep Date: <b>11/22/2021</b> |                       |             | RunNo: <b>104969</b> |          |      |
|-----------------------------|------------------------|--|-----------|----------------------------------|------|------------------------------|-----------------------|-------------|----------------------|----------|------|
| Client ID: <b>LCSW</b>      | Batch ID: <b>41727</b> | TestNo: <b>SW8015B SW3511</b>                  |           | Analysis Date: <b>12/10/2021</b> |      |                              | SeqNo: <b>2568542</b> |             |                      |          |      |
| Analyte                     | Result                 | PQL  | SPK value | SPK Ref Val                      | %REC | LowLimit                     | HighLimit             | RPD Ref Val | %RPD                 | RPDLimit | Qual |
| TPH (Oil Range)             | 1.28                   | 0.124  | 1.778     | 0                                | 71.8 | 70                           | 130                   |             |                      |          |      |
| Surr: 4-Terphenyl-d14       | 0.0421                 |  | 0.05926   |                                  | 71.1 | 51.4                         | 146                   |             |                      |          |      |

**Qualifiers:**

- |    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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 Website: [www.element.com](http://www.element.com)

# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41747

|            |                 |           |              |             |                |          |             |                |                   |          |                |
|------------|-----------------|-----------|--------------|-------------|----------------|----------|-------------|----------------|-------------------|----------|----------------|
| Sample ID  | <b>MB-41747</b> | SampType: | <b>MBLK</b>  | TestCode:   | <b>6010_W</b>  | Units:   | <b>mg/L</b> | Prep Date:     | <b>11/23/2021</b> | RunNo:   | <b>104599</b>  |
| Client ID: | <b>PBW</b>      | Batch ID: | <b>41747</b> | TestNo:     | <b>SW6010B</b> |          |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:   | <b>2557873</b> |
| Analyte    | Result          | PQL       | SPK value    | SPK Ref Val | %REC           | LowLimit | HighLimit   | RPD Ref Val    | %RPD              | RPDLimit | Qual           |
| Arsenic    | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Barium     | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Cadmium    | < 0.00500       | 0.00500   |              |             |                |          |             |                |                   |          |                |
| Chromium   | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Iron       | < 0.0500        | 0.0500    |              |             |                |          |             |                |                   |          |                |
| Lead       | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Manganese  | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Sodium     | < 10.0          | 10.0      |              |             |                |          |             |                |                   |          |                |
| Strontium  | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |
| Zinc       | < 0.0100        | 0.0100    |              |             |                |          |             |                |                   |          |                |

|            |                  |           |              |             |                |          |             |                |                   |          |                |
|------------|------------------|-----------|--------------|-------------|----------------|----------|-------------|----------------|-------------------|----------|----------------|
| Sample ID  | <b>LCS-41747</b> | SampType: | <b>LCS</b>   | TestCode:   | <b>6010_W</b>  | Units:   | <b>mg/L</b> | Prep Date:     | <b>11/23/2021</b> | RunNo:   | <b>104599</b>  |
| Client ID: | <b>LCSW</b>      | Batch ID: | <b>41747</b> | TestNo:     | <b>SW6010B</b> |          |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:   | <b>2557874</b> |
| Analyte    | Result           | PQL       | SPK value    | SPK Ref Val | %REC           | LowLimit | HighLimit   | RPD Ref Val    | %RPD              | RPDLimit | Qual           |
| Arsenic    | 0.473            | 0.0100    | 0.5000       | 0           | 94.7           | 80       | 120         |                |                   |          |                |
| Barium     | 0.471            | 0.0100    | 0.5000       | 0           | 94.2           | 80       | 120         |                |                   |          |                |
| Cadmium    | 0.467            | 0.00500   | 0.5000       | 0           | 93.3           | 80       | 120         |                |                   |          |                |
| Chromium   | 0.471            | 0.0100    | 0.5000       | 0           | 94.2           | 80       | 120         |                |                   |          |                |
| Iron       | 0.475            | 0.0500    | 0.5000       | 0           | 95.0           | 80       | 120         |                |                   |          |                |
| Lead       | 0.457            | 0.0100    | 0.5000       | 0           | 91.5           | 80       | 120         |                |                   |          |                |
| Manganese  | 0.470            | 0.0100    | 0.5000       | 0           | 94.0           | 80       | 120         |                |                   |          |                |
| Sodium     | 46.2             | 10.0      | 50.00        | 0           | 92.4           | 80       | 120         |                |                   |          |                |
| Strontium  | 0.467            | 0.0100    | 0.5000       | 0           | 93.4           | 80       | 120         |                |                   |          |                |
| Zinc       | 0.454            | 0.0100    | 0.5000       | 0           | 90.7           | 80       | 120         |                |                   |          |                |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41747

|            |                  |           |              |           |                |             |             |                |                   |           |                |      |          |      |
|------------|------------------|-----------|--------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>LCS-41747</b> | SampType: | <b>LCS</b>   | TestCode: | <b>6010_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     | <b>11/23/2021</b> | RunNo:    | <b>104599</b>  |      |          |      |
| Client ID: | <b>LCSW</b>      | Batch ID: | <b>41747</b> | TestNo:   | <b>SW6010B</b> |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2557874</b> |      |          |      |
| Analyte    |                  | Result    |              | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

