



Company: Ritchie Exploration, Inc.

Lease: Anderson-Schwartz Trust #1

SEC: 32 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2927 EGL
Field Name: Sutton Township
Pool: Infield
Job Number: 312

Operation:
Uploading recovery & pressures

DATE
March
08
2019

DST #3 **Formation: Pawnee** **Test Interval: 4477 - 4500'** **Total Depth: 4500'**

Time On: 19:58 03/08 Time Off: 04:57 03/09
Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

Electronic Volume Estimate:
269'

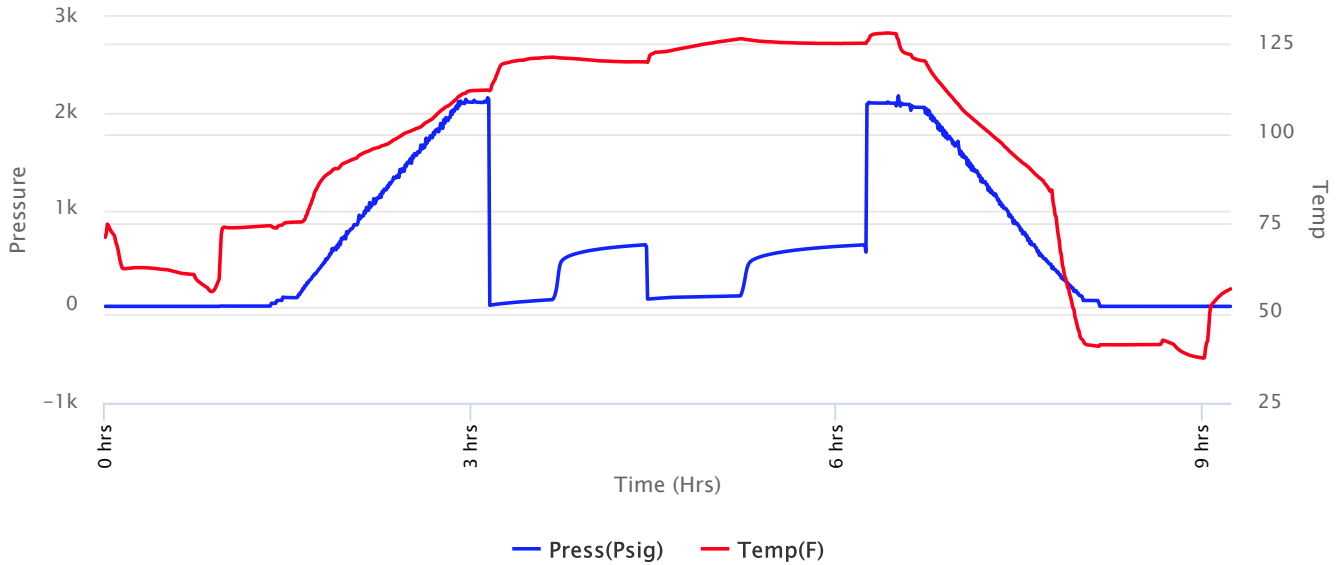
1st Open
Minutes: 30
Current Reading:
5.5" at 30 min
Max Reading: 5.5"

1st Close
Minutes: 45
Current Reading:
0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading:
7.0" at 45 min
Max Reading: 7.0"

2nd Close
Minutes: 60
Current Reading:
0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Anderson-Schwartz Trust #1

SEC: 32 TWN: 19S RNG: 30W
 County: LANE
 State: Kansas
 Drilling Contractor: WW Drilling, LLC - Rig 12
 Elevation: 2927 EGL
 Field Name: Sutton Township
 Pool: Infield
 Job Number: 312

Operation:
 Uploading recovery & pressures

DATE
 March
08
 2019

DST #3 **Formation: Pawnee** **Test Interval: 4477 - 4500'** **Total Depth: 4500'**
 Time On: 19:58 03/08 Time Off: 04:57 03/09
 Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

