



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Outlaw Well Service  
1408 West 42nd  
Hays KS 67601  
ATTN: Steve Reed

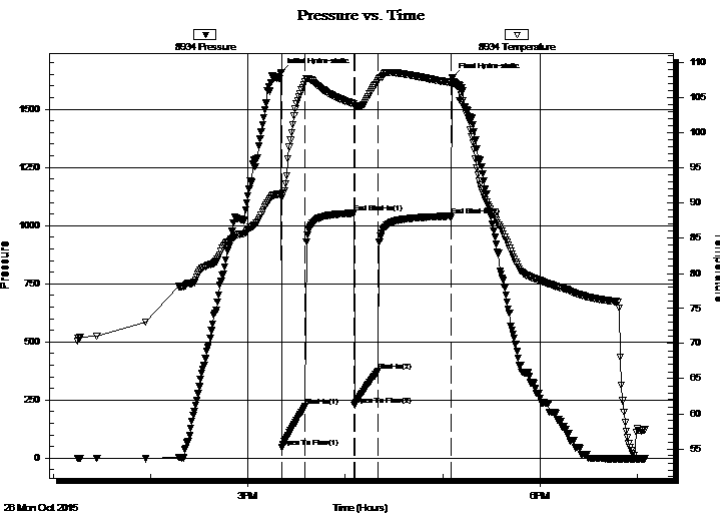
**20-8-19, Rooks, KS**  
**Lowry #5-13**  
Job Ticket: 64865      **DST#: 4**  
Test Start: 2015.10.26 @ 13:15:05

## GENERAL INFORMATION:

Formation: **Arb**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 15:21:00  
Time Test Ended: 19:04:59  
Interval: **3407.00 ft (KB) To 3470.00 ft (KB) (TVD)**  
Total Depth: 3470.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Fair  
Reference Elevations: 2009.00 ft (KB)  
2001.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8934      Outside**  
Press@RunDepth: 374.11 psig @ 3408.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2015.10.26      End Date: 2015.10.26      Last Calib.: 2015.10.26  
Start Time: 13:15:05      End Time: 19:04:59      Time On Btm: 2015.10.26 @ 15:20:30  
Time Off Btm: 2015.10.26 @ 17:06:00

TEST COMMENT: IF-BOB in 3min  
IS-No blow  
FF-BOB in 3min  
FS-No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.69	91.40	Initial Hydro-static
1	44.78	90.78	Open To Flow (1)
15	221.97	107.26	Shut-In(1)
45	1053.86	104.19	End Shut-In(1)
46	229.01	103.91	Open To Flow (2)
60	374.11	107.42	Shut-In(2)
105	1041.02	107.21	End Shut-In(2)
106	1635.49	107.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
480.00	MCW 70%W 30%M	6.46
240.00	OS WCM 5%W 95%M	3.37

\* Recovery from multiple tests

## Gas Rates

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



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## FLUID SUMMARY

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**Lowry #5-13**

Job Ticket: 64865

**DST#: 4**

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### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

25000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
480.00	MCW 70%W 30%M	6.460
240.00	OS WCM 5%W 95%M	3.367

Total Length: 720.00 ft

Total Volume: 9.827 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