|            |                   |           |              |           |                |             |             |                |                   |           |                |       |          |      |
|------------|-------------------|-----------|--------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|-------|----------|------|
| Sample ID  | <b>LCSD-41747</b> | SampType: | <b>LCSD</b>  | TestCode: | <b>6010_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     | <b>11/23/2021</b> | RunNo:    | <b>104599</b>  |       |          |      |
| Client ID: | <b>LCSS02</b>     | Batch ID: | <b>41747</b> | TestNo:   | <b>SW6010B</b> |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2557875</b> |       |          |      |
| Analyte    |                   | Result    |              | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD  | RPDLimit | Qual |
| Arsenic    |                   | 0.469     |              | 0.0100    | 0.5000         | 0           |             | 93.8           | 80                | 120       | 0.4734         | 0.938 | 20       |      |
| Barium     |                   | 0.472     |              | 0.0100    | 0.5000         | 0           |             | 94.4           | 80                | 120       | 0.4708         | 0.257 | 20       |      |
| Cadmium    |                   | 0.469     |              | 0.00500   | 0.5000         | 0           |             | 93.8           | 80                | 120       | 0.4667         | 0.532 | 20       |      |
| Chromium   |                   | 0.474     |              | 0.0100    | 0.5000         | 0           |             | 94.9           | 80                | 120       | 0.4708         | 0.777 | 20       |      |
| Iron       |                   | 0.489     |              | 0.0500    | 0.5000         | 0           |             | 97.8           | 80                | 120       | 0.4752         | 2.91  | 20       |      |
| Lead       |                   | 0.463     |              | 0.0100    | 0.5000         | 0           |             | 92.6           | 80                | 120       | 0.4574         | 1.27  | 20       |      |
| Manganese  |                   | 0.472     |              | 0.0100    | 0.5000         | 0           |             | 94.4           | 80                | 120       | 0.4700         | 0.458 | 20       |      |
| Sodium     |                   | 43.0      |              | 10.0      | 50.00          | 0           |             | 86.1           | 80                | 120       | 46.19          | 7.05  | 20       |      |
| Strontium  |                   | 0.470     |              | 0.0100    | 0.5000         | 0           |             | 94.0           | 80                | 120       | 0.4668         | 0.641 | 20       |      |
| Zinc       |                   | 0.456     |              | 0.0100    | 0.5000         | 0           |             | 91.1           | 80                | 120       | 0.4537         | 0.429 | 20       |      |

|            |                        |           |              |           |                |             |             |                |                   |           |                |      |          |      |
|------------|------------------------|-----------|--------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>21110916-020EMS</b> | SampType: | <b>MS</b>    | TestCode: | <b>6010_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     | <b>11/23/2021</b> | RunNo:    | <b>104599</b>  |      |          |      |
| Client ID: | <b>ZZZZZZ</b>          | Batch ID: | <b>41747</b> | TestNo:   | <b>SW6010B</b> |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2557877</b> |      |          |      |
| Analyte    |                        | Result    |              | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| Arsenic    |                        | 0.474     |              | 0.0100    | 0.5000         | 0           |             | 94.8           | 75                | 125       |                |      |          |      |
| Barium     |                        | 0.476     |              | 0.0100    | 0.5000         | 0           |             | 95.2           | 75                | 125       |                |      |          |      |
| Cadmium    |                        | 0.470     |              | 0.00500   | 0.5000         | 0           |             | 94.0           | 75                | 125       |                |      |          |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41747

| Sample ID  | <b>21110916-020EMS</b> | SampType: <b>MS</b>    | TestCode: <b>6010_W</b> | Units: <b>mg/L</b>               | Prep Date: <b>11/23/2021</b> | RunNo: <b>104599</b> |           |             |      |          |      |
|------------|------------------------|------------------------|-------------------------|----------------------------------|------------------------------|----------------------|-----------|-------------|------|----------|------|
| Client ID: | <b>ZZZZZZ</b>          | Batch ID: <b>41747</b> | TestNo: <b>SW6010B</b>  | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557877</b>        |                      |           |             |      |          |      |
| Analyte    | Result                 | PQL                    | SPK value               | SPK Ref Val                      | %REC                         | LowLimit             | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Chromium   | 0.476                  | 0.0100                 | 0.5000                  | 0                                | 95.2                         | 75                   | 125       |             |      |          |      |
| Iron       | 0.528                  | 0.0500                 | 0.5000                  | 0                                | 106                          | 75                   | 125       |             |      |          |      |
| Lead       | 0.462                  | 0.0100                 | 0.5000                  | 0                                | 92.4                         | 75                   | 125       |             |      |          |      |
| Manganese  | 0.472                  | 0.0100                 | 0.5000                  | 0                                | 94.4                         | 75                   | 125       |             |      |          |      |
| Sodium     | 47.1                   | 10.0                   | 50.00                   | 0                                | 94.1                         | 75                   | 125       |             |      |          |      |
| Strontium  | 0.471                  | 0.0100                 | 0.5000                  | 0                                | 94.3                         | 75                   | 125       |             |      |          |      |
| Zinc       | 0.486                  | 0.0100                 | 0.5000                  | 0.02565                          | 92.0                         | 75                   | 125       |             |      |          |      |

