

**Operation:**Uploading recovery &  
pressures**Company: Grand Mesa  
Operating Company  
Lease: O'Brien #2-9**SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL  
Field Name: Hickok Road  
Pool: Infield  
Job Number: 421  
API #: 15-101-22638-00-00**DATE**

November

**16**

2019

**DST #1****Formation:****Test Interval: 3944 -  
4037'****Total Depth: 4037'**

Time On: 21:45 11/16

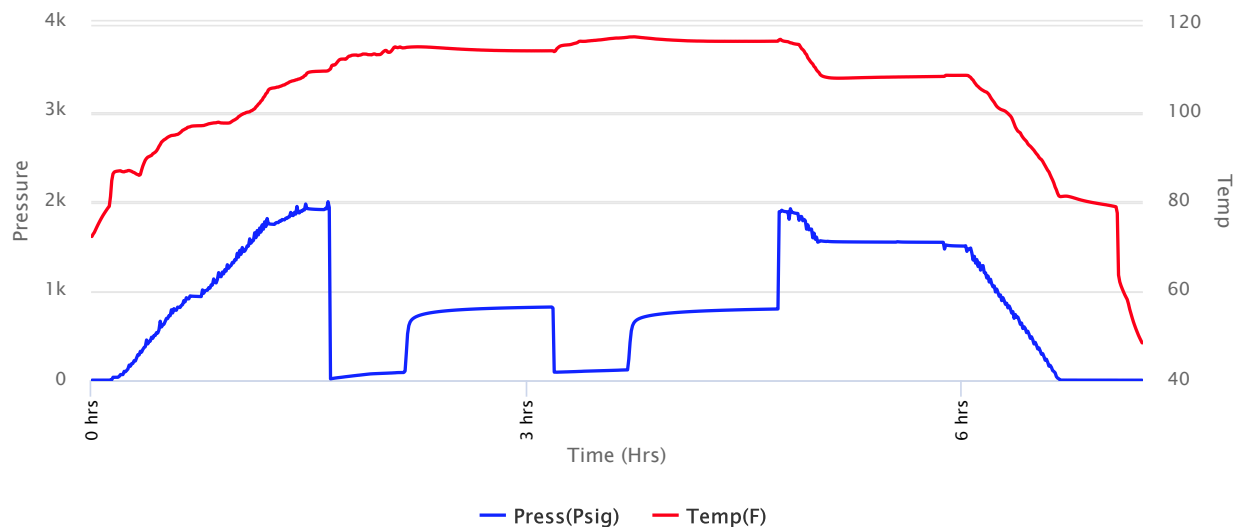
Time Off: 05:55 11/17

Time On Bottom: 00:06 11/17

Time Off Bottom: 03:06 11/17

Electronic Volume  
Estimate:  
217'1st Open  
Minutes: 30  
Current Reading:  
7.8" at 30 min  
Max Reading: 7.8"1st Close  
Minutes: 60  
Current Reading:  
0" at 60 min  
Max Reading: 0"2nd Open  
Minutes: 30  
Current Reading:  
5.5" at 30 min  
Max Reading: 5.5"2nd Close  
Minutes: 60  
Current Reading:  
0" at 60 min  
Max Reading: 0"

Inside Recorder





**Company: Grand Mesa  
Operating Company  
Lease: O'Brien #2-9**

SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL  
Field Name: Hickok Road  
Pool: Infield  
Job Number: 421  
API #: 15-101-22638-00-00

**Operation:**

Uploading recovery &  
pressures

**DATE**

November  
**16**  
2019

**DST #1**

**Formation:**

**Test Interval: 3944 -  
4037'**

**Total Depth: 4037'**

Time On: 21:45 11/16

Time Off: 05:55 11/17

Time On Bottom: 00:06 11/17

Time Off Bottom: 03:06 11/17

Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
100	1.4060558	M (trace O)	0	.1	0	99.9
60	0.2952	HWCM (trace O)	0	.1	42.9	57
60	0.2952	HWCM	0	0	44	56

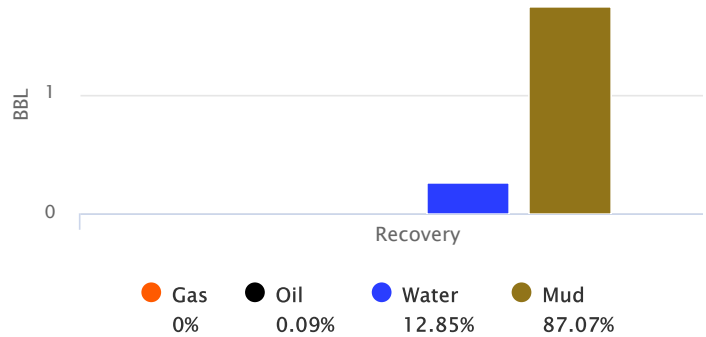
Total Recovered: 220 ft

Total Barrels Recovered: 1.9964558

**Reversed Out  
NO**

**Recovery at a glance**

Initial Hydrostatic Pressure	1912	PSI
Initial Flow	16 to 87	PSI
<b>Initial Closed in Pressure</b>	<b>817</b>	<b>PSI</b>
Final Flow Pressure	91 to 116	PSI
<b>Final Closed in Pressure</b>	<b>795</b>	<b>PSI</b>
Final Hydrostatic Pressure	1896	PSI
Temperature	118	°F
Pressure Change Initial Close / Final Close	2.7	%



