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## Variance Request

### Site of Project:

Pogo Resources  
Bagley SWD  
S-34-11S-33E  
1RP-5716

### Report by:

Zach Robbins | Technical and Engineering Analyst | RXSoil, Inc.  
201 Main St, Ste 1360, Fort Worth, TX 76102  
Zach.robbins@rxsoil.solutions | (210) 400-7645

May 22, 2020

**RXSoil, Inc.**

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This report serves as a variance request for remediation project 1RP-5716 of release #NRM1927360423.

Bagley Field Rd, a Lea County road, borders this spill just to the south. Per instructed by the Lea County Road Department, excavation stopped 5' away from the edge of the road to prevent the road from collapsing. At the Road Department's request, RXSoil set up orange barricades between the road and excavation area and installed "Road Work Ahead" signs. Samples ES10 – ES15 were collected along this sidewall and tested for chlorides via Method 4500 at Cardinal Laboratories in Hobbs, shown below. Laboratory reports are attached. In order to avoid the need to build an access road parallel tearing up additional land along with the safety liability that would come with, RXSoil is requesting a variance to leave the soil in place.

There is also an electrical pole near the excavation area, shown in the map on the following page. RXSoil contacted Lea County Electric Co-op. They requested RXSoil remain 15' away from the pole until Lea County Electric personnel was on-site, in which excavation continued to 12'. A sidewall sample was tested ("TP") They are not allowing further excavation, as further excavation could lead to issues with the integrity of the pole and outages resulting in additional releases. RXSoil is requesting a variance to leave this soil in place.

| Sample Name             | Sample Type | Sample Date | Chloride    |             |
|-------------------------|-------------|-------------|-------------|-------------|
|                         |             |             | Field       | M4500       |
| ES10                    | Sidewall    | 5/18/2020   | -           | <b>1550</b> |
| ES11                    | Sidewall    | 5/18/2020   | -           | 128         |
| ES12                    | Sidewall    | 5/18/2020   | -           | 160         |
| ES13                    | Sidewall    | 5/18/2020   | -           | 384         |
| ES14                    | Sidewall    | 5/18/2020   | -           | 48          |
| ES15                    | Sidewall    | 5/18/2020   | -           | 480         |
| TP                      | Sidewall    | 5/21/2020   | <b>2404</b> | <b>3520</b> |
| <b>NMOCD Thresholds</b> |             |             | <b>600</b>  |             |

**BOLD** results indicate results above thresholds

- indicates tests were not ran

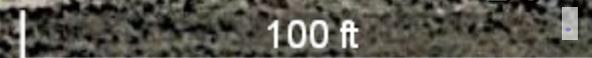
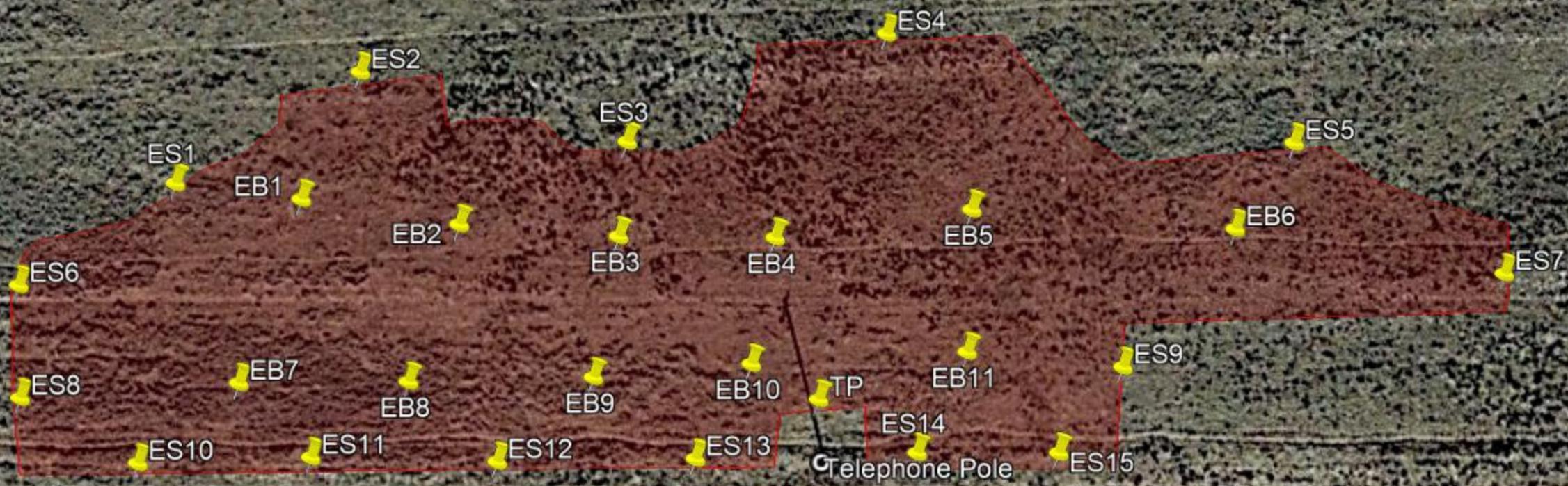
"ND" indicates a non-detectable result, below testing limits