| Sample ID  | <b>21110916-020EMSD</b> | SampType: <b>MSD</b>   | TestCode: <b>6010_W</b> | Units: <b>mg/L</b>               | Prep Date: <b>11/23/2021</b> | RunNo: <b>104599</b> |           |             |       |          |      |
|------------|-------------------------|------------------------|-------------------------|----------------------------------|------------------------------|----------------------|-----------|-------------|-------|----------|------|
| Client ID: | <b>ZZZZZZ</b>           | Batch ID: <b>41747</b> | TestNo: <b>SW6010B</b>  | Analysis Date: <b>11/24/2021</b> | SeqNo: <b>2557878</b>        |                      |           |             |       |          |      |
| Analyte    | Result                  | PQL                    | SPK value               | SPK Ref Val                      | %REC                         | LowLimit             | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Arsenic    | 0.472                   | 0.0100                 | 0.5000                  | 0                                | 94.4                         | 75                   | 125       | 0.4738      | 0.372 | 20       |      |
| Barium     | 0.464                   | 0.0100                 | 0.5000                  | 0                                | 92.8                         | 75                   | 125       | 0.4758      | 2.57  | 20       |      |
| Cadmium    | 0.462                   | 0.00500                | 0.5000                  | 0                                | 92.4                         | 75                   | 125       | 0.4700      | 1.75  | 20       |      |
| Chromium   | 0.466                   | 0.0100                 | 0.5000                  | 0                                | 93.2                         | 75                   | 125       | 0.4759      | 2.09  | 20       |      |
| Iron       | 0.486                   | 0.0500                 | 0.5000                  | 0                                | 97.1                         | 75                   | 125       | 0.5279      | 8.34  | 20       |      |
| Lead       | 0.454                   | 0.0100                 | 0.5000                  | 0                                | 90.9                         | 75                   | 125       | 0.4622      | 1.71  | 20       |      |
| Manganese  | 0.463                   | 0.0100                 | 0.5000                  | 0                                | 92.7                         | 75                   | 125       | 0.4718      | 1.80  | 20       |      |
| Sodium     | 49.8                    | 10.0                   | 50.00                   | 0                                | 99.7                         | 75                   | 125       | 47.06       | 5.70  | 20       |      |
| Strontium  | 0.461                   | 0.0100                 | 0.5000                  | 0                                | 92.1                         | 75                   | 125       | 0.4714      | 2.29  | 20       |      |
| Zinc       | 0.476                   | 0.0100                 | 0.5000                  | 0.02565                          | 90.1                         | 75                   | 125       | 0.4858      | 1.96  | 20       |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41765

|            |                 |            |              |           |                  |           |             |                |                   |        |                |           |             |      |          |      |
|------------|-----------------|------------|--------------|-----------|------------------|-----------|-------------|----------------|-------------------|--------|----------------|-----------|-------------|------|----------|------|
| Sample ID  | <b>MB-41765</b> | SampType:  | <b>MBLK</b>  | TestCode: | <b>HG_W_7470</b> | Units:    | <b>mg/L</b> | Prep Date:     | <b>11/24/2021</b> | RunNo: | <b>104697</b>  |           |             |      |          |      |
| Client ID: | <b>PBW</b>      | Batch ID:  | <b>41765</b> | TestNo:   | <b>SW7470A</b>   |           |             | Analysis Date: | <b>11/30/2021</b> | SeqNo: | <b>2559961</b> |           |             |      |          |      |
| Analyte    |                 | Result     |              | PQL       |                  | SPK value |             | SPK Ref Val    |                   | %REC   | LowLimit       | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury    |                 | < 0.000200 |              | 0.000200  |                  |           |             |                |                   |        |                |           |             |      |          |      |

|            |                        |           |              |           |                  |           |             |                |                   |        |                |           |             |      |          |      |
|------------|------------------------|-----------|--------------|-----------|------------------|-----------|-------------|----------------|-------------------|--------|----------------|-----------|-------------|------|----------|------|
| Sample ID  | <b>21111099-006CMS</b> | SampType: | <b>MS</b>    | TestCode: | <b>HG_W_7470</b> | Units:    | <b>mg/L</b> | Prep Date:     | <b>11/24/2021</b> | RunNo: | <b>104697</b>  |           |             |      |          |      |
| Client ID: | <b>SE-SB 35</b>        | Batch ID: | <b>41765</b> | TestNo:   | <b>SW7470A</b>   |           |             | Analysis Date: | <b>11/30/2021</b> | SeqNo: | <b>2559972</b> |           |             |      |          |      |
| Analyte    |                        | Result    |              | PQL       |                  | SPK value |             | SPK Ref Val    |                   | %REC   | LowLimit       | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury    |                        | 0.0104    |              | 0.000200  |                  | 0.01000   |             | 0.001399       |                   | 89.9   | 75             | 125       |             |      |          |      |

