# L Peter Galusky, Jr PE

5935 Exeter Circle Norcross, GA 30071 | 470 955-5335 | peter@bluerock.pro

# April 1<sup>st</sup>, 2020

Bradford Billings New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87504

# RE: **2019 Annual Report** Rice Operating Company Vacuum K-35-1 Boot, UL K, Sec 35, T17S, R35E **OCD Case Number 1R425-03**

Sent by E-mail

Mr. Billings:

This letter summarizes remediation history and progress made for this project over the past calendar year. Location and site schematic maps are given in the Appendix (Figures 1 and 2, respectively).

OCD granted termination of soil remediation requirements (soil closure) on October 13<sup>th</sup>, 2011, allowing for the cessation of groundwater withdrawals and stipulating that groundwater monitoring must continue semi-annually at wells MW-2, MW-3 and MW-4.

A Groundwater Recovery Notification was submitted to the NMOCD on September 4<sup>th</sup>, 2013 and NMOCD approved the notification on September 5<sup>th</sup>, 2013. Groundwater recovery began from RW-1 on September 13<sup>th</sup>, 2013. According to the NMOCD approved Groundwater Recovery Notification, ROC began sampling all the wells (MW-1, MW-2, MW-3, MW-4, and RW-1) on a semi-annual (twice a year) basis in 2013, and a quarterly basis in 2014.

Brief Summary of Groundwater Monitoring and Present Status

- Approximately 32,110 barrels of chloride-affected groundwater have been withdrawn from a near-source recovery well (RW-1) over the period June 2008 through October 2019 resulting in the removal of an estimated 2,359 kg of chlorides (Appendix Figure 3). The removed groundwater was hauled to an off-site location and utilized for a beneficial use.
- The average annual groundwater chloride concentration in the near/at-source monitor well, MW-4, decreased substantially from 365 mg/l in 2018 to 137 mg/l in 2019 (Appendix Figure 3, Table 1).

# **Rice Operating Company Vacuum K-35-1 Boot Annual Report**

- The average annual groundwater chloride concentration in the down-gradient monitor well, MW-2, was little changed rising from 39 mg/l in 2018 to 50 mg/l in (Appendix Table 1).
- The average annual groundwater chloride concentration in the down-gradient recovery well, RW-1, dropped substantially from 523 mg/l in 2018 to 269 mg/l in 2019 (Appendix Figure 3, Table 1).
- The average annual groundwater chloride concentration in the up-gradient monitor well (MW-3) rose slightly from 274 mg/l in 2018 to 307 mg/l in (Appendix Figure 3, Table 1). The more or less general rise in average annual groundwater chloride concentrations from a low value of 77 mg/l in 2009 suggests that chloride impacted groundwater water from up-gradient source(s) may increase groundwater chloride concentrations beneath the subject site within the coming years.

Due to the current climate, and in the interest of safety, ROC proposes to reduce groundwater monitoring from quarterly to semi-annually for the remainder of this year. In addition, ROC proposes to suspend groundwater recovery for this year. These proposals are only temporary, and regularly scheduled groundwater monitoring and recovery will commence as soon as possible.

ROC is the service provider (agent) for the Vacuum Saltwater Disposal (SWD) System and has no ownership of any portion of pipeline, well or facility. The Vacuum SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Please do not hesitate to contact either myself or Rice Operating Company if you have any questions or need additional information.

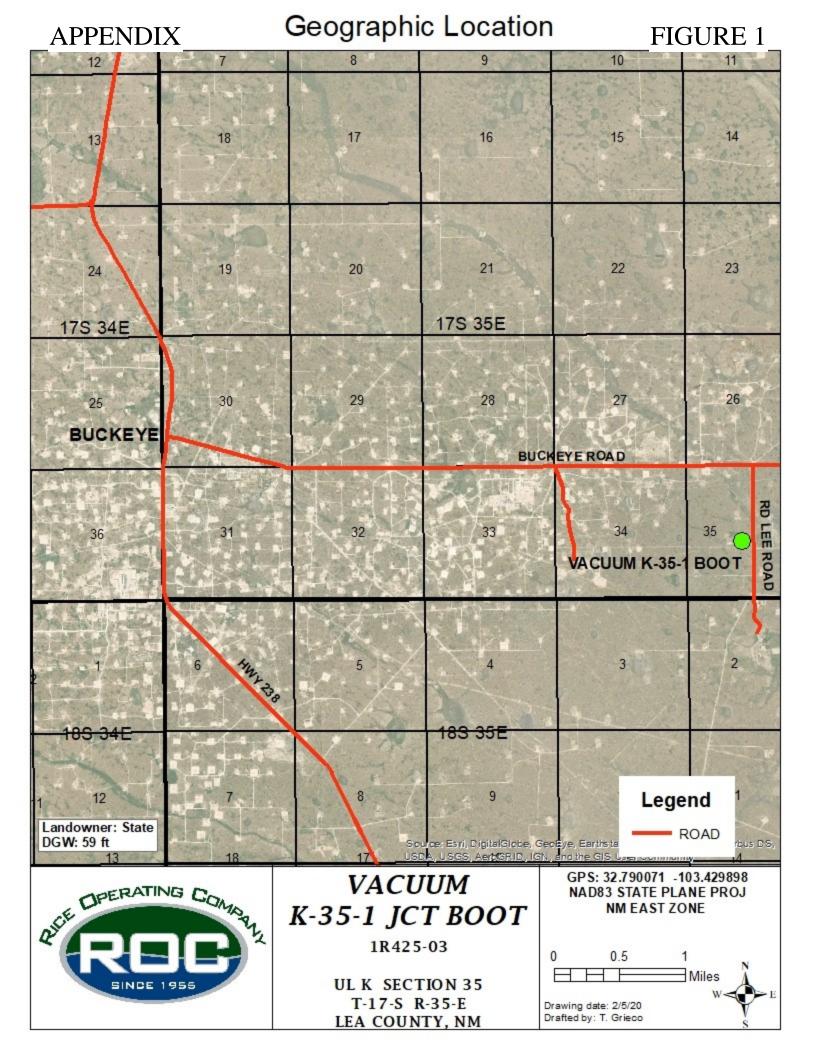
Sincerely,

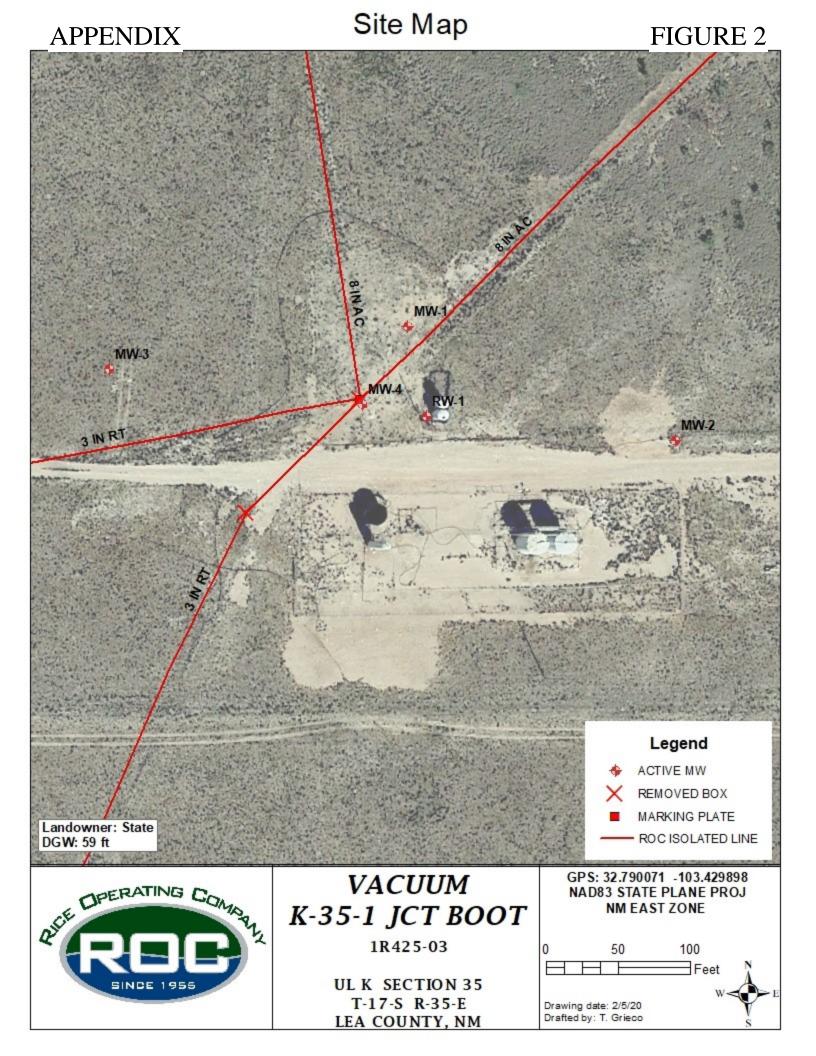
L. Peter Galusky, Jr. P.E. NM Prof. Engineer No. 22561

Copy: Rice Operating Company Attachments: ... as noted, above.