GIP cubic foot volume: 0



**Company: Grand Mesa  
Operating Company  
Lease: O'Brien #2-9**

SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL  
Field Name: Hickok Road  
Pool: Infield  
Job Number: 421  
API #: 15-101-22638-00-00

**Operation:**

Uploading recovery &  
pressures

**DATE**

November  
**16**  
2019

**DST #1**

**Formation:**

**Test Interval: 3944 -  
4037'**

**Total Depth: 4037'**

Time On: 21:45 11/16

Time Off: 05:55 11/17

Time On Bottom: 00:06 11/17

Time Off Bottom: 03:06 11/17

**BUCKET MEASUREMENT:**

1st Open: 1/2" blow building to 7 1/2"

1st Close: No BB

2nd Open: Surface blow building to 5 1/4"

2nd Close: No BB

**REMARKS:**

Tool Sample: 0% Gas .3% Oil 15.7% Water 84% Mud

Ph: 8.0

Measured RW: GAUGE DIDN'T WORK @ degrees °F

Chlorides: 22,000 ppm



**Company: Grand Mesa  
Operating Company**

SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL

**Operation:**Uploading recovery &  
pressures**Lease: O'Brien #2-9**Field Name: Hickok Road  
Pool: Infield  
Job Number: 421  
API #: 15-101-22638-00-00**DATE**

November

**16**

2019

**DST #1****Formation:****Test Interval: 3944 -  
4037'****Total Depth: 4037'**

Time On: 21:45 11/16

Time Off: 05:55 11/17

Time On Bottom: 00:06 11/17

Time Off Bottom: 03:06 11/17

**Down Hole Makeup****Heads Up:** 21.28 FT**Packer 1:** 3939.17 FT**Drill Pipe:** 3811.06 FT**Packer 2:** 3944.17 FT

ID-3 1/2

**Top Recorder:** 3928.59 FT**Weight Pipe:** 0 FT**Bottom Recorder:** 4015 FT

ID-2 7/8

**Collars:** 121.82 FT**Well Bore Size:** 7 7/8

ID-2 1/4

**Surface Choke:** 1"**Test Tool:** 33.57 FT**Bottom Choke:** 5/8"

ID-3 1/2-FH

Jars

Safety Joint

**Total Anchor:** 92.83**Anchor Makeup****Packer Sub:** 1 FT**Perforations: (top):** 3 FT

4 1/2-FH

**Change Over:** 1 FT**Drill Pipe: (in anchor):** 63.83 FT

ID-3 1/2

**Change Over:** 1 FT**Perforations: (below):** 23 FT

4 1/2-FH

**Operation:****Company: Grand Mesa  
Operating Company  
Lease: O'Brien #2-9**SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL  
Field Name: Hickok Road  
Pool: Infield

Uploading recovery &  
pressures

Job Number: 421  
API #: 15-101-22638-00-00

**DATE**  
November  
**16**  
2019

**DST #1**      **Formation:**      **Test Interval: 3944 - 4037'**      **Total Depth: 4037'**  
Time On: 21:45 11/16      Time Off: 05:55 11/17  
Time On Bottom: 00:06 11/17      Time Off Bottom: 03:06 11/17

### Mud Properties

**Mud Type:** Chemical      **Weight:** 9.0      **Viscosity:** 57      **Filtrate:** 6.8      **Chlorides:** 2,000 ppm



**Operation:**

Uploading recovery &  
pressures

**Company: Grand Mesa  
Operating Company  
Lease: O'Brien #2-9**

SEC: 9 TWN: 16S RNG: 29W  
County: LANE  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2662 GL  
Field Name: Hickok Road  
Pool: Infield  
Job Number: 421  
API #: 15-101-22638-00-00

**DATE**

November

**16**

2019

**DST #1**

**Formation:**

**Test Interval: 3944 -  
4037'**

**Total Depth: 4037'**

Time On: 21:45 11/16

Time Off: 05:55 11/17

Time On Bottom: 00:06 11/17

Time Off Bottom: 03:06 11/17

### Gas Volume Report

#### 1st Open

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

#### 2nd Open

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