|            |                         |           |              |           |                  |           |             |                |                   |        |                |           |             |      |          |      |
|------------|-------------------------|-----------|--------------|-----------|------------------|-----------|-------------|----------------|-------------------|--------|----------------|-----------|-------------|------|----------|------|
| Sample ID  | <b>21111099-006CMSD</b> | SampType: | <b>MSD</b>   | TestCode: | <b>HG_W_7470</b> | Units:    | <b>mg/L</b> | Prep Date:     | <b>11/24/2021</b> | RunNo: | <b>104697</b>  |           |             |      |          |      |
| Client ID: | <b>SE-SB 35</b>         | Batch ID: | <b>41765</b> | TestNo:   | <b>SW7470A</b>   |           |             | Analysis Date: | <b>11/30/2021</b> | SeqNo: | <b>2559973</b> |           |             |      |          |      |
| Analyte    |                         | Result    |              | PQL       |                  | SPK value |             | SPK Ref Val    |                   | %REC   | LowLimit       | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury    |                         | 0.0107    |              | 0.000200  |                  | 0.01000   |             | 0.001399       |                   | 93.5   | 75             | 125       | 0.01039     | 3.39 | 20       |      |

|            |                  |           |              |           |                  |           |             |                |                   |        |                |           |             |      |          |      |
|------------|------------------|-----------|--------------|-----------|------------------|-----------|-------------|----------------|-------------------|--------|----------------|-----------|-------------|------|----------|------|
| Sample ID  | <b>LCS-41765</b> | SampType: | <b>LCS</b>   | TestCode: | <b>HG_W_7470</b> | Units:    | <b>mg/L</b> | Prep Date:     | <b>11/24/2021</b> | RunNo: | <b>104697</b>  |           |             |      |          |      |
| Client ID: | <b>LCSW</b>      | Batch ID: | <b>41765</b> | TestNo:   | <b>SW7470A</b>   |           |             | Analysis Date: | <b>11/30/2021</b> | SeqNo: | <b>2559984</b> |           |             |      |          |      |
| Analyte    |                  | Result    |              | PQL       |                  | SPK value |             | SPK Ref Val    |                   | %REC   | LowLimit       | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury    |                  | 0.0108    |              | 0.000200  |                  | 0.01000   |             | 0              |                   | 108    | 80             | 120       |             |      |          |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41765

|            |                   |           |              |           |                  |           |             |                |                   |        |                |          |  |           |  |             |  |      |  |          |  |      |
|------------|-------------------|-----------|--------------|-----------|------------------|-----------|-------------|----------------|-------------------|--------|----------------|----------|--|-----------|--|-------------|--|------|--|----------|--|------|
| Sample ID  | <b>LCSD-41765</b> | SampType: | <b>LCSD</b>  | TestCode: | <b>HG_W_7470</b> | Units:    | <b>mg/L</b> | Prep Date:     | <b>11/24/2021</b> | RunNo: | <b>104697</b>  |          |  |           |  |             |  |      |  |          |  |      |
| Client ID: | <b>LCSS02</b>     | Batch ID: | <b>41765</b> | TestNo:   | <b>SW7470A</b>   |           |             | Analysis Date: | <b>11/30/2021</b> | SeqNo: | <b>2559985</b> |          |  |           |  |             |  |      |  |          |  |      |
| Analyte    |                   | Result    |              | PQL       |                  | SPK value |             | SPK Ref Val    |                   | %REC   |                | LowLimit |  | HighLimit |  | RPD Ref Val |  | %RPD |  | RPDLimit |  | Qual |
| Mercury    |                   | 0.0105    |              | 0.000200  |                  | 0.01000   |             | 0              |                   | 105    |                | 80       |  | 120       |  | 0.01083     |  | 2.82 |  | 20       |  |      |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode

- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- SDL Sample detection limit

- M Matrix Interference
- RL Reporting Limit
- U Analyte not detected



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 41934

|                         |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-------------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID               | <b>21111079-015ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>SAR_S</b>     | Units:           |      | Prep Date:     | <b>12/10/2021</b> | RunNo:      | <b>105021</b>  |          |      |
| Client ID:              | <b>ZZZZZZ</b>           | Batch ID: | <b>41934</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/10/2021</b> | SeqNo:      | <b>2569472</b> |          |      |
| Analyte                 |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Sodium Adsorption Ratio |                         | 5.84      |              | 0.10      |                  |                  |      |                |                   | 5.65        | 3.35           | 20       |      |
| Soluble Calcium         |                         | 14.5      |              | 0.02      |                  |                  |      |                |                   | 14.31       | 1.65           | 20       |      |
| Soluble Magnesium       |                         | 7.34      |              | 0.05      |                  |                  |      |                |                   | 7.23        | 1.52           | 20       |      |
| Soluble Sodium          |                         | 19.3      |              | 0.25      |                  |                  |      |                |                   | 18.53       | 4.15           | 20       |      |

**Qualifiers:**

- |    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |





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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** 42011

|                       |                         |           |              |           |                  |                  |      |                |                   |             |                |          |      |
|-----------------------|-------------------------|-----------|--------------|-----------|------------------|------------------|------|----------------|-------------------|-------------|----------------|----------|------|
| Sample ID             | <b>21111263-003ADUP</b> | SampType: | <b>DUP</b>   | TestCode: | <b>ESP_S</b>     | Units:           | %    | Prep Date:     | <b>12/16/2021</b> | RunNo:      | <b>105207</b>  |          |      |
| Client ID:            | <b>ZZZZZZ</b>           | Batch ID: | <b>42011</b> | TestNo:   | <b>LDNR 29-B</b> | <b>LDNR 29-B</b> |      | Analysis Date: | <b>12/17/2021</b> | SeqNo:      | <b>2574514</b> |          |      |
| Analyte               |                         | Result    |              | PQL       | SPK value        | SPK Ref Val      | %REC | LowLimit       | HighLimit         | RPD Ref Val | %RPD           | RPDLimit | Qual |
| Exchangeable Sodium % |                         | 0.25      |              | 0.10      |                  |                  |      |                |                   | 0.26        | 3.92           | 20       |      |