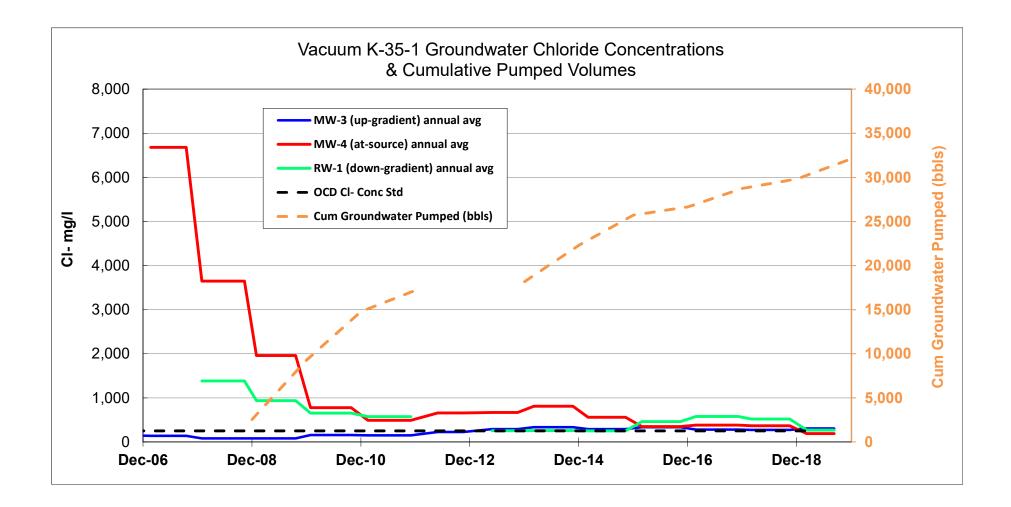


# L Peter Galusky, Jr PE





# APPENDIX



# APPENDIX

|          |               |             |            | Groundwate | r Chloride Co | nc (mg/l)  |           |            |             |              |
|----------|---------------|-------------|------------|------------|---------------|------------|-----------|------------|-------------|--------------|
|          |               |             |            |            |               |            |           | MW-4 (at-  |             | RW-<br>(dowr |
|          | MW-1          |             | W-2 (down∙ |            |               | MW-3 (up-  |           | source)    |             | gradien      |
|          | (downgradient | MW-1 annual | gradient   | MW-2       | MW-3 (up-     |            | MW-4 (at- |            | RW-1 (down- | annu         |
| Date     | well)         | avg         | well)      | annual avg | gradient)     | annual avg | source)   | avg        | gradient)   | av           |
| 6/28/06  | 508           | 684         | 32         | 29         | 140           | 153        |           |            |             |              |
| 10/19/06 | 859           | 684         | 26         | 29         | 165           | 153        |           |            |             |              |
| 2/21/07  | 1,080         | 1,138       | 29         | 27         | 178           | 138        | 6,770     | 6,680      |             |              |
| 5/22/07  | 923           | 1,138       | 25         | 27         | 128           | 138        | 6,770     | 6,680      |             |              |
| 8/7/07   | 1,150         | 1,138       | 27         | 27         | 134           | 138        | 6,390     | 6,680      |             |              |
| 10/16/07 | 1,400         | 1,138       | 28         | 27         | 112           | 138        | 6,790     | 6,680      |             |              |
| 1/30/08  | 1,300         | 1,330       | 80         | 43         | 88            | 81         | 4,000     | 3,645      |             | 1,38         |
| 4/30/08  | 1,440         | 1,330       | 32         | 43         | 84            | 81         | 4,550     | 3,645      | 1,880       | 1,38         |
| 7/30/08  | 1,360         | 1,330       | 32         | 43         | 76            | 81         | 3,450     | 3,645      | 1,070       | 1,38         |
| 11/10/08 | 1,220         | 1,330       | 28         | 43         | 76            | 81         | 2,580     | 3,645      | 1,200       | 1,38         |
| 1/30/09  | 1,280         | 1,210       | 28         | 28         | 76            | 83         | 1,960     | 1,960      | 1,680       | 93           |
| 5/1/09   | 1,420         | 1,210       | 28         | 28         | 84            | 83         | 2,080     | 1,960      | 750         | 93           |
| 8/4/09   | 940           | 1,210       | 28         | 28         | 72            | 83         | 2,300     | 1,960      | 580         | 93           |
| 10/20/09 | 1,200         | 1,210       | 28         | 28         | 100           | 83         | 1,500     | 1,960      | 730         | 93           |
| 1/27/10  | 1,180         | 795         | 32         | 32         | 152           | 157        | 1,200     | 778        | 490         | 65           |
| 4/28/10  | 460           | 795         | 32         | 32         | 128           | 157        | 460       | 778        | 1,220       | 65           |
| 7/29/10  | 980           | 795         | 32         | 32         | 184           | 157        | 800       | 778        | 570         | 65           |
| 10/26/10 | 560           | 795         | 32         | 32         | 164           | 157        | 650       | 778        | 332         | 65           |
| 2/16/11  | 800           | 662         | 32         | 34         | 128           | 152        | 520       | 490        | 750         | 57           |
| 6/1/11   | 396           | 662         | 32         | 34         | 148           | 152        | 680       | 490        | 476         | 57           |
| 8/30/11  | 352           | 662         | 32         | 34         | 156           | 152        | 380       | 490        | 490         | 57           |
| 12/1/11  | 1,100         | 662         | 40         | 34         | 176           | 152        | 380       | 490        |             | 57           |
| 5/29/12  | 1,100         | 002         | 36         | 36         | 204           | 228        | 700       | 655        |             | 0.           |
| 11/15/12 |               |             | 36         | 36         | 252           | 228        | 610       | 655        |             |              |
| 5/28/13  |               |             | 36         | 36         | 280           | 294        | 690       | 670        | 212         | 25           |
| 11/15/13 | 1.040         | 1.040       | 36         | 36         | 308           | 294        | 650       | 670        | 300         | 25           |
| 3/4/14   | 920           | 733         | 32         | 36         | 312           | 333        | 720       | 808        | 364         | 26           |
| 6/3/14   | 800           | 733         | 36         | 36         | 356           | 333        | 870       | 808        | 300         | 26           |
| 8/28/14  | 750           | 733         | 44         | 36         | 328           | 333        | 810       | 808        | 292         | 26           |
| 11/21/14 | 460           | 733         | 32         | 36         | 336           | 333        | 830       | 808        | 84          | 26           |
| 3/3/15   | 400           | 423         | 40         | 44         | 304           | 288        | 640       | 560        | 252         | 25           |
| 6/3/15   | 499           | 423         | 40<br>60   | 44         | 244           | 288        | 750       | 560        | 232         | 25           |
| 8/22/15  | 292           | 423         | 36         | 44         | 284           | 288        | 510       | 560        | 292         | 25           |
| 11/8/15  | 432           | 423         | 30<br>40   | 44         | 320           | 288        | 340       | 560        | 292         | 25           |
| 2/26/16  | 432<br>830    | 630         | 40         | 44         | 430           | 200        | 340       | 350        | 220<br>570  | 46           |
| 5/21/16  | 740           | 630         | 40<br>32   | 40         | 430<br>284    | 337        | 440       |            | 620         | 46           |
|          | 520           | 630         | 32<br>36   | 40         |               | 337        | 280       | 350<br>350 | 368         | 46           |
| 9/10/16  | 520<br>430    | 630         | 30<br>68   | 40<br>46   | 332<br>300    | 337        | 280       |            | 292         | 46           |
| 11/10/16 |               |             |            |            |               |            |           | 350        |             |              |
| 2/22/17  | 850           | 968         | 40         | 54         | 280           | 279        | 430       | 385        | 690         | 57           |
| 5/25/17  | 960           | 968         | 84         | 54         | 296           | 279        | 256       | 385        | 810         | 57           |
| 9/16/17  | 1,040         | 968         | 60         | 54         | 320           | 279        | 392       | 385        | 156         | 57           |
| 12/2/17  | 1,020         | 968         | 32         | 54         | 220           | 279        | 460       | 385        | 652         | 57           |
| 2/28/18  | 1,300         | 1,305       | 44         | 39         | 328           | 274        | 300       | 365        | 680         | 52           |
| 5/15/18  | 1,300         | 1,305       | 36         | 39         | 180           | 274        | 320       | 365        | 820         | 52           |
| 9/8/18   | 1,120         | 1,305       | 36         | 39         | 288           | 274        | 228       | 365        | 112         | 52           |
| 11/13/18 | 1,500         | 1,305       | 40         | 39         | 300           | 274        | 610       | 365        | 480         | 52           |
| 3/6/19   | 870           | 748         | 44         | 50         | 324           | 307        | 344       | 188        | 820         | 26           |
| 5/29/19  | 900           | 748         | 32         | 50         | 312           | 307        | 128       | 188        | 108         | 26           |
| 9/6/19   | 640           | 748         | 48         | 50         | 320           | 307        | 132       | 188        | 108         | 26           |
| 11/16/19 | 580           | 748         | 76         | 50         | 272           | 307        | 148       | 188        | 40          | 26           |



March 18, 2019

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION K-35-1** 

Enclosed are the results of analyses for samples received by the laboratory on 03/11/19 13:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 03/11/2019                       | Sampling Date:      | 03/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 03/18/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: MONITOR WELL #1 (H900962-01)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 870    | 4.00            | 03/18/2019 | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: JH     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 72.3   | 10.0            | 03/14/2019 | ND           | 21.3 | 106        | 20.0          | 6.80 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 1840   | 5.00            | 03/14/2019 | ND           | 542  | 103        | 527           | 7.32 |           |

