



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Ritchie Exploration Inc  
 8100 E 22d St n 700  
 Wichita, Ks 67278  
 ATTN: John Goldsmith

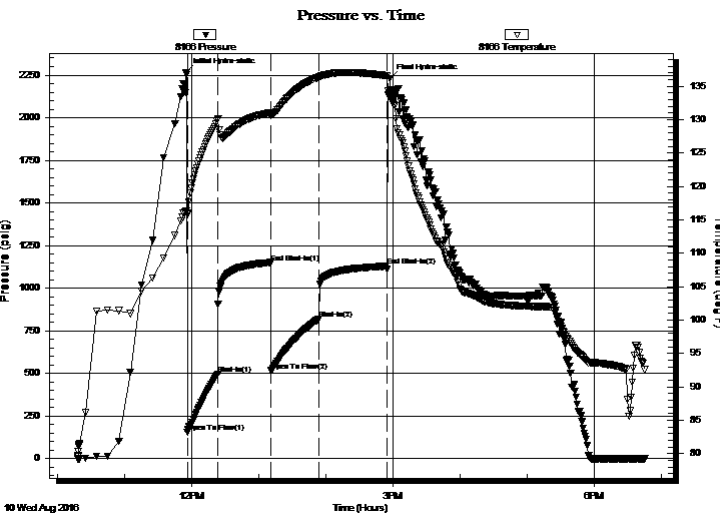
**32-19s-30w Lane, Ks**  
**Anderson 32B #1**  
 Job Ticket: 65501 **DST#: 4**  
 Test Start: 2016.08.10 @ 10:18:13

## GENERAL INFORMATION:

Formation: **Pawnee- Ft Scott**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 11:56:13  
 Time Test Ended: 18:44:43  
 Interval: **4475.00 ft (KB) To 4549.00 ft (KB) (TVD)**  
 Total Depth: 4549.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Brandon Turley  
 Unit No: 79  
 Reference Elevations: 2934.00 ft (KB)  
 2929.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8166 Outside**  
 Press@RunDepth: 820.24 psig @ 4476.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.08.10 End Date: 2016.08.10 Last Calib.: 2016.08.10  
 Start Time: 10:18:18 End Time: 18:44:42 Time On Btm: 2016.08.10 @ 11:55:13  
 Time Off Btm: 2016.08.10 @ 14:57:13

TEST COMMENT: IF: BOB in 1 1/2 min.  
 IS: BOB in 7 min.  
 FF: BOB in 2 min.  
 FS: BOB in 30 min.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2265.99	116.33	Initial Hydro-static
1	152.52	115.84	Open To Flow (1)
28	496.23	129.99	Shut-In(1)
76	1150.55	131.03	End Shut-In(1)
76	514.85	130.87	Open To Flow (2)
119	820.24	136.39	Shut-In(2)
179	1129.24	136.58	End Shut-In(2)
182	2228.01	133.51	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	gocm 20%g 10%o 70%m	0.31
126.00	mcco 20%g 60%o 20%m	1.25
1827.00	go 40%g 60%o	25.63
239.00	go 20%g 80%o	3.35
0.00	1525 GIP	0.00

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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**32-19s-30w Lane, Ks**  
**Anderson 32B #1**  
Job Ticket: 65501 **DST#: 4**  
Test Start: 2016.08.10 @ 10:18:13

## GENERAL INFORMATION:

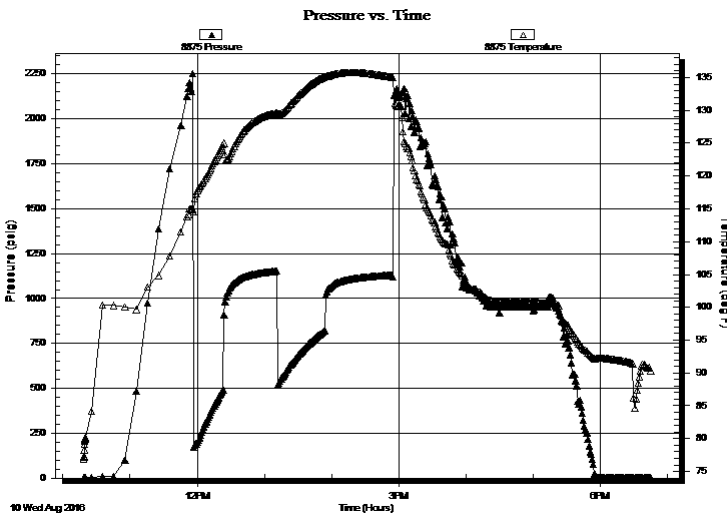
Formation: **Pawnee- Ft Scott**  
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 11:56:13 Tester: Brandon Turley  
Time Test Ended: 18:44:43 Unit No: 79  
**Interval: 4475.00 ft (KB) To 4549.00 ft (KB) (TVD)** Reference Elevations: 2934.00 ft (KB)  
Total Depth: 4549.00 ft (KB) (TVD) 2929.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

## Serial #: 8875 Inside

Press@RunDepth: psig @ 4476.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2016.08.10 End Date: 2016.08.10 Last Calib.: 2016.08.10  
Start Time: 10:18:33 End Time: 18:44:57 Time On Btm:  
Time Off Btm:

**TEST COMMENT:** IF: BOB in 1 1/2 min.  
IS: BOB in 7 min.  
FF: BOB in 2 min.  
FS: BOB in 30 min.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	gocm 20%g 10%o 70%m	0.31
126.00	mcgo 20%g 60%o 20%m	1.25
1827.00	go 40%g 60%o	25.63
239.00	go 20%g 80%o	3.35
0.00	1525 GIP	0.00

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ritchie Exploration Inc

**32-19s-30w Lane, Ks**

8100 E 22d St n 700  
Wichita, Ks 67278

**Anderson 32B #1**

Job Ticket: 65501

**DST#: 4**

ATTN: John Goldsmith

Test Start: 2016.08.10 @ 10:18:13

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
63.00	gocm 20%g 10%o 70%m	0.310
126.00	mcgo 20%g 60%o 20%m	1.248
1827.00	go 40%g 60%o	25.628
239.00	go 20%g 80%o	3.353
0.00	1525 GIP	0.000

Total Length: 2255.00 ft      Total Volume: 30.539 bbl

Num Fluid Samples: 0

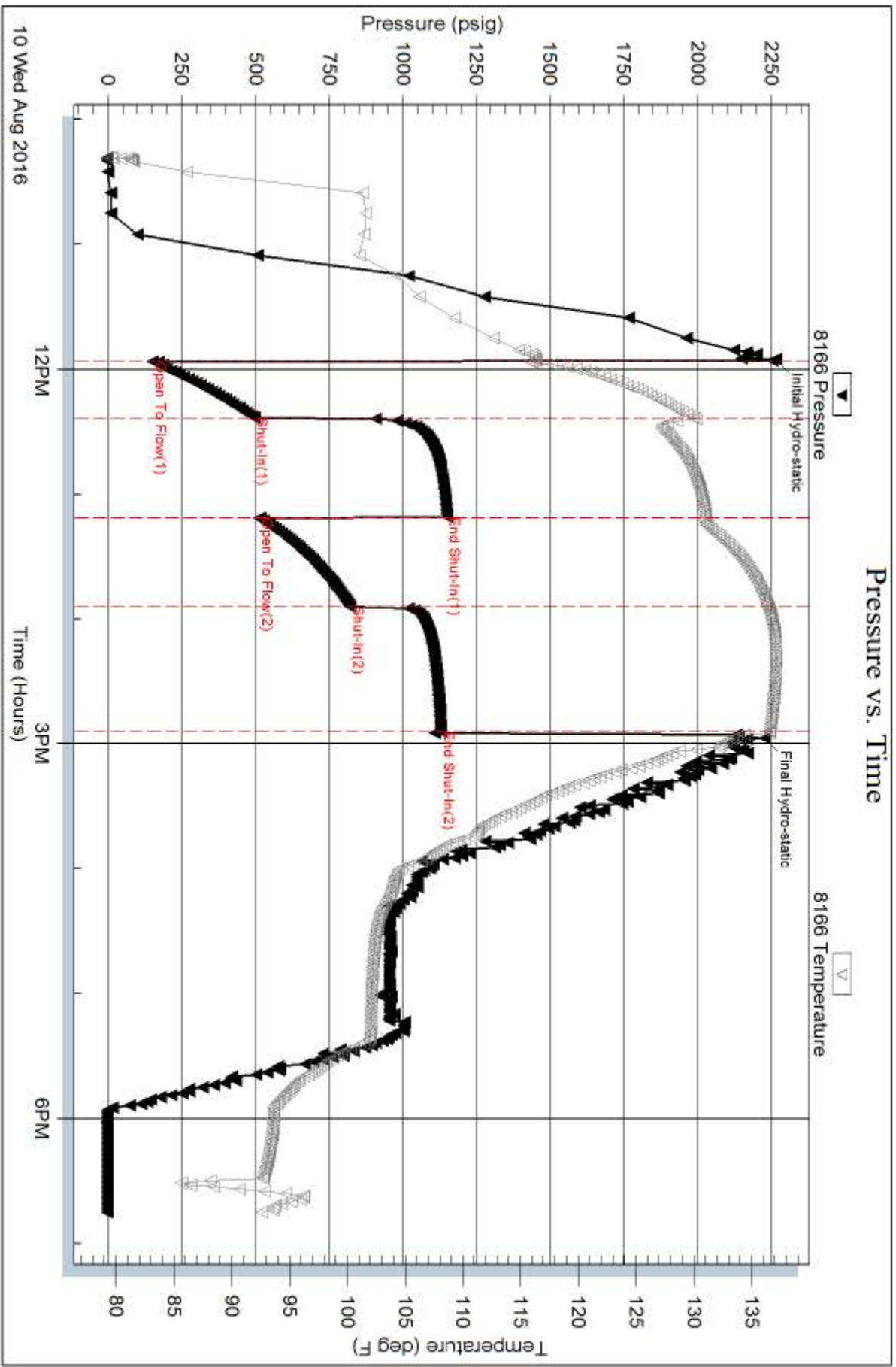
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 38@90=35



Serial #: 8875

Inside

Ritchie Exploration Inc

Anderson 32B #1

DST Test Number: 4