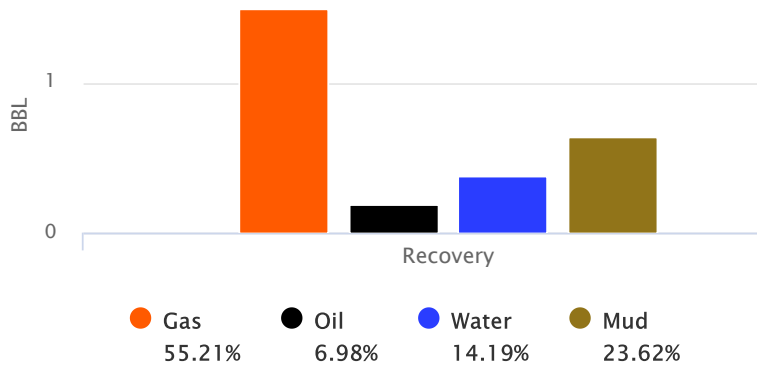
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
105	1.49415	G	100	0	0	0
2	0.02846	O	0	100	0	0
25	0.2979349	SLWCHOCM	0	37	7	56
60	0.2952	SLOC SLWCM	0	4	7	89
60	0.2952	SLOCHWCM	0	8	34	58
60	0.2952	SLOC SLMCW	0	5	82	13

Total Recovered: 312 ft
 Total Barrels Recovered: 2.7061449

Reversed Out
NO

Initial Hydrostatic Pressure	2116	PSI
Initial Flow	11 to 70	PSI
Initial Closed in Pressure	639	PSI
Final Flow Pressure	76 to 109	PSI
Final Closed in Pressure	638	PSI
Final Hydrostatic Pressure	2116	PSI
Temperature	127	°F
Pressure Change Initial Close / Final Close	0.1	%

Recovery at a glance



GIP cubic foot volume: 8.38891



**Company: Ritchie Exploration,
Inc.**

**Lease: Anderson-Schwartz
Trust #1**

SEC: 32 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2927 EGL
Field Name: Sutton Township
Pool: Infield
Job Number: 312

Operation:
Uploading recovery &
pressures

DATE
March
08
2019

DST #3 Formation: Pawnee Test Interval: 4477 - Total Depth: 4500'
4500'
Time On: 19:58 03/08 Time Off: 04:57 03/09
Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

BUCKET MEASUREMENT:

Diesel in Bucket

1st Open: Surface blow building to 6"

1st Close: No BB

2nd Open: Surface blow building to 7 3/4"

2nd Close: Surface BB

REMARKS:

Tool Sample: 0% Gas 10% Oil 72% Water 18% Mud

Ph: 7.5

Measured RW: .35 @ 68 degrees °F

RW at Formation Temp: 0.196 @ 127 °F

Chlorides: 69,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Anderson-Schwartz Trust #1

SEC: 32 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2927 EGL
Field Name: Sutton Township
Pool: Infield
Job Number: 312

Operation:
Uploading recovery & pressures

DATE
March
08
2019

DST #3 Formation: Pawnee Test Interval: 4477 - 4500' Total Depth: 4500'
Time On: 19:58 03/08 Time Off: 04:57 03/09
Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

Down Hole Makeup

Heads Up: 9.0400000000001 FT	Packer 1: 4472 FT
Drill Pipe: 4267.26 FT <i>ID-3 1/2</i>	Packer 2: 4477 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4461.42 FT
Collars: 186.21 FT <i>ID-2 1/4</i>	Bottom Recorder: 4479 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 23	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 22 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

**Lease: Anderson-Schwartz
Trust #1**

SEC: 32 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: WW Drilling, LLC -
Rig 12
Elevation: 2927 EGL
Field Name: Sutton Township
Pool: Infield
Job Number: 312

Operation:
Uploading recovery &
pressures

DATE
March
08
2019

DST #3 Formation: Pawnee Test Interval: 4477 - Total Depth: 4500'
4500'
Time On: 19:58 03/08 Time Off: 04:57 03/09
Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 53 **Filtrate:** 7.2 **Chlorides:** 4,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Anderson-Schwartz Trust #1

SEC: 32 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 12
Elevation: 2927 EGL
Field Name: Sutton Township
Pool: Infield
Job Number: 312

Operation:
Uploading recovery & pressures

DATE
March
08
2019

DST #3 Formation: Pawnee Test Interval: 4477 - 4500' Total Depth: 4500'
Time On: 19:58 03/08 Time Off: 04:57 03/09
Time On Bottom: 23:02 03/08 Time Off Bottom: 02:02 03/09

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D