# Sample ID: MONITOR WELL #2 (H900962-02)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze       | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|---------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 44.0   | 4.00            | 03/18/2019    | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze       | d By: JH     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 62.6   | 10.0            | 03/14/2019    | ND           | 21.3 | 106        | 20.0          | 6.80 |           |
| TDS 160.1            | mg,    | /L              | Analyze       | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 436    | 5.00            | 03/14/2019 ND |              | 542  | 103        | 527           | 7.32 |           |

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 03/11/2019                       | Sampling Date:      | 03/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 03/18/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

#### Sample ID: MONITOR WELL #3 (H900962-03)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze       | d By: AC              |      |            |               |      |           |
|----------------------|--------|-----------------|---------------|-----------------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed      | Analyzed Method Blank |      | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 324    | 4.00            | 03/18/2019    | ND                    | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze       | d By: JH              |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank          | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 115    | 25.0            | 03/14/2019    | ND                    | 21.3 | 106        | 20.0          | 6.80 |           |
| TDS 160.1            | mg,    | /L              | Analyze       | d By: AC              |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank          | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 906    | 5.00            | 03/14/2019 ND |                       | 542  | 103        | 527           | 7.32 |           |

# Sample ID: MONITOR WELL #4 (H900962-04)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze       | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|---------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 128    | 4.00            | 03/18/2019    | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze       | d By: JH     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 74.8   | 10.0            | 03/14/2019    | ND           | 21.3 | 106        | 20.0          | 6.80 |           |
| TDS 160.1            | mg,    | /L              | Analyze       | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed      | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 496    | 5.00            | 03/14/2019 ND |              | 542  | 103        | 527           | 7.32 |           |

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\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 03/11/2019                       | Sampling Date:      | 03/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 03/18/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: RECOVERY WELL #1 (H900962-05)

| Chloride, SM4500Cl-B | mg     | /L              | Analyze         | d By: AC     |                 |            |                 |      |           |  |  |  |  |
|----------------------|--------|-----------------|-----------------|--------------|-----------------|------------|-----------------|------|-----------|--|--|--|--|
| Analyte              | Result | Reporting Limit | Analyzed        | Method Blank | BS              | % Recovery | True Value QC   | RPD  | Qualifier |  |  |  |  |
| Chloride*            | 820    | 4.00            | 03/18/2019      | ND           | 100             | 100        | 100             | 0.00 |           |  |  |  |  |
| Sulfate 375.4        | mg,    | /L              | Analyze         | d By: JH     |                 |            |                 |      |           |  |  |  |  |
| Analyte              | Result | Reporting Limit | Analyzed        | Method Blank | BS              | % Recovery | True Value QC   | RPD  | Qualifier |  |  |  |  |
| Sulfate*             | 73.4   | 10.0            | 03/14/2019      | ND           | 21.3            | 106        | 20.0            | 6.80 |           |  |  |  |  |
| TDS 160.1            | mg,    | /L              | Analyzed By: AC |              | Analyzed By: AC |            | Analyzed By: AC |      |           |  |  |  |  |
| Analyte              | Result | Reporting Limit | Analyzed        | Method Blank | BS              | % Recovery | True Value QC   | RPD  | Qualifier |  |  |  |  |
| TDS*                 | 1840   | 5.00            | 03/14/2019 ND   |              | 542             | 103        | 527             | 7.32 |           |  |  |  |  |

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Celeg D. Keine



### **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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#### \*=Accredited Analyte