**Qualifiers:**

- |    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104528

|            |             |           |                |           |                |             |             |                |                   |           |                |      |          |      |
|------------|-------------|-----------|----------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>mblk</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>9056_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104528</b>  |      |          |      |
| Client ID: | <b>PBW</b>  | Batch ID: | <b>R104528</b> | TestNo:   | <b>SW9056A</b> |             |             | Analysis Date: | <b>11/22/2021</b> | SeqNo:    | <b>2556011</b> |      |          |      |
| Analyte    |             | Result    |                | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| Chloride   |             | < 0.250   |                | 0.250     |                |             |             |                |                   |           |                |      |          |      |

|            |             |           |                |           |                |             |             |                |                   |           |                |      |          |      |
|------------|-------------|-----------|----------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>lcs</b>  | SampType: | <b>LCS</b>     | TestCode: | <b>9056_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104528</b>  |      |          |      |
| Client ID: | <b>LCSW</b> | Batch ID: | <b>R104528</b> | TestNo:   | <b>SW9056A</b> |             |             | Analysis Date: | <b>11/22/2021</b> | SeqNo:    | <b>2556012</b> |      |          |      |
| Analyte    |             | Result    |                | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| Chloride   |             | 10.9      |                | 0.250     | 10.00          | 0           |             | 109            | 80                | 120       |                |      |          |      |

|            |               |           |                |           |                |             |             |                |                   |           |                |       |          |      |
|------------|---------------|-----------|----------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|-------|----------|------|
| Sample ID  | <b>lcsd</b>   | SampType: | <b>LCSD</b>    | TestCode: | <b>9056_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104528</b>  |       |          |      |
| Client ID: | <b>LCSS02</b> | Batch ID: | <b>R104528</b> | TestNo:   | <b>SW9056A</b> |             |             | Analysis Date: | <b>11/22/2021</b> | SeqNo:    | <b>2556013</b> |       |          |      |
| Analyte    |               | Result    |                | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD  | RPDLimit | Qual |
| Chloride   |               | 10.9      |                | 0.250     | 10.00          | 0           |             | 109            | 80                | 120       | 10.90          | 0.444 | 15       |      |

|            |                        |           |                |           |                |             |             |                |                   |           |                |      |          |      |
|------------|------------------------|-----------|----------------|-----------|----------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>21111097-001ams</b> | SampType: | <b>MS</b>      | TestCode: | <b>9056_W</b>  | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104528</b>  |      |          |      |
| Client ID: | <b>ZZZZZZ</b>          | Batch ID: | <b>R104528</b> | TestNo:   | <b>SW9056A</b> |             |             | Analysis Date: | <b>11/22/2021</b> | SeqNo:    | <b>2556016</b> |      |          |      |
| Analyte    |                        | Result    |                | PQL       | SPK value      | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |
| Chloride   |                        | 932       |                | 12.5      | 250.0          | 650.7       |             | 113            | 80                | 120       |                |      |          |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104528

|            |                         |                          |                         |                                  |                       |                      |           |             |       |          |      |
|------------|-------------------------|--------------------------|-------------------------|----------------------------------|-----------------------|----------------------|-----------|-------------|-------|----------|------|
| Sample ID  | <b>21111097-001amsd</b> | SampType: <b>MSD</b>     | TestCode: <b>9056_W</b> | Units: <b>mg/L</b>               | Prep Date:            | RunNo: <b>104528</b> |           |             |       |          |      |
| Client ID: | <b>ZZZZZZ</b>           | Batch ID: <b>R104528</b> | TestNo: <b>SW9056A</b>  | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2556017</b> |                      |           |             |       |          |      |
| Analyte    | Result                  | PQL                      | SPK value               | SPK Ref Val                      | %REC                  | LowLimit             | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Chloride   | 936                     | 12.5                     | 250.0                   | 650.7                            | 114                   | 80                   | 120       | 932.3       | 0.371 | 15       |      |

|            |                        |                          |                         |                                  |                       |                      |           |             |      |          |      |
|------------|------------------------|--------------------------|-------------------------|----------------------------------|-----------------------|----------------------|-----------|-------------|------|----------|------|
| Sample ID  | <b>21111105-006ams</b> | SampType: <b>MS</b>      | TestCode: <b>9056_W</b> | Units: <b>mg/L</b>               | Prep Date:            | RunNo: <b>104528</b> |           |             |      |          |      |
| Client ID: | <b>ZZZZZZ</b>          | Batch ID: <b>R104528</b> | TestNo: <b>SW9056A</b>  | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2556033</b> |                      |           |             |      |          |      |
| Analyte    | Result                 | PQL                      | SPK value               | SPK Ref Val                      | %REC                  | LowLimit             | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Chloride   | 130                    | 2.50                     | 50.00                   | 67.10                            | 126                   | 80                   | 120       |             |      |          | S    |