# Pogo Bagley SWD Remediation

Excavation Sample Map

## Legend

-  Excavation Area
-  Sample Location
-  Telephone Pole







PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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May 19, 2020

HAYES ADAMS

RX-SOIL INC.

201 MAIN STREET, SUITE 1360

FORT WORTH, TX 76102

RE: POGO

Enclosed are the results of analyses for samples received by the laboratory on 05/18/20 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RX-SOIL INC.  
 HAYES ADAMS  
 201 MAIN STREET, SUITE 1360  
 FORT WORTH TX, 76102  
 Fax To: NA

|                   |              |                     |                |
|-------------------|--------------|---------------------|----------------|
| Received:         | 05/18/2020   | Sampling Date:      | 05/16/2020     |
| Reported:         | 05/19/2020   | Sampling Type:      | Soil           |
| Project Name:     | POGO         | Sampling Condition: | Cool & Intact  |
| Project Number:   | TATUM, NM    | Sample Received By: | Kelly Jacobson |
| Project Location: | BAGLEY FIELD |                     |                |

**Sample ID: ES -10 (H001353-01)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 1550   | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: ES -11 (H001353-02)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 128    | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: ES -12 (H001353-03)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 160    | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: ES -13 (H001353-04)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 384    | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RX-SOIL INC.  
 HAYES ADAMS  
 201 MAIN STREET, SUITE 1360  
 FORT WORTH TX, 76102  
 Fax To: NA

|                   |              |                     |                |
|-------------------|--------------|---------------------|----------------|
| Received:         | 05/18/2020   | Sampling Date:      | 05/16/2020     |
| Reported:         | 05/19/2020   | Sampling Type:      | Soil           |
| Project Name:     | POGO         | Sampling Condition: | Cool & Intact  |
| Project Number:   | TATUM, NM    | Sample Received By: | Kelly Jacobson |
| Project Location: | BAGLEY FIELD |                     |                |

**Sample ID: ES -14 (H001353-05)**

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>48.0</b> | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: ES -15 (H001353-06)**

| Chloride, SM4500Cl-B |            | mg/kg           |            | Analyzed By: GM |     |            |               |      |           |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result     | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>480</b> | 16.0            | 05/19/2020 | ND              | 400 | 100        | 400           | 3.92 |           |

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Celey D. Keene, Lab Director/Quality Manager



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**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager





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May 22, 2020

HAYES ADAMS

RX-SOIL INC.

201 MAIN STREET, SUITE 1360

FORT WORTH, TX 76102

RE: POGO

Enclosed are the results of analyses for samples received by the laboratory on 05/21/20 16:05.

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Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RX-SOIL INC.  
 HAYES ADAMS  
 201 MAIN STREET, SUITE 1360  
 FORT WORTH TX, 76102  
 Fax To: NA

Received: 05/21/2020  
 Reported: 05/22/2020  
 Project Name: POGO  
 Project Number: TATUM, NM  
 Project Location: BAGLEY FIELD

Sampling Date: 05/21/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Kelly Jacobson

**Sample ID: TELEPHONE POLE (H001404-01)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: AC**

| Analyte         | Result      | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
|-----------------|-------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| <b>Chloride</b> | <b>3520</b> | 16.0            | 05/22/2020 | ND           | 416 | 104        | 400           | 0.00 |           |

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\* = Accredited Analyte

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