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Celeg D. Keine

| 101 East Marland - Hobbs, NM 88240<br>Tel (575) 393-2326<br>Eav (575) 393-2476 | mo               | 1Т                                  | 0      | h      |        | 0        | 10               |                  |                    | a                              | Τ.                  |         | ~           |               |                |  | CHA  | AIN  | -OF        | -cu                 | JST             | OD        | YA                   | ND                         | AN             | AL                   | YS           | IS F                 | REC              | UES      | ST                     |              |
|--|------------------|-------------------------------------|--------|--------|--------|----------|------------------|------------------|--------------------|--------------------------------|---------------------|---------|-------------|---------------|----------------|--|--|--|------------|---------------------|-----------------|-----------|----------------------|----------------------------|----------------|----------------------|--------------|----------------------|------------------|----------|------------------------|--------------|
| Tel (575) 393-2326<br>Fax (575) 393-2476                                       | llla             |                                     | 1a     | U      | JI     | a        | ιυ               |                  | le                 | 5,                             |                     |         | C.          |               |                |  |  | L  | AB (       | Orde                | r ID i          | #         |                      |                            | _              |                      |              |                      |                  |          |                        |              |
| Company Name:<br>RICE Operating Company  |                  | BILL RIC                            |        | Com    |        |          | mp               | anv              | 3                  |                                | PO#                 |         |             |               | 1              |  |  |  |            | AN/                 | ALY             | SIS       | SR                   | EQI                        | UES            | ST                   |              |                      |                  |          |                        |              |
| Project Manager:   |                  | TRIO                                |        | Addr   |        | 00       | mpa              | arry             | _                  | eet, (                         | City, Z             | ip)     |             |               |                |  |  |  | ((         | Circle              | e or a          | Spec      | cify N               | Neth                       | od N           | lo.)                 |              |                      |                  |          |                        |              |
| Katie Jones  |                  | 122 W                               | / Tayl | or Str | eet~   | Hobb     | s, Ne            | w Me             | exico              | 8824                           | 0                   |         |             |               |                |  |  |  |            | 1                   |                 |           |                      |                            | 1              |                      |              |                      | 2                | 11       |                        | 21           |
| Address: (Street, City, Zip)   |                  |                                     |        | Phor   |        |          |                  |                  |                    |                                | Fax#:               |         | en a        | 598           | 1              |  |  | 2  |            |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| 122 W Taylor Street ~ Hobbs, New Mexico 88240<br>Phone #:                      | Fax #:           | (575                                | 6) 39  | 93-9   | 174    |          |                  |                  |                    |                                | (575                | 5)3     | 97-1        | 471           |                |  |  | //200  |            |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| (575) 393-9174   |                  | ) 397-                              | -147   | 71     |        |          |                  |                  |                    |                                |                     |         |             |               |                | 35)  |  | 010E   |            |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Project #: Project Name:   |                  | ,                                   |        |        | /      | /        | )_               | A                | 5                  | 6                              |                     |         |             |               | 1              | ed ((  |  | 9 6  | P          |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Vacuum Junction K  | -35-1            |                                     |        | /      | /      | 1        | 1                | /                | /                  | )                              |                     | Toronto |             |               |                | tend   |  | Ser  | Sel        |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Project Location:<br>T17S-R35E-Sec35 K ~ Lea County New N                      | exico            |                                     | /      | sam    | pler S | ignat    | ure:             | Ro               | zann               | e Joh                          | inson               | (575    | 5)631-9     | 9310          |                | BTEX 8021B/602<br>TPH 418 1/TX1005 / TX1005 Fxtended (C35) |  | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200 | r Pb       |                     |                 |           |                      | 25                         |                |                      |              |                      | 03)              |          |                        | )            |
|  |                  |                                     |        | 4      |        | 1        | 4                | PRE              | SEF                | RVA                            | TIVE                | T       |             |               |                | (100   |  | D p  | S          |                     |                 |           |                      | C/62                       |                |                      |              |                      | HCO3             |          |                        |              |
|  |                  |                                     | K      | IVIA   | ATRI   | <u>/</u> |                  |                  | MET                |                                |                     | ľ       | SAMP        | PLING         |                | Ê.   |  | Ba C   | Ba         | s                   |                 |           | /624                 | 8270                       |                | 88                   |              | 2                    | CO3,             |          | olids                  | ĉ            |
| LAB #  | duo              | # CONTAINERS                        |        |        |        |          | R                |                  |                    |                                | DE)                 |         |             |               | 302            | 1005   |  | J As   | g As       | TCLP Semi Volatiles | s               |           | GC/MS Vol. 8260B/624 | GC/MS Semi. Vol. 8270C/625 | 8              | Pesticides 8081A/608 | tuc          | Cations (Ca Mr Na K) | 10,40            |          | Total Dissolved Solids | Chlorides    |
| FIELD CODE   | Ű                | AIN                                 |        |        |        |          | N Im             |                  |                    |                                | er HC               |         | 19)         |               | 21B/           | 1B/6   | 0  | Is Ag  | A sla      | i Vol               | icide           |           | I. 82                | mi.                        | 2/60           | 808                  | H            |                      | 'sul             |          | olve                   | E E          |
| LAB USE  | b or             | LN                                  | ER     |        |        | ğ        | (2 40            |                  | 304                | 4                              | 111                 | ш       | : (20       |               | 80             | 802  | 3270   | Aeta   | Met        | Sem                 | Pest            |           | 200                  | S Se                       | 808            | des                  | LSS          |                      | 000              | Se       | Diss                   | Ges          |
| ONLY<br>H900962  | (G)rab or (C)omp | 00                                  | WATER  | SOIL   | AIR    | SLUDGE   | HCL (2 40ml VOA) | HNO <sub>3</sub> | NaHSO <sub>4</sub> | H <sub>2</sub> SO <sub>4</sub> | ICE (1-1Liter HDPE) | INCINE  | DATE (2019) | TIME          | MTBE 8021B/602 | BTEX 8021B/602<br>TPH 418 1/TX100                          | PAH 8270C  | otal   | CLP        | TCLP Semi Vol       | TCLP Pesticides | RCI       | CIM                  | C/M                        | PCB's 8082/608 | estici               | BOD, TSS, pH | otion                | Anions (CI, SO4, | Sulfates | otal I                 | Cniorides    |
| Monitor Well #1  | G                | 1                                   | ×      | 0      | 4      | 5        | ┿                | +-               | 2                  | T                              | <u> </u>            |         | □<br>3/6    | -             |                |  |  | Ĕ  | <u>ř</u> ř |                     | Ĕ               | æ         | G                    | Ö                          | ĕ              | 8                    | m z          | ΣĊ                   | Ā                |          | _                      |              |
| Z Monitor Well #2  | G                | 1                                   | x      |        |        | +        | -                | +-               | +                  | $\square$                      | 1                   | -       | 3/6         | 12:50<br>9:05 |                |  | +  | +  | +          | +                   | ┼─              | $\square$ |                      |                            | _              | -                    | +            | ┿                    |                  | + +      | _                      | X            |
| 3 Monitor Well #3  | G                | 1                                   | X      |        |        | +        | +                | +-               | 1                  | $\square$                      | 1                   |         | 3/6         | 10:15         |                |  | +  | +  | +          | +                   | $\vdash$        |           |                      |                            | _              | -+                   | +            | +                    | +                |          | _                      | X            |
| V Monitor Well #4  | G                | 1                                   | X      |        |        | +        |                  | +                | +                  |                                | 1                   |         | 3/6         | 11:35         |                | -  | +-   | $\vdash$                                       | +          | -                   |                 |           |                      |                            | -              | $\rightarrow$        | -            | +                    | +                |          | _                      | X<br>X       |
| Recovery Well #1   | G                | 1                                   | X      |        |        | +        |                  | +                | +                  |                                | 1                   | -       |             | 15:00         |                | -  | +  | +  | +          | -                   | ┢──             |           |                      |                            | -              | -                    | +            | +                    | +                |          | _                      | ^<br>X       |
|  |                  |                                     |        |        |        | +        |                  | +                |                    |                                | -                   | ╈       | 0.0         | 10.00         |                | -  | +  | +  | +          | +                   | -               |           |                      |                            |                | +                    |              | ╈                    | +                | Ĥ        | <u></u>                | <del>^</del> |
|  | 1                |                                     |        |        |        |          |                  | 1                | $\top$             |                                |                     | $^{+}$  |             |               |                |  | +  | +  | +          |                     | ┼─              | H         |                      |                            |                | +                    |              | +                    | +                | $\vdash$ | +                      | +            |
| 1  |                  |                                     |        |        |        |          |                  | 1                |                    |                                |                     | T       |             |               | H              |  | 1  | $\square$                                      |            |                     | $\vdash$        |           |                      |                            |                | +                    |              | ╈                    |                  |          | +                      |              |
|  |                  |                                     |        |        |        |          |                  |                  |                    |                                |                     | T       |             |               |                |  |  | П  |            |                     |                 |           |                      |                            |                | +                    |              | ╈                    |                  | $\vdash$ |                        | -            |
|  |                  |                                     |        |        |        |          |                  |                  |                    |                                |                     | T       |             |               |                |  | T  |  |            |                     |                 |           |                      |                            |                |                      |              | 1                    |                  | H        |                        | _            |
| Relinquished by: Date: Time:   |                  | yed by:                             |        | /      | 71     | 1        | 11               |                  | Date:              |                                | Time                |         |             |               | -              | ne Re  | The second s |  | Y          | 'es                 |                 | No        |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Rozanne 10 poson 3/11/2019 13:25   |                  | Jamara 1 1dan of 3-11-19 13:25 Fa   |        |        |        |          | Fax              | Resul            | ts                 |                                | Y                   | 'es     |             | No            |                | Addi   | ition  | al Fa  | ax N       | umb                 | er:             |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Retinquished by: Date: Time:   | Recei            | Received By: (Laboratory Staff) Dat |        |        |        |          | Date:            |                  | Time               |                                |                     |         |             | ARK           |                |  |  |  |            |                     |                 |           | -                    |                            |                |                      |              |                      |                  |          |                        |              |
|  |                  |                                     |        |        |        |          |                  |                  |                    |                                |                     |         |             |               | Email          | Res  | ults   | : 1  | ion        | es@                 | Dric            | esv       | vd.c                 | om                         |                |                      |              |                      |                  |          |                        |              |
| Delivered By: (Circle One)   |                  |                                     |        | CH     | IECK   | KED E    | BY:              |                  |                    |                                |                     |         |             |               |                | r  | oza  | nne  | 11(        | @w                  | inds            | stre      | am                   | .net                       |                |                      |              |                      |                  |          |                        |              |
|  | Yes Yes (In      |                                     |        |        | itiale | Ň        |                  |                  |                    |                                |                     |         |             |               |                |  |  |  |            |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
| Sampler - UPS - Bus - Other: No  |                  |                                     | 1      | No     |        |          | (m)              | itials           | >.                 |                                |                     |         |             |               |                |  |  |  |            |                     |                 |           |                      |                            |                |                      |              |                      |                  |          |                        |              |
|  | 1                |                                     |        |        |        |          |                  | 1.               | -                  |                                | 2                   |         | -           |               |                |  |  |  | _          |                     |                 |           | _                    |                            |                |                      |              |                      |                  |          |                        |              |



June 06, 2019

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION K-35-1** 

Enclosed are the results of analyses for samples received by the laboratory on 06/03/19 10:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 06/03/2019                       | Sampling Date:      | 05/29/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 06/06/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: MONITOR WELL #1 (H901928-01)

| Chloride, SM4500Cl-B | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 900    | 4.00            | 06/04/2019 | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 69.0   | 10.0            | 06/04/2019 | ND           | 21.1 | 105        | 20.0          | 4.96 |           |
| TDS 160.1            | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 2270   | 5.00            | 06/06/2019 | ND           | 520  | 98.7       | 527           | 2.05 |           |

# Sample ID: MONITOR WELL #2 (H901928-02)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 32.0   | 4.00            | 06/04/2019 | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 63.5   | 10.0            | 06/04/2019 | ND           | 21.1 | 105        | 20.0          | 4.96 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 453    | 5.00            | 06/06/2019 | ND           | 520  | 98.7       | 527           | 2.05 |           |

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 06/03/2019                       | Sampling Date:      | 05/29/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 06/06/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

#### Sample ID: MONITOR WELL #3 (H901928-03)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 312    | 4.00            | 06/04/2019 | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 114    | 100             | 06/04/2019 | ND           | 21.1 | 105        | 20.0          | 4.96 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 889    | 5.00            | 06/06/2019 | ND           | 520  | 98.7       | 527           | 2.05 |           |

### Sample ID: MONITOR WELL #4 (H901928-04)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 132    | 4.00            | 06/04/2019 | ND           | 100  | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 72.4   | 10.0            | 06/04/2019 | ND           | 21.1 | 105        | 20.0          | 4.96 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 599    | 5.00            | 06/06/2019 | ND           | 520  | 98.7       | 527           | 2.05 |           |

### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 06/03/2019                       | Sampling Date:      | 05/29/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 06/06/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: RECOVERY WELL #1 (H901928-05)

| Chloride, SM4500Cl-B | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 108    | 4.00            | 06/04/2019 | /04/2019 ND  |      | 100        | 100           | 0.00 |           |
| Sulfate 375.4        | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 56.4   | 10.0            | 06/04/2019 | ND           | 21.1 | 105        | 20.0          | 4.96 |           |
| TDS 160.1            | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 465    | 5.00            | 06/06/2019 | ND           | 520  | 98.7       | 527           | 2.05 |           |