|            |                         |                          |                         |                                  |                       |                      |           |             |       |          |      |
|------------|-------------------------|--------------------------|-------------------------|----------------------------------|-----------------------|----------------------|-----------|-------------|-------|----------|------|
| Sample ID  | <b>21111105-006amsd</b> | SampType: <b>MSD</b>     | TestCode: <b>9056_W</b> | Units: <b>mg/L</b>               | Prep Date:            | RunNo: <b>104528</b> |           |             |       |          |      |
| Client ID: | <b>ZZZZZZ</b>           | Batch ID: <b>R104528</b> | TestNo: <b>SW9056A</b>  | Analysis Date: <b>11/22/2021</b> | SeqNo: <b>2556034</b> |                      |           |             |       |          |      |
| Analyte    | Result                  | PQL                      | SPK value               | SPK Ref Val                      | %REC                  | LowLimit             | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Chloride   | 129                     | 2.50                     | 50.00                   | 67.10                            | 124                   | 80                   | 120       | 130.2       | 0.715 | 15       | S    |

**NOTES:**  
 S - Spike recovery indicates matrix interference. The method is in control for the analyte as indicated by the LCS/LCSD.

|                    |    |   |     |  |    |                      |
|--------------------|----|---|-----|--|----|----------------------|
| <b>Qualifiers:</b> | B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
|                    | ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
|                    | S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
|                    | W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104531

|                             |                          |                       |                        |                                  |                       |          |           |             |      |          |      |
|-----------------------------|--------------------------|-----------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>MB-R104531</b> | SampType: <b>MBLK</b>    | TestCode: <b>COND</b> | Units: <b>µmhos/cm</b> | Prep Date:                       | RunNo: <b>104531</b>  |          |           |             |      |          |      |
| Client ID: <b>PBW</b>       | Batch ID: <b>R104531</b> | TestNo: <b>E120.1</b> |                        | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556523</b> |          |           |             |      |          |      |
| Analyte                     | Result                   | PQL                   | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Specific Conductance        | < 10.0                   | 10.0                  |                        |                                  |                       |          |           |             |      |          |      |

|                               |                          |                       |                        |                                  |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|-----------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS1-R104531</b> | SampType: <b>LCS1</b>    | TestCode: <b>COND</b> | Units: <b>µmhos/cm</b> | Prep Date:                       | RunNo: <b>104531</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104531</b> | TestNo: <b>E120.1</b> |                        | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556525</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                   | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Specific Conductance          | 495                      | 10.0                  | 505.0                  | 0                                | 98.0                  | 90       | 110       |             |      |          |      |

|                               |                          |                       |                        |                                  |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|-----------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS2-R104531</b> | SampType: <b>LCS2</b>    | TestCode: <b>COND</b> | Units: <b>µmhos/cm</b> | Prep Date:                       | RunNo: <b>104531</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R104531</b> | TestNo: <b>E120.1</b> |                        | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556527</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                   | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Specific Conductance          | 52,800                   | 10.0                  | 53,000                 | 0                                | 99.6                  | 90       | 110       |             |      |          |      |

|                                   |                          |                       |                        |                                  |                       |          |           |             |       |          |      |
|-----------------------------------|--------------------------|-----------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|-------|----------|------|
| Sample ID <b>21111099-005BDUP</b> | SampType: <b>DUP</b>     | TestCode: <b>COND</b> | Units: <b>µmhos/cm</b> | Prep Date:                       | RunNo: <b>104531</b>  |          |           |             |       |          |      |
| Client ID: <b>SE-SB 36</b>        | Batch ID: <b>R104531</b> | TestNo: <b>E120.1</b> |                        | Analysis Date: <b>11/23/2021</b> | SeqNo: <b>2556530</b> |          |           |             |       |          |      |
| Analyte                           | Result                   | PQL                   | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Specific Conductance              | 1,220                    | 10.0                  |                        |                                  |                       |          |           | 1,219       | 0.246 | 20       |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099

17-Dec-21

**Client:** Southland Environmental

**Project:** Drew Estate "15"/11397

**BatchID:** R104565

|            |                   |           |                |           |                  |             |             |                |                   |           |                |      |          |      |
|------------|-------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>MB-R104565</b> | SampType: | <b>MBLK</b>    | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |      |          |      |
| Client ID: | <b>PBW</b>        | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558871</b> |      |          |      |
| Analyte    |                   | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

Total Dissolved Solids (Residue, Filterable) < 10.0 10.0

|            |                    |           |                |           |                  |             |             |                |                   |           |                |      |          |      |
|------------|--------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>LCS-R104565</b> | SampType: | <b>LCS</b>     | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |      |          |      |
| Client ID: | <b>LCSW</b>        | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558872</b> |      |          |      |
| Analyte    |                    | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

Total Dissolved Solids (Residue, Filterable) 1,000 10.0 1,000 0 100 85 115

|            |                     |           |                |           |                  |             |             |                |                   |           |                |      |          |      |
|------------|---------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>LCSD-R104565</b> | SampType: | <b>LCSD</b>    | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |      |          |      |
| Client ID: | <b>LCSS02</b>       | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558873</b> |      |          |      |
| Analyte    |                     | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

