



# Company: Ritchie Exploration, Inc.

## Lease: Ramsey Trust 15B #1

SEC: 15 TWN: 19S RNG: 31W  
 County: SCOTT  
 State: Kansas  
 Drilling Contractor: WW Drilling, LLC - Rig 12  
 Elevation: 2952 EGL  
 Field Name: Grigston SW Ext  
 Pool: Infield  
 Job Number: 358  
 API #: 15-171-21251

**Operation:**  
 Uploading recovery & pressures

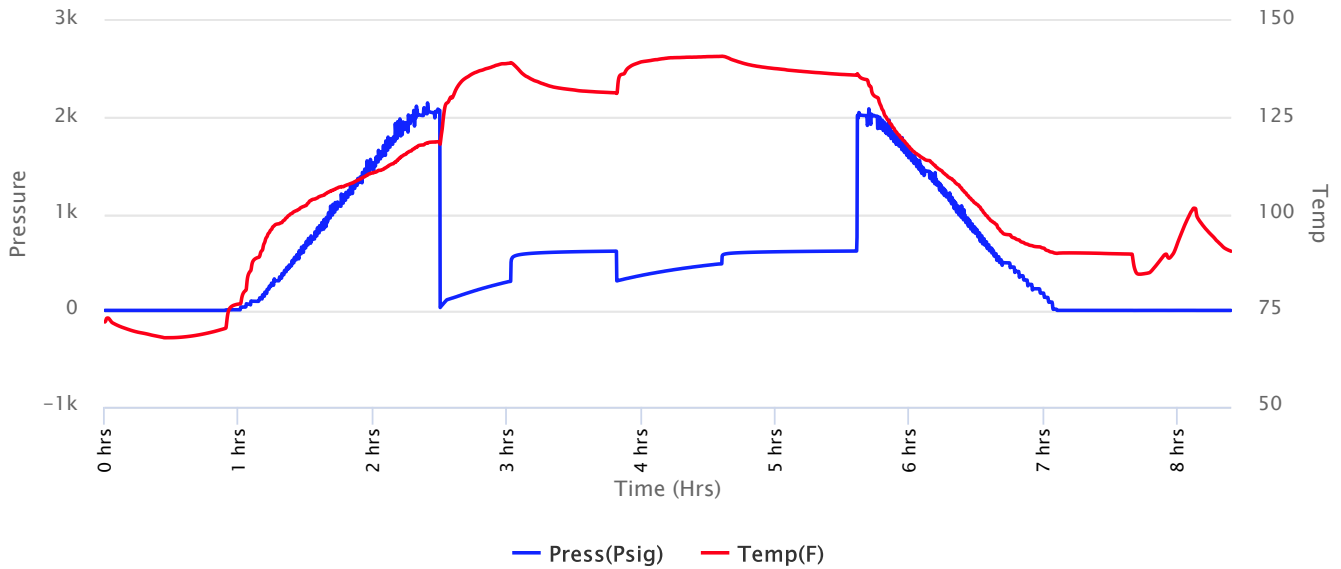
**DATE**  
 June  
**21**  
 2019

**DST #4**      **Formation: Lans K+L**      **Test Interval: 4240 - 4326'**      **Total Depth: 4326'**  
 Time On: 07:49 06/21      Time Off: 15:59 06/21  
 Time On Bottom: 10:16 06/21      Time Off Bottom: 13:16 06/21

Electronic Volume Estimate:  
 1039'

| <u>1st Open</u>                  | 1st Close                     | <u>2nd Open</u>                  | 2nd Close                     |
|----------------------------------|-------------------------------|----------------------------------|-------------------------------|
| Minutes: 30                      | Minutes: 45                   | Minutes: 45                      | Minutes: 60                   |
| Current Reading: 47.9" at 30 min | Current Reading: 0" at 45 min | Current Reading: 38.7" at 45 min | Current Reading: 0" at 60 min |
| Max Reading: 47.9"               | Max Reading: 0"               | Max Reading: 38.7"               | Max Reading: 0"               |