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Celeg D. Keine



### **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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Celeg D. Keine

| 3ge 6 of 6  | d   |                  |              |       |      |         |            |                  |                  |        |                                |                             |             |          |                                |                |  |           |  |  |                     |                 | 0.05      |                      |                            |                |                      | Ρ            | age              | ə <u> </u>              | 1        | of                     | 1         | _                           |
|---|---|------------------|--------------|-------|------|---------|------------|------------------|------------------|--------|--------------------------------|-----------------------------|-------------|----------|--------------------------------|----------------|--|-----------|--|--|---------------------|-----------------|-----------|----------------------|----------------------------|----------------|----------------------|--------------|------------------|-------------------------|----------|------------------------|-----------|-----------------------------|
| 101 East Marland - H                                |   | no               | 1 T          | 0     | h    |         | <b>a</b> t |                  |                  | 00     | 4                              | T                           |             |          |                                |                | С  | HA        | IN-  | OF   | -CL                 | JST             | OD        | Y A                  | NE                         | ) AI           | IAI                  | _Y           | SIS              | RE                      | QU       | EST                    | Г         |                             |
| Tel (575) 39<br>Fax (575) 39                        | 93-2326 <b>Calu</b><br>93-2476  | Па               |              | a     | U    | UI      | al         | .0               | []               | es     | 9                              | 11                          | IC          | •        | LAB Order ID #                 |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Company Name:                                       |   |                  | BILL T       |       |      |         |            |                  |                  |        | F                              | PO#                         |             |          | T                              |                |  |           |  | 11   | A                   | A 1 3           | 101       | 0.0                  |                            |                |                      |              | -                |                         |          |                        |           |                             |
|   | ating Company   |                  | RICE         |       |      |         | Cor        | npa              |                  |        |                                |                             |             |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Project Manager:                                    |   |                  |              |       | Addr | ess:    |            |                  |                  | (Stre  | et, C                          | City, Zip                   | o)          |          | (Circle or Specify Method No.) |                |  |           |  |  |                     |                 |           | <b>a</b> 10          |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Katie Jones   |   |                  | 122 W        |       |      |         | lobbs      | , New            | Mex              | kico 8 | sector damage                  | -                           |             |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
|   | Street, City, Zip)  |                  | 1070         |       | Phon |         |            |                  |                  |        |                                | Fax#:                       |             |          |                                |                |  |           | 2  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| 122 W Taylor Str<br>Phone #:                        | reet ~ Hobbs, New Mexico 88240  | Fax #:           | (575         | ) 39: | 3-9  | 1/4     |            | _                |                  |        | (                              | (575                        | )397        | 7-1471   |                                |                |  |           | 1200   |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| (575) 393-9   | 174   |                  | ) 397-       | 147   | 1    |         |            |                  |                  | 0      |                                |                             |             |          |                                |                | C35)                                     |           | 010B   |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Project #:  | Project Name:   |                  |              |       | 1    | 7       |            |                  | L                | 1      |                                | >                           |             |          | 1                              |                | led (                                    |           | 9 6-   | P  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Project Location:                                   | Vacuum Junction K-  | 35-1             |              | /     | Com  |         |            | 1                |                  | /      |                                |                             |             | 04 0040  |                                |                | tenc                                     |           | Sel  | Re   |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Contraction and a second state of the second second | -Sec35 K ~ Lea County New Me  | exico            |              | X     | Sam  | pier Si | gnatu      | re.              | Roza             | anne   | Johr                           | nson (:                     | 575)6       | 31-9310  |                                |                | 05 Ex                                    |           | Cr Pb  |  |                     |                 |           |                      | 325                        |                |                      |              |                  | 1800                    | lon      |                        |           | ours                        |
| 1000000   |   |                  |              | T     | MA   | TRI     |            | F                |                  | SER    |                                |                             | SA          | MPLING   |                                |                | TPH 418.1/TX1005 / TX1005 Extended (C35) |           | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | 33 Cd                                      |                     |                 |           | 24                   | GC/MS Semi. Vol. 8270C/625 |                | 8                    |              |                  | Cations (Ca, Mg, Na, K) | 10,00    | sp                     |           | Turn Around Time ~ 24 Hours |
| H901928   |   | ę                | RS           |       |      |         |            | 2                |                  |        | -                              |                             | 1           |          | 2                              | N              | 005 /                                    |           | As B   | I CLP Metals Ag As Ba<br>TCL D Vicipitales | TCLP Semi Volatiles |                 |           | GC/MS Vol. 8260B/624 | ol. 8;                     |                | Pesticides 8081A/608 |              | ŧ                | Z C                     | 2        | Total Dissolved Solids |           | ne ~                        |
| LAD #   | FIELD CODE  | (G)rab or (C)omp | L Z          |       |      |         |            | V0/              |                  |        |                                | 臣                           | 6           | -        | B/6(                           | B/60           | LX1                                      |           | Ag.  | S Ag                                       | Vola                | ides            |           | 826                  | i. <                       | 608            | 081                  | T            | nte              | ž C                     |          | ved                    |           | Ē                           |
| / LAB USE   |   | or ()            | TA           | m     |      | L       | <u>н</u>   | 40m              |                  | 4      | 4- 22                          | Liter                       | 201         |          | 8021                           | 0211           | 8.1/                                     | 700       | tals   | etal                                       | mi                  | estic           |           | Sol.                 | Sem                        | 082            | 8 8                  | S, p         | ő                | C Ca                    | Ĵ.       | ssol                   | ŝ         | ound                        |
| ( ONLY  |   | ab               | NO           |       | Ч    |         | ξl         | 3                | ő                | Sp (   | 04                             | ΞЩ                          | μ           | ĨШ       | а<br>Ш                         | × 8            | 41                                       | 82        | Ne la  |  | P Se                | PP              |           | VS/                  | AS S                       | s 8            | icide                | , TS         | sture            | Suc                     | ates     | Ö                      | ride      | Arc                         |
|   |   | Ū.               | # CONTAINERS | WATER | SOIL | AIR     | וק         | HCL (2 40ml VOA) | HNO <sub>3</sub> | NaHSO4 | H <sub>2</sub> SO <sub>4</sub> | ICE (1-1Liter HDPE)<br>NONE | DATE (2019) | TIME     | MTBE 8021B/602                 | BTEX 8021B/602 | TPH                                      | PAH 8270C | Tota   | TCLP Metals A                              | 102                 | TCLP Pesticides | RCI       | GCI                  | GCM                        | PCB's 8082/608 | Pest                 | BOD, TSS, pH | Moisture Content | Catio                   | Sulfates | Tota                   | Chlorides | Lurn                        |
| /   | Monitor Well #1   | G                | 1            | X     |      |         |            |                  |                  |        |                                | 1                           | 5/2         |          |                                |                |  |           | Ť  | Ť  | Ť                   | T.              |           |                      |                            |                |                      |              | 1                |                         | -        | X                      | x         | Ċ                           |
| 2   | Monitor Well #2   | G                | 1            | X     |      |         |            |                  |                  |        |                                | 1                           | 5/2         | 29 9:15  |                                |                |  |           |  |  |                     | 1               |           |                      |                            |                |                      |              |                  |                         | X        | X                      | X         |                             |
| 3   | Monitor Well #3   | G                | 1            | X     |      |         |            |                  |                  |        |                                | 1                           | 5/2         | 29 10:40 |                                |                |  |           |  |  | Τ                   | Γ               | Γ         |                      |                            |                |                      |              |                  |                         | X        | x                      | X         |                             |
| 4   | Monitor Well #4   | G                | 1            | X     |      |         |            |                  |                  |        |                                | 1                           | 5/2         | 29 12:40 | b                              |                |  |           |  |  |                     | 1               | $\square$ |                      |                            |                |                      |              |                  |                         | x        |                        | x         |                             |
| Š   | Recovery Well #1  | G                | 1            | x     |      |         |            |                  |                  |        |                                | 1                           | 5/2         | 29 14:40 | D                              |                |  |           |  |  |                     | $\square$       |           |                      |                            |                |                      |              |                  |                         | _        | x                      |           |                             |
|   |   |                  |              |       |      |         |            |                  |                  |        |                                |                             | Τ           |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          | T                      |           |                             |
|   |   |                  |              |       |      |         |            |                  |                  |        |                                |                             |             |          | 1                              |                |  |           |  | 1  |                     |                 |           |                      |                            |                |                      |              | $\top$           |                         |          | $\vdash$               | 1         |                             |
|   |   |                  |              |       |      |         |            |                  |                  |        |                                |                             |             |          |                                |                |  |           |  | 1  | $\top$              |                 |           |                      |                            |                |                      |              | $\top$           |                         |          | $\vdash$               |           |                             |
|   | Da  |                  |              |       |      |         |            |                  |                  |        |                                |                             |             |          |                                |                |  |           |  | $\uparrow$                                 | $\top$              | $\square$       | $\square$ |                      |                            |                |                      |              | +                | +                       |          | $\vdash$               |           |                             |
|   | A   |                  |              | Π     |      |         | Τ          |                  |                  |        |                                |                             | 1           |          |                                |                |  |           |  | $\uparrow$                                 |                     |                 |           |                      |                            |                |                      |              |                  | $\uparrow$              |          | $\vdash$               | 1         |                             |
| Retinquished by:                                    | Date: Time:   |                  | ved by:      |       | 1    |         |            |                  | Da               | ate:   | 1                              | Time                        | :           |          | Ph                             | one            | Resi                                     | ults      |  | Y  | es                  |                 | No        | -                    |                            |                |                      |              |                  |                         |          |                        |           | -                           |
| Rozanne Johnso                                      | 16/3/2019 8:00  | 4                | The          | fa    | h    | un      |            | (                | d                | 31     | 20                             | 119                         | 8           | :01      | Fat                            | x Re           | sults                                    |           |  |  | es                  |                 | No        |                      | Add                        | litior         | nal F                | avl          | slum             | her:                    | _        |                        |           |                             |
| Relinquished by:                                    | Date: Time:   | Réceiv           | ved By:      | (La   | bora | atory s | Staff)     |                  | Da               |        |                                | Time                        |             |          | -                              | MAF            | _  |           |  |  | 00                  |                 | 110       |                      | 7100                       |                |                      | an           | turn             | Der.                    |          | _                      |           | -                           |
| taw for   | m 6/3/2019 10.12  |                  | au           | ern   | N    | In      | of         | Len              | 1                | 6-     | 3.                             | -19                         | 1           | 0:12     |                                | Em             | ail F                                    | lesu      | ılts:  | k  | jon                 | es(             | Dric      | esv                  | vd.                        | con            | ı                    |              |                  |                         |          |                        |           |                             |
| Delivered By:                                       | (Circle One)  | Sample           | Conditi      | оп    |      |         | 1.         | Сн               |                  | ED B'  |                                |                             |             |          | rozanne11@windstream.net       |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
|   | and the second se |                  | N            | Cool  | -    | Intact  | -          |                  |                  |        |                                |                             |             |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| O amountant 1                                       |   |                  | Yes          | 1     | Yes  | 1       |            |                  | ials)            |        |                                |                             |             |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |
| Sampier - l   | JPS - Bus - Other   |                  | No           |       | No   |         |            | Y.               | 0_               |        |                                |                             |             |          |                                |                |  |           |  |  |                     |                 |           |                      |                            |                |                      |              |                  |                         |          |                        |           |                             |



