



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Culbreath Oil And Gas Company

**4-12s-32w Logan Co KS**

3501 S Yale Ave.  
Tulsa OK 74135

**Voth #1-4**

Job Ticket: 63717

**DST#: 2**

ATTN: Larry Nicholson

Test Start: 2017.04.18 @ 04:53:15

## GENERAL INFORMATION:

Formation: **H**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 07:06:00  
 Time Test Ended: 15:52:45  
 Interval: **4190.00 ft (KB) To 435.00 ft (KB) (TVD)**  
 Total Depth: 4235.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Mike Roberts  
 Unit No: 81  
 Reference Elevations: 3050.00 ft (KB)  
 3040.00 ft (CF)  
 KB to GR/CF: 10.00 ft

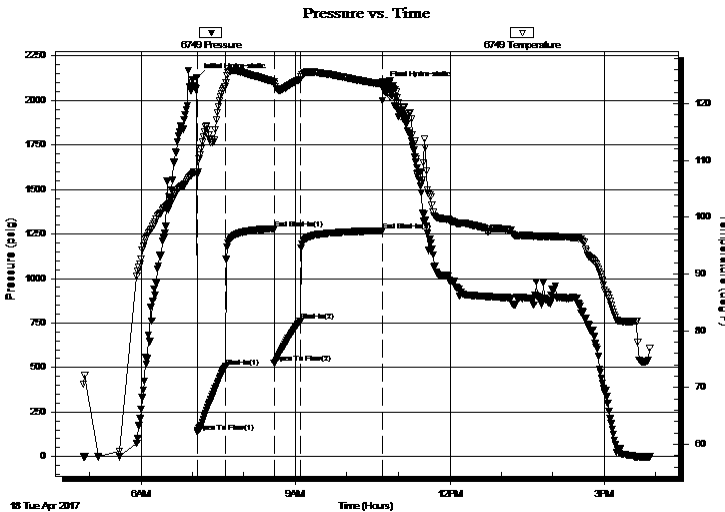
## Serial #: 6749

**Outside**

Press@RunDepth: 759.17 psig @ 4230.00 ft (KB)  
 Start Date: 2017.04.18 End Date: 2017.04.18  
 Start Time: 04:53:15 End Time: 15:52:45  
 Capacity: 8000.00 psig  
 Last Calib.: 2017.04.18  
 Time On Btm: 2017.04.18 @ 07:05:30  
 Time Off Btm: 2017.04.18 @ 10:42:00

**TEST COMMENT:** IF:BOB in 2 min.  
 IS:BOB in 9 min. died back to 9"  
 FF:BOB in 2 min.  
 FS:BOB in 4 min. died in 85 min

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2127.71	108.06	Initial Hydro-static
1	135.64	107.52	Open To Flow (1)
33	505.00	123.03	Shut-In(1)
90	1280.62	123.82	End Shut-In(1)
90	525.24	123.46	Open To Flow (2)
120	759.17	124.25	Shut-In(2)
216	1265.83	123.39	End Shut-In(2)
217	2085.66	123.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 1798	0.00
1860.00	gco 50%g 50%o	26.09
124.00	gcmo 5%g 40%m 55%o	1.74

\* Recovery from multiple tests

## Gas Rates

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





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**FLUID SUMMARY**

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## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.57 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GIP= 1798	0.000
1860.00	gco 50%g 50%o	26.091
124.00	gcmo 5%g 40%m 55%o	1.739

Total Length: 1984.00 ft      Total Volume: 27.830 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

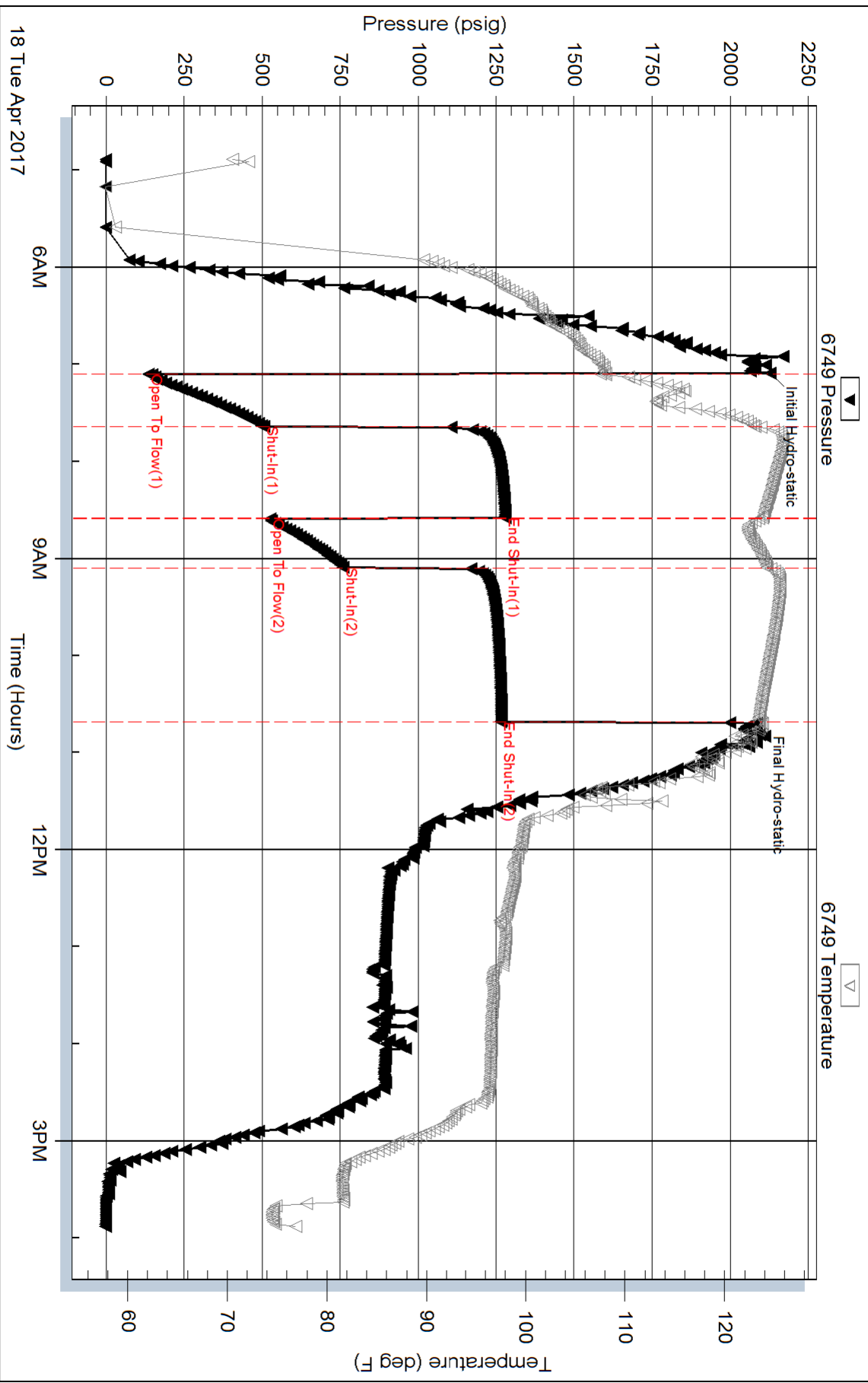
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API= 41@ 70 corrected to 40 @ 60

### Pressure vs. Time



Serial #: 8672

Inside

Culbreath Oil And Gas Company

Voith #1-4

DST Test Number: 2