Inside Recorder





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Recovered

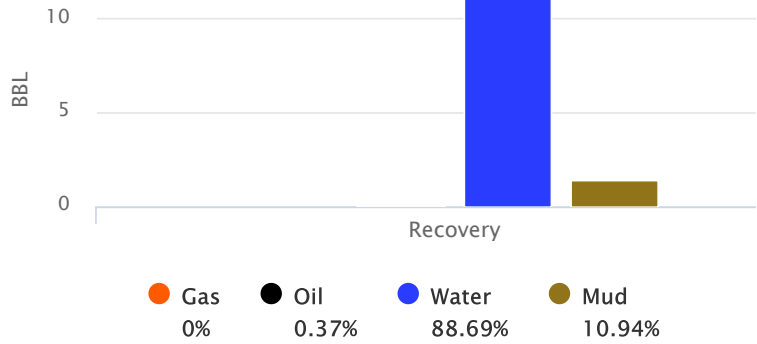
| Foot | BBLs      | Description of Fluid | Gas % | Oil % | Water % | Mud % |
|------|-----------|----------------------|-------|-------|---------|-------|
| 174  | 2.47602   | SLOCHWCM             | 0     | 2     | 48      | 50    |
| 882  | 10.818269 | SLMCW                | 0     | 0     | 98      | 2     |

Total Recovered: 1056 ft  
 Total Barrels Recovered: 13.294289

Reversed Out  
 NO

|   |            |            |
|---|------------|------------|
| Initial Hydrostatic Pressure                | 2018       | PSI        |
| Initial Flow                                | 30 to 302  | PSI        |
| <b>Initial Closed in Pressure</b>           | <b>614</b> | <b>PSI</b> |
| Final Flow Pressure                         | 306 to 483 | PSI        |
| <b>Final Closed in Pressure</b>             | <b>615</b> | <b>PSI</b> |
| Final Hydrostatic Pressure                  | 2018       | PSI        |
| Temperature                                 | 141        | °F         |
| Pressure Change Initial Close / Final Close | 0.0        | %          |

**Recovery at a glance**



GIP cubic foot volume: 0



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|               |                                |  |                           |
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**BUCKET MEASUREMENT:**

1st Open: 1/2" Blow. BOB in 6 mins  
1st Close: NOBB  
2nd Open: 1/4" Blow. BOB in 11 mins  
2nd Close: NOBB

**REMARKS:**

Tool Sample: 0% Gas 0% Oil 100% Water 0% Mud

Ph: 7

Measured RW: .33 @ 80 degrees °F

RW at Formation Temp: 0.194 @ 141 °F

Chlorides: 27,000 ppm



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### Down Hole Makeup

|  |                                 |
|--|---------------------------------|
| <b>Heads Up:</b> 22.36 FT  | <b>Packer 1:</b> 4235.09 FT     |
| <b>Drill Pipe:</b> 4043.78 FT<br><i>ID-3 1/2</i>                                       | <b>Packer 2:</b> 4240.09 FT     |
| <b>Weight Pipe:</b> FT<br><i>ID-2 7/8</i>  | <b>Top Recorder:</b> 4224.51 FT |
| <b>Collars:</b> 186.1 FT<br><i>ID-2 1/4</i>  | <b>Bottom Recorder:</b> 4310 FT |
| <b>Test Tool:</b> 33.57 FT<br><i>ID-3 1/2-FH</i><br><i>Jars</i><br><i>Safety Joint</i> | <b>Well Bore Size:</b> 7 7/8    |
| <b>Total Anchor:</b> 85.91   | <b>Surface Choke:</b> 1"        |
| <b>Anchor Makeup</b>   | <b>Bottom Choke:</b> 5/8"       |
| <b>Packer Sub:</b> 1 FT  |                                 |
| <b>Perforations: (top):</b> 3 FT<br><i>4 1/2-FH</i>                                    |                                 |
| <b>Change Over:</b> .5 FT  |                                 |
| <b>Drill Pipe: (in anchor):</b> 63.41 FT<br><i>ID-3 1/2</i>                            |                                 |
| <b>Change Over:</b> 1 FT   |                                 |
| <b>Perforations: (below):</b> 17 FT<br><i>4 1/2-FH</i>                                 |                                 |



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**Mud Properties**

**Mud Type:** Chem      **Weight:** 9.3      **Viscosity:** 51      **Filtrate:** 6.4      **Chlorides:** 2000 ppm



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### Gas Volume Report

1st Open

2nd Open

| Time | Orifice | PSI | MCF/D |
|------|---------|-----|-------|
|------|---------|-----|-------|

| Time | Orifice | PSI | MCF/D |
|------|---------|-----|-------|
|------|---------|-----|-------|