September 17, 2019

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION K-35-1** 

Enclosed are the results of analyses for samples received by the laboratory on 09/11/19 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 09/11/2019                       | Sampling Date:      | 09/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 09/17/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: MONITOR WELL #1 (H903143-01)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride*            | 640    | 4.00            | 09/13/2019 | ND           | 104  | 104        | 100           | 0.00  |           |
| Sulfate 375.4        | mg     | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Sulfate*             | 73.5   | 25.0            | 09/13/2019 | ND           | 21.2 | 106        | 20.0          | 0.950 |           |
| TDS 160.1            | mg     | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| TDS*                 | 1660   | 5.00            | 09/13/2019 | ND           | 539  | 102        | 527           | 9.17  |           |

# Sample ID: MONITOR WELL #2 (H903143-02)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride*            | 48.0   | 4.00            | 09/13/2019 | ND           | 104  | 104        | 100           | 0.00  |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Sulfate*             | 53.1   | 10.0            | 09/13/2019 | ND           | 21.2 | 106        | 20.0          | 0.950 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| TDS*                 | 504    | 5.00            | 09/13/2019 | ND           | 539  | 102        | 527           | 9.17  |           |

### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 09/11/2019                       | Sampling Date:      | 09/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 09/17/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

#### Sample ID: MONITOR WELL #3 (H903143-03)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride*            | 320    | 4.00            | 09/13/2019 | ND           | 104  | 104        | 100           | 0.00  |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Sulfate*             | 93.4   | 25.0            | 09/13/2019 | ND           | 21.2 | 106        | 20.0          | 0.950 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| TDS*                 | 942    | 5.00            | 09/13/2019 | ND           | 539  | 102        | 527           | 9.17  |           |

# Sample ID: MONITOR WELL #4 (H903143-04)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride*            | 148    | 4.00            | 09/13/2019 | ND           | 104  | 104        | 100           | 0.00  |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Sulfate*             | 68.3   | 10.0            | 09/13/2019 | ND           | 21.2 | 106        | 20.0          | 0.950 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| TDS*                 | 572    | 5.00            | 09/13/2019 | ND           | 539  | 102        | 527           | 9.17  |           |

### Cardinal Laboratories

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 09/11/2019                       | Sampling Date:      | 09/06/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 09/17/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: RECOVERY WELL #1 (H903143-05)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride*            | 108    | 4.00            | 09/13/2019 | ND           | 104  | 104        | 100           | 0.00  |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Sulfate*             | 53.2   | 10.0            | 09/13/2019 | ND           | 21.2 | 106        | 20.0          | 0.950 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |       |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| TDS*                 | 490    | 5.00            | 09/13/2019 | ND           | 539  | 102        | 527           | 9.17  |           |

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Celez D. Keine



### **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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#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