Total Dissolved Solids (Residue, Filterable) 1,010 10.0 1,000 0 101 85 115 1,004 0.298 10

|            |                         |           |                |           |                  |             |             |                |                   |           |                |      |          |      |
|------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>21110836-001BDUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |      |          |      |
| Client ID: | <b>ZZZZZZ</b>           | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558880</b> |      |          |      |
| Analyte    |                         | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

Total Dissolved Solids (Residue, Filterable) 22,000 1,000 22,100 0.454 10

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
| B  | Analyte detected in the associated Method Blank                       | H   | Holding times for preparation or analysis exceeded | M  | Matrix Interference  |
| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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 2417 W. Pinhook Road  
 Lafayette, LA 70508-3344  
 TEL: (337) 235-0483 FAX: (337) 233-6540  
 Website: [www.element.com](http://www.element.com)

# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R104565

|            |                         |           |                |           |                  |             |             |                |                   |           |                |      |          |      |
|------------|-------------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|------|----------|------|
| Sample ID  | <b>21110836-001BDUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |      |          |      |
| Client ID: | <b>ZZZZZZ</b>           | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558880</b> |      |          |      |
| Analyte    |                         | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD | RPDLimit | Qual |

|  |                         |           |                |           |                  |             |             |                |                   |           |                |       |          |      |
|--|-------------------------|-----------|----------------|-----------|------------------|-------------|-------------|----------------|-------------------|-----------|----------------|-------|----------|------|
| Sample ID                                    | <b>21111170-006ADUP</b> | SampType: | <b>DUP</b>     | TestCode: | <b>TDS_2540C</b> | Units:      | <b>mg/L</b> | Prep Date:     |                   | RunNo:    | <b>104565</b>  |       |          |      |
| Client ID:                                   | <b>ZZZZZZ</b>           | Batch ID: | <b>R104565</b> | TestNo:   | <b>SM2540C</b>   |             |             | Analysis Date: | <b>11/24/2021</b> | SeqNo:    | <b>2558888</b> |       |          |      |
| Analyte                                      |                         | Result    |                | PQL       | SPK value        | SPK Ref Val |             | %REC           | LowLimit          | HighLimit | RPD Ref Val    | %RPD  | RPDLimit | Qual |
| Total Dissolved Solids (Residue, Filterable) |                         | 3,450     |                | 50.0      |                  |             |             |                |                   |           | 3,420          | 0.873 |          | 10   |

**Qualifiers:**

- |    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
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| ND | Not Detected at the Reporting Limit                                   | R   | RPD outside accepted recovery limits               | RL | Reporting Limit      |
| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
| W  | Sample container temperature is out of limit as specified at testcode |     |  |    |                      |



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# QC SUMMARY REPORT

WO#: 21111099  
 17-Dec-21

**Client:** Southland Environmental  
**Project:** Drew Estate "15"/11397

**BatchID:** R105004

|                             |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|-----------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>MB-R104948</b> | SampType: <b>MBLK</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>105004</b>  |          |           |             |      |          |      |
| Client ID: <b>PBS</b>       | Batch ID: <b>R105004</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/10/2021</b> | SeqNo: <b>2567926</b> |          |           |             |      |          |      |
| Analyte                     | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity     | < 0.10                   | 0.10                     |                        |                                  |                       |          |           |             |      |          |      |

|                               |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS1-R104948</b> | SampType: <b>LCS1</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>105004</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R105004</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/10/2021</b> | SeqNo: <b>2567928</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 0.52                     | 0.10                     | 0.50                   | 0                                | 102                   | 90       | 110       |             |      |          |      |

|                               |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|-------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>LCS2-R104948</b> | SampType: <b>LCS2</b>    | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>105004</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>       | Batch ID: <b>R105004</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/10/2021</b> | SeqNo: <b>2567930</b> |          |           |             |      |          |      |
| Analyte                       | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity       | 54.2                     | 0.10                     | 53.00                  | 0                                | 102                   | 90       | 110       |             |      |          |      |

|                                   |                          |                          |                        |                                  |                       |          |           |             |      |          |      |
|-----------------------------------|--------------------------|--------------------------|------------------------|----------------------------------|-----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID <b>21111079-015ADUP</b> | SampType: <b>DUP</b>     | TestCode: <b>EC_S</b>    | Units: <b>mmhos/cm</b> | Prep Date:                       | RunNo: <b>105004</b>  |          |           |             |      |          |      |
| Client ID: <b>ZZZZZ</b>           | Batch ID: <b>R105004</b> | TestNo: <b>LDNR 29-B</b> |                        | Analysis Date: <b>12/10/2021</b> | SeqNo: <b>2567939</b> |          |           |             |      |          |      |
| Analyte                           | Result                   | PQL                      | SPK value              | SPK Ref Val                      | %REC                  | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Electrical Conductivity           | 3.65                     | 0.10                     |                        |                                  |                       |          |           | 3.67        | 0.55 | 20       |      |

**Qualifiers:**

|    |   |     |  |    |                      |
|----|---|-----|--|----|----------------------|
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| S  | Spike Recovery outside accepted recovery limits                       | SDL | Sample detection limit                             | U  | Analyte not detected |
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## Sample Log-In Check List

Client Name: **SOUTHLAND\_ENV** Work Order Number: **21111099** RcptNo: **1**

|               |                          |                              |                          |
|---------------|--------------------------|------------------------------|--------------------------|
| Logged by:    | <b>Tammy Thibodeaux</b>  | <b>11/19/2021 3:08:00 PM</b> | <i>Tammy Thibodeaux</i>  |
| Completed By: | <b>Tammy Thibodeaux</b>  | <b>11/19/2021 4:48:50 PM</b> | <i>Tammy Thibodeaux</i>  |
| Reviewed By:  | <b>Caitlin Duplantis</b> | <b>11/23/2021 9:32:45 AM</b> | <i>Caitlin Duplantis</i> |

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? Element

### Log In

3. Coolers are present? Yes  No  NA   
 4. Shipping container/cooler in good condition? Yes  No   
 Custody seals intact on shipping container/cooler? Yes  No  Not Present   
 No. Seal Date: Signed By:  
 5. Was an attempt made to cool the samples? Yes  No  NA   
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 7. Sample(s) in proper container(s)? Yes  No   
 8. Sufficient sample volume for indicated test(s)? Yes  No   
 9. Are samples (except VOA and ONG) properly preserved? Yes  No   
 10. Was preservative added to bottles? Yes  No  NA   
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes  No  No VOA Vials   
 12. Were any sample containers received broken? Yes  No   
 13. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 14. Are matrices correctly identified on Chain of Custody? Yes  No   
 15. Is it clear what analyses were requested? Yes  No   
 16. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

|                      |  |       |  |
|----------------------|--|-------|--|
| Person Notified:     | <input type="text" value="Duane Piranio"/>             | Date: | <input type="text" value="11/23/2021"/>  |
| By Whom:             | <input type="text" value="Caitlin Duplantis"/>         | Via:  | <input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | <input type="text" value="Confirm TPH test request."/> |       |  |
| Client Instructions: | <input type="text" value="TPH-D/O (8015)"/>            |       |  |

18. Additional remarks:

### Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 4.8     | Good      | Not Present |         |           |           |





# Chain of Custody

Laboratory Number: **2111099**

**Client Information:**  
 Southland Environmental  
 Duane Piranio  
 510 Clarence St.  
 Lake Charles, LA 70601  
 337-436-3248  
 dpiranio@southlandenv.com

**Billing Information:**  
 Hope Clark  
 Ext: \_\_\_\_\_

**PO Number:** \_\_\_\_\_  
**Quote Number:** \_\_\_\_\_  
**Required QC Level:** \_\_\_\_\_  
**Bill Monthly:**  Yes  No

**Project Name/Number:** Drew Estate "15" / 11397  
**Matrix Code:** \_\_\_\_\_  
 DW = Drinking Water  
 WW = Waste Water  
 GW = Ground Water  
 AQ = Aqueous  
 OT = Other  
 SL = Sludge  
 O = Oil  
 F = Food  
 NG = Natural Gas  
 NGL = Natural Gas Liquid  
 PW = Produced Water  
 CF = Completion Fluid

| Sample ID/Description | Turn Time |      | Rush turn times will incur a surcharge and must be pre-approved by lab.) | Container Type | Pres. | Requested Tests |           |     | Comments |
|-----------------------|-----------|------|--|----------------|-------|-----------------|-----------|-----|----------|
|                       | Date      | Time |  |                |       | TPH-D/O (8015)  | Chlorides | TDS |          |
| SE-SB 35 (13-15)      | 11/18/21  | 0935 | G  | SO             | None  | X               |           |     |          |
| SE-SB 35 (18-20)      | 11/18/21  | 0940 | G  | SO             | None  | X               |           |     |          |
| SE-SB 36 (13-15)      | 11/18/21  | 1108 | G  | SO             | None  | X               |           |     |          |
| SE-SB 36 (18-20)      | 11/18/21  | 1110 | G  | SO             | None  | X               |           |     |          |
| SE-SB 36              | 11/18/21  | 1245 | G  | GW             | HNO3  | X               | X         | X   |          |
| SE-SB 35              | 11/18/21  | 1345 | G  | GW             | HNO3  | X               | X         | X   |          |

| Relinquished by | Date/Time     | Received by | Date/Time     | Field Notes   |
|-----------------|---------------|-------------|---------------|---|
| [Signature]     | 11/19/21 1330 | [Signature] | 11/19/21 1230 |   |
| [Signature]     | 11/19/21 1508 | [Signature] | 11/19/21 1528 | Received at lab on ice? <input type="checkbox"/> Yes <input type="checkbox"/> No Temp: 4.8c |

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 F 765-378-4100

629 Washington St Suite 300  
 Columbus, IN 47201-6231 USA  
 P 812-375-0531  
 F 812-375-0731

2121 East Washington Boulevard  
 Fort Wayne, IN 46803-1328 USA  
 P 260-471-7000  
 F 260-471-7777

560 South Zimmer Road  
 Warsaw, IN 46580-2368 USA  
 P 574-267-3305  
 F 574-269-6589

3371 Cleveland Road, Suite 100A  
 South Bend, IN 46628-9780 USA  
 P 574-277-0707  
 F 574-273-6549

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