| age 6 of 6                        | d                             |                  |   |             |      |           |         |                  |                  |                    |                  |                     |            |             |       |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      | Pa             | ige              | 1  |          | of                     | 1         | _                           |
|-----------------------------------|-------------------------------|------------------|---|-------------|------|-----------|---------|------------------|------------------|--------------------|------------------|---------------------|------------|-------------|-------|----------------|----------------|--|-----------|---|----------------|---------------------|-----------------|------|----------------------|----------------------------|----------------|----------------------|----------------|------------------|--|----------|------------------------|-----------|-----------------------------|
| 101 East Marland - He             | obbs, NM 88240                |                  | IT  | ~           | h    | ~ 7       |         |                  |                  | ~                  | ~                | Τ.,                 |            |             |       |                |                | Cł                                       | A         | N-C   | )F-            | cu                  | ST              | יסכ  | ΥA                   | ND                         | AN             | IAL                  | YS             | IS               | REC  | QUE      | EST                    | n<br>     |                             |
| Tel (575) 39<br>Fax (575) 39      |                               | II a             |   | id          | D    | UI        | a       | U.               | r                | e                  | s,               | II                  | IC         | •           |       |                |                |  |           | LA  | во             | rder                | ID #            | ·    |                      |                            |                |                      |                |                  | _  | -        |                        |           |                             |
| Company Name:                     |                               |                  | BILL T  |             | Com  |           |         |                  |                  |                    |                  | PO#                 |            |             |       |                |                |  |           |   | Δ              | NA                  |                 | SIS  |                      |                            | JES            | ът                   |                |                  |  |          |                        |           |                             |
|                                   | ating Company                 |                  | RICE  | E O         | _    |           | ) Cor   | npa              | any              | 101                |                  |                     |            |             |       |                |                |  |           |   |                |                     |                 |      |                      |                            | od N           |                      |                |                  |  |          |                        |           |                             |
| Project Manager:                  | 23                            |                  | Address: (Street, City, Zip)<br>122 W Taylor Street ~ Hobbs, New Mexico 88240 |             |      |           |         |                  | 1                | 1                  | 1                | 1                   | T          | Ť           | 1     | Ê 1            | . 1            | 1  | 1         | T   | 1              | 1                   | Т               | T    | T                    | Ē.                         | 1              | 1                    |                |                  |  |          |                        |           |                             |
| Katie Jones                       |                               |                  | 122 W   | Tayle       | -    |           | Hobbs   | s, Nev           | w Me             | xico               |                  | _                   |            |             |       |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| Contraction and the second second | Street, City, Zip)            |                  | (575  | 1 30        | Phor |           |         |                  |                  |                    |                  | Fax#:<br>(575       | 130        | 7 1         | 471   |                |                |  |           | 1.0   |                |                     |                 |      |                      |                            |                |                      |                |                  |  | 8        |                        |           |                             |
| Phone #:                          | eet ~ Hobbs, New Mexico 88240 | Fax #:           | (575  | ) 38        | 5-9  | 174       |         |                  |                  |                    |                  | (575                | 139        | 7-14        | +/ 1  |                |                | _  |           | B/20  | 1              |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| (575) 393-9                       | 174                           |                  | ) 397-  | 147         | 1    |           |         |                  |                  |                    |                  | 0                   |            |             |       |                |                | 35)                                      |           | 10  |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| Project #:                        | Project Name:                 | (2.3)            | ,   | and for the |      | /         | ~       |                  |                  | )                  | J                | -                   | 7          |             |       |                |                | )) pe                                    |           | Se Hg 6010B/200.  | 2              |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
|                                   | Vacuum Junction K-            | 35-1             |   |             |      | (         | l       |                  |                  | V                  | 1                | / /                 | /          |             |       |                |                | ende                                     |           | Set   |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| Project Location:                 |                               | 02               |   |             | Sam  | pler \$   | Signatu | ire:             | Roz              | zanne              | e Joh            | nnson (             | (575)6     | 631-9       | 310   |                |                | EXT                                      |           | a la  | 2              |                     |                 |      |                      | 10                         |                |                      |                |                  | (6)  | ŝ        |                        |           | S                           |
| T17S-R35E                         | -Sec35 K ~ Lea County New Me  | exico            |   |             |      |           | 0       | t                | 3                | 4                  | - 0              | N                   |            |             |       |                |                | 005                                      |           | Cr Pb   | 5              |                     |                 |      |                      | 162!                       |                |                      |                |                  | C<br>C   | 5        |                        |           | noF                         |
| 10021112                          |                               |                  |   |             | M    | ATR       | X       | /                |                  |                    | RVA'<br>HOE      | TIVE<br>D           | S          | AMP         | LING  |                |                | / TX1                                    |           | Ba Cd   | 5 Ph           | s                   |                 |      | 1624                 | 8270C                      |                | 80                   |                | 5                | Va, K)   | 5        | olids                  | 2         | ~ 24                        |
| H903143                           | FIELD CODE                    | (C)omp           | # CONTAINERS  |             |      |           | ш       | Dml VOA)         | Final Andrews    |                    |                  | (ter HDPE)          | 1000       | (119)       |       | 21B/602        | 21B/602        | TPH 418.1/TX1005 / TX1005 Extended (C35) | S         | Total Metals Ag As Ba Cd Cr Pb Se Hg<br>Tr'i D Metals An As Ba Cd Cr Ph Se Hn | atiles         | TCLP Semi Volatiles | sticides        |      | GC/MS Vol. 8260B/624 | GC/MS Semi. Vol. 8270C/625 | 82/608         | Pesticides 8081A/608 | S, pH          | Content          | Cations (Ca, Mg, Na, K)<br>Anions (CI, SO4, CO3, HCO3) |          | Total Dissolved Solids |           | Turn Around Time ~ 24 Hours |
| ( LAB USE<br>ONLY )               |                               | (G)rab or (C)omp | # CONT  | WATER       | SOIL | AIR       | SLUDGE  | HCL (2 40ml VOA) | HNO <sub>3</sub> | NaHSO <sub>4</sub> | H₂SO₄            | ICE (1-1Liter HDPE) |            | DATE (2019) | TIME  | MTBE 8021B/602 | BTEX 8021B/602 | TPH 418                                  | PAH 8270C | Total Met   | TCLP Volatiles | TCLP Ser            | TCLP Pesticides | RCI  | GC/MS V              | GC/MS S                    | PCB's 8082/608 | Pesticides           | BOD, TSS, pH   | Moisture Content | Cations (  | Sulfates | Total Dis              | Chlorides | Turn Aro                    |
| 1                                 | Monitor Well #1               | G                | 1   | X           |      |           |         | Γ                | Τ                |                    |                  | 1                   | 9          | 0/6         | 13:30 |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      |                | Т                | T  | X        | X                      | X         |                             |
| 2                                 | Monitor Well #2               | G                | 1   | X           |      |           |         |                  | Τ                |                    | Π                | 1                   | 9          | 9/6         | 9:45  |                |                |  |           |   | Τ              |                     |                 |      |                      |                            |                |                      | Т              | Т                | T  | X        | X                      | X         |                             |
| 3                                 | Monitor Well #3               | G                | 1   | x           |      |           |         |                  |                  |                    |                  | 1                   | 9          | 9/6         | 11:00 |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      | $\square$      | $\uparrow$       | T  | X        | X                      | X         |                             |
| Y                                 | Monitor Well #4               | G                | 1   | x           |      |           |         |                  |                  |                    | П                | 1                   | 9          |             | 12:15 |                |                |  |           |   |                |                     |                 |      |                      |                            | 1              |                      | $\neg$         | +                | $\top$   | x        | -                      | -         |                             |
| 5                                 | Recovery Well #1              | G                | 1   | X           |      |           |         | 1                | 1                |                    | П                | 1                   |            |             | 14:00 |                |                |  | 1         | +   | 1              | 1                   |                 |      |                      |                            | 1              |                      | $\uparrow$     | +                | 1  | x        | -                      | -         |                             |
|                                   |                               | Ť                | † ·   |             |      | Н         |         |                  | +                |                    | $\square$        |                     | f          |             |       |                |                |  |           | +   | +              | +                   |                 | _    |                      |                            | -              | -                    |                | +                | +  | Ê        | 1                      |           |                             |
|                                   |                               |                  |   | +           |      | $\square$ |         | -                | +                | $\vdash$           | $\square$        |                     | +          |             |       |                |                |  |           | +   | +              | +                   |                 |      |                      |                            | $\rightarrow$  | $\dashv$             | -+             | +                | +  | +        | +                      | -         | +                           |
|                                   |                               |                  |   | +           | -    | +         |         | _                | +                | $\vdash$           | +                |                     | +          |             |       |                |                |  | +         | +   | ╋              | -                   |                 | -    | _                    | -                          | $\rightarrow$  | $\neg$               | $ \rightarrow$ | +                | +  | +        | +                      | $\vdash$  |                             |
|                                   | 2                             |                  |   | +           | -    | $\vdash$  |         | +                | +                |                    | H                | $\vdash$            | +          | -           |       |                |                |  | +         | +   | +              | +                   | -               |      |                      | +                          | +              | -                    | $\vdash$       | +                | +  | +        | +                      | -         | +                           |
|                                   | 12                            |                  |   | -           | -    | $\vdash$  |         | +                | +-               |                    | $\left  \right $ | $\vdash$            | +          | -           |       | 5              | -              | _  | -         | +   | +              | -                   | -               |      |                      | +                          | +              | _                    | $\vdash$       | +                | +  | +        | +                      |           | -                           |
| Delinevieled blu                  | Data: Time:                   | Dessi            | und hu  |             |      |           |         |                  |                  | ate:               |                  | Time                |            |             |       | Dha            |                |  |           | _   | X              |                     | -               | No   |                      |                            |                |                      |                |                  |  |          | _                      |           |                             |
| Relinquished by:                  |                               | Recei            | ved by:   |             |      | 1         | 11      | 11               | 1                |                    |                  | 1 me                | <b>ð</b> . |             |       |                |                | Resu                                     |           |   |                | es                  | -               | -    |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| Rozanne Johnso                    | h m 9/11/2019 15:50           |                  | au  | aa          | 11   | <u>M</u>  | des.    | 2                |                  | 9                  | -11-             | 17                  | 1          | 5:5         | 50    | Fax            | Re             | sults                                    |           |   | Y              | es                  |                 | No   |                      | Add                        | ition          | al F                 | ax N           | lum              | ber:   |          |                        |           |                             |
| Relinquished by:                  | Date: Time:                   | Recei            | ved By  | : (L        | abor | atory     | Staff   |                  | C                | ate:               | 1                | Time                | э:         |             |       | RE             | MAF            | RKS                                      |           |   |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
|                                   |                               |                  |   |             |      |           |         |                  |                  |                    |                  |                     |            |             |       |                | Em             | ail F                                    | esu       | ılts:   | k              | jon                 | es(             | Dric | esv                  | vd.c                       | com            | ĩ.                   |                |                  |  |          |                        |           |                             |
| Delivered By:                     | (Circle One)                  | Sample           | e Condit  | tion        |      |           |         | CH               | HECK             | ED I               | BY:              |                     |            |             |       |                |                |  |           |   | r              | oza                 | nne             | 11(  | @w                   | ind                        | stre           | am                   | n.ne           | t                |  |          |                        |           |                             |
| $\bigcirc$                        | 8                             |                  | Yes   | Coo         | ~    | Intac     |         | (In              | itials           | )                  |                  |                     |            |             |       |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |
| Sampler - I                       | UPS - Bus - Other:            |                  | No  |             | No   |           |         | T                | 0                |                    |                  |                     |            |             |       |                |                |  |           |   |                |                     |                 |      |                      |                            |                |                      |                |                  |  |          |                        |           |                             |



December 02, 2019

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION K-35-1** 

Enclosed are the results of analyses for samples received by the laboratory on 11/21/19 12:55.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 11/21/2019                       | Sampling Date:      | 11/16/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 12/02/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: MONITOR WELL #1 (H903952-01)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 580    | 4.00            | 11/22/2019 | ND           | 104  | 104        | 100           | 0.00 |           |
| Sulfate 375.4        | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 65.8   | 25.0            | 11/27/2019 | ND           | 18.3 | 91.6       | 20.0          | 18.5 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 1230   | 5.00            | 11/26/2019 | ND           | 523  | 99.2       | 527           | 2.39 |           |

# Sample ID: MONITOR WELL #2 (H903952-02)

| Chloride, SM4500Cl-B | mg     | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 76.0   | 4.00            | 11/22/2019 | ND           | 104  | 104        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 70.6   | 25.0            | 11/27/2019 | ND           | 18.3 | 91.6       | 20.0          | 18.5 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 485    | 5.00            | 11/26/2019 | ND           | 523  | 99.2       | 527           | 2.39 |           |

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 11/21/2019                       | Sampling Date:      | 11/16/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 12/02/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

#### Sample ID: MONITOR WELL #3 (H903952-03)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride*            | 272    | 4.00            | 11/22/2019 | ND           | 104  | 104        | 100           | 0.00 |           |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Sulfate*             | 162    | 25.0            | 11/27/2019 | ND           | 18.3 | 91.6       | 20.0          | 18.5 |           |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| TDS*                 | 833    | 5.00            | 11/26/2019 | ND           | 523  | 99.2       | 527           | 2.39 |           |

# Sample ID: MONITOR WELL #4 (H903952-04)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | Analyzed By: AC |      |            |               |      |           |  |  |  |
|----------------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|--|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |  |
| Chloride*            | 140    | 4.00            | 11/22/2019 | ND              | 104  | 104        | 100           | 0.00 |           |  |  |  |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC        |      |            |               |      |           |  |  |  |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |  |
| Sulfate*             | 73.5   | 25.0            | 11/27/2019 | ND              | 18.3 | 91.6       | 20.0          | 18.5 |           |  |  |  |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC        |      |            |               |      |           |  |  |  |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |  |
| TDS*                 | 564    | 5.00            | 11/26/2019 | ND              | 523  | 99.2       | 527           | 2.39 |           |  |  |  |

### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received:         | 11/21/2019                       | Sampling Date:      | 11/16/2019     |
|-------------------|----------------------------------|---------------------|----------------|
| Reported:         | 12/02/2019                       | Sampling Type:      | Water          |
| Project Name:     | VACUUM JUNCTION K-35-1           | Sampling Condition: | Cool & Intact  |
| Project Number:   | NOT GIVEN                        | Sample Received By: | Tamara Oldaker |
| Project Location: | T17S-R35E-SEC35 K LEA COUNTY, NM |                     |                |

### Sample ID: RECOVERY WELL #1 (H903952-05)

| Chloride, SM4500Cl-B | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |  |  |
|----------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|--|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |
| Chloride*            | 40.0   | 4.00            | 11/22/2019 | ND           | 104  | 104        | 100           | 0.00 |           |  |  |
| Sulfate 375.4        | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |  |  |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |
| Sulfate*             | 155    | 25.0            | 11/27/2019 | ND           | 18.3 | 91.6       | 20.0          | 18.5 |           |  |  |
| TDS 160.1            | mg,    | /L              | Analyze    | d By: AC     |      |            |               |      |           |  |  |
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |  |
| TDS*                 | 428    | 5.00            | 11/26/2019 | ND           | 523  | 99.2       | 527           | 2.39 |           |  |  |

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\*=Accredited Analyte

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Celeg D. Keine



### **Notes and Definitions**

| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
|-------|--|
| ND    | Analyte NOT DETECTED at or above the reporting limit   |
| RPD   | Relative Percent Difference  |
| **    | 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  |

### **Cardinal Laboratories**

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

| 9 to 9 eps   | 4                             |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           | -  |                |                     |                 |     |                      |                            |                |                      | P            | age              | •                       | 1          | of                                 | 1                 |                             |
|--|-------------------------------|------------------|--------------|-------------------------|-------|--------|--------|------------------|------------------|--|--------------------------------|---------------------------------------|--------------------------|-------------|-----------------------------------|-----------|----------------|--|-----------|--|----------------|---------------------|-----------------|-----|----------------------|----------------------------|----------------|----------------------|--------------|------------------|-------------------------|------------|------------------------------------|-------------------|-----------------------------|
| 101 East Marland - Hobbs, NM 88240   |                               |                  |              |                         |       |        |        |                  |                  |  |                                | CHAIN-OF-CUSTODY AND ANALYSIS REQUEST |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Tel (575) 393-2326         Cardinal Laboratories, IIIC.           Fax (575) 393-2476         Cardinal Laboratories, IIIC.              |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       | LAB Order ID #           |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Company Name:         BILL TO         Company:         PO#           RICE Operating Company         RICE Operating Company         PO# |                               |                  |              |                         |       |        |        |                  |                  |  | ANALYSIS REQUEST               |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Project Manager:   | ting Company                  |                  | RICE         |                         | Addre |        | Cor    | mpa              | iny              | (Str   | eet, (                         | City.                                 | Zip)                     |             | (Circle or Specify Method No.)    |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Katie Jones  |                               |                  | 122 W        |                         |       |        | Hobbs  | s. Ne            | w Me             |  |                                |                                       |                          |             |                                   |           |                | 1  |           |  |                |                     |                 |     |                      |                            | 1              | 1                    | Ĩ            | 1                | 1                       | Ι          | 1                                  | 1                 | 1                           |
|  | Street, City, Zip)            |                  |              |                         | hon   |        |        |                  |                  |  | _                              | Fax                                   | #:                       |             |                                   |           |                |  | 1         | _  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| 122 W Taylor Stre  | eet ~ Hobbs, New Mexico 88240 |                  | (575)        | ) 393                   | 3-91  | 174    |        |                  |                  |  |                                | (57                                   | 75)3                     | 397-1       | 471                               |           |                |  | 000       | 2007   |                |                     |                 |     |                      |                            |                |                      | p            |                  |                         |            |                                    |                   |                             |
| Phone #:   | 474                           | Fax #:           | 207          | 4 474                   | 4     |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| (575) 393-9 <sup>-</sup><br>Project #:   | Project Name:                 | (575)            | 397-         | 147                     | 1     | -      | 7      | 1                |                  |  |                                | -                                     |                          | _           |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  | ł                       |            |                                    |                   |                             |
| ir Toject #.   | Vacuum Junction K-            | 35-1             | -1 ///       |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                | nde                                      | -         | e Hg   |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Project Location:  |                               |                  |              | 9                       | Samr  | pler S | ignati | ure              | Ro               | zann   | e Joh                          | nso                                   | n (57                    | 5)631-      | 9310                              |           |                | Exte                                     |           | n a  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         | 3)         |                                    |                   | S                           |
| T17S-R35E  | -Sec35 K ~ Lea County New Me  | exico            |              | 4                       | 1     | ×      | V      | Th               | 8                | -  | -                              |                                       |                          |             |                                   |           |                | 005                                      | Ċ         | 5 2  |                |                     |                 |     |                      | /625                       |                |                      |              |                  |                         | S          |                                    |                   | Pon                         |
| 1022050  |                               |                  |              | V                       | MA    | ATRI   | 1      |                  |                  |  | RVA<br>HOL                     |                                       | E                        | SAM         | PLING                             |           |                | 5/TX1                                    |           | Ba Cd Cr Pb Se t<br>Ba Cd Cr Pb Se   |                | s                   |                 |     | 8/624                | 8270C                      |                | 308                  |              |                  | Na, K)                  | CO3, F     | olids                              |                   | ~ 24                        |
| H909750<br>LAB #   | FIELD CODE                    | (C)omp           | AINERS       |                         |       |        |        | Imi VOA)         |                  |  |                                | ter HDPE)                             |                          | 19)         |                                   | 8021B/602 | 21B/602        | 1/TX100                                  | 20        | als Ag As E<br>als Ag As   | atiles         | ni Volatile         | ticides         |     | ol. 8260E            | emi. Vol.                  | 82/608         | 8081A/6              | , pH         | Content          | Ca, Mg, I               | CI, SO4, 0 | anlyed Si                          |                   | und Time                    |
| ( LAB USE ONLY )   |                               | (G)rab or (C)omp | # CONTAINERS | WATER                   | SOIL  | AIR    | SLUDGE | HCI (2 40ml VOA) | HNO <sub>3</sub> | NaHSO <sub>4</sub>   | H <sub>2</sub> SO <sub>4</sub> | ICE (1-1Liter HDPE)                   | NONE                     | DATE (2019) | TIME                              | MTBE 80   | BTEX 8021B/602 | TPH 418.1/TX1005 / TX1005 Extended (C35) | PAH 8270C | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/B/2007<br>TCI P Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B/624 | GC/MS Semi. Vol. 8270C/625 | PCB's 8082/608 | Pesticides 8081A/608 | BOD, TSS, pH | Moisture Content | Cations (Ca, Mg, Na, K) | Anions (C  | Sultates<br>Total Dissolved Solids | Chlorides         | Turn Around Time ~ 24 Hours |
| 1  | Monitor Well #1               | G                | 1            | X                       |       |        | T      |                  | T                |  |                                | 1                                     |                          | 11/16       | 13:20                             |           |                |  |           |  | T              |                     |                 |     |                      |                            |                |                      | $\square$    |                  |                         | _          | x x                                | ()                | (                           |
| 2  | Monitor Well #2               | G                | 1            | X                       |       |        |        |                  |                  |  |                                | 1                                     |                          | 11/16       | 9:20                              |           |                |  |           | J.   |                |                     |                 |     |                      |                            |                |                      | $\square$    |                  | Π                       |            | x x                                | ()                | (                           |
| 3  | Monitor Well #3               | G                | 1            | X                       |       |        |        |                  |                  |  |                                | 1                                     |                          | 11/16       | 10:50                             |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      | $\Box$       |                  |                         |            | xx                                 | $\langle \rangle$ | (                           |
| 4  | Monitor Well #4               | G                | 1            | X                       |       |        |        |                  |                  |  |                                | 1                                     |                          | 11/16       | 12:05                             |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            | x x                                | $\langle \rangle$ | (                           |
| 5  | Recovery Well #1              | G                | 1            | X                       |       |        |        |                  |                  |  |                                | 1                                     |                          | 11/16       | 16:05                             |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            | XX                                 | ()                | (                           |
|  |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
|  |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  | $\square$               |            | $\perp$                            |                   |                             |
|  |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  | 4                       | _          | $\perp$                            | _                 |                             |
|  |                               | <u> </u>         |              |                         |       |        |        |                  | 1                | -  |                                |                                       |                          |             |                                   |           |                |  |           | _  | _              |                     |                 |     |                      |                            |                |                      |              |                  | 4                       | _          | _                                  | -                 | _                           |
|  |                               |                  | <u> </u>     |                         |       |        |        |                  |                  |  |                                |                                       |                          | -           |                                   |           |                |  |           | _  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Relinquished by:<br>Rozanne Johnso   | Date: Time:<br>12:55          | Receiv           |              |                         |       |        |        |                  |                  | Phone Results         Yes         No           Fax Results         Yes         No         Additional Fax Number: |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Relinquished by Date: Time: Received By: (Laboratory Staff) Date   |                               |                  |              |                         |       |        | ate:   |                  | Ti               | me:  |                                |                                       | RE                       | MAF         | KS:                               |           |                |  |           |  |                |                     | 50 B            |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| U  |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             | Email Results: kjones@riceswd.com |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Delivered By: (Circle One) Samp  |                               |                  |              | e Condition CHECKED BY: |       |        |        |                  |                  |  |                                |                                       | rozanne11@windstream.net |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Yes Yes (Initials)   |                               |                  |              |                         |       |        |        |                  |                  |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                |                     |                 |     |                      |                            |                |                      |              |                  |                         |            |                                    |                   |                             |
| Sampler - l  | JPS - Bus - Other:            |                  | No           |                         | No    |        |        | T                | 9.               |  |                                |                                       |                          |             |                                   |           |                |  |           |  |                | _                   |                 |     | -                    |                            |                |                      |              | _                | _                       |            |                                    |                   |                             |