



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Culbreath Oil & Gas Company Inc.

**5-15S-34W Logan, KS**

3501 S. Yale Ave.  
Tulsa, OK 74135

**Sowers #1-5**

Job Ticket: 65616

**DST#: 2**

ATTN: Richard Bell

Test Start: 2016.10.07 @ 18:34:15

## GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:09:30

Time Test Ended: 02:03:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

**Interval: 4023.00 ft (KB) To 4064.00 ft (KB) (TVD)**

Reference Elevations: 2922.00 ft (KB)

Total Depth: 4064.00 ft (KB) (TVD)

2912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

**Serial #: 6751 Outside**

Press@RunDepth: 649.60 psig @ 4025.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.07

End Date:

2016.10.08

Last Calib.: 2016.10.08

Start Time: 18:34:15

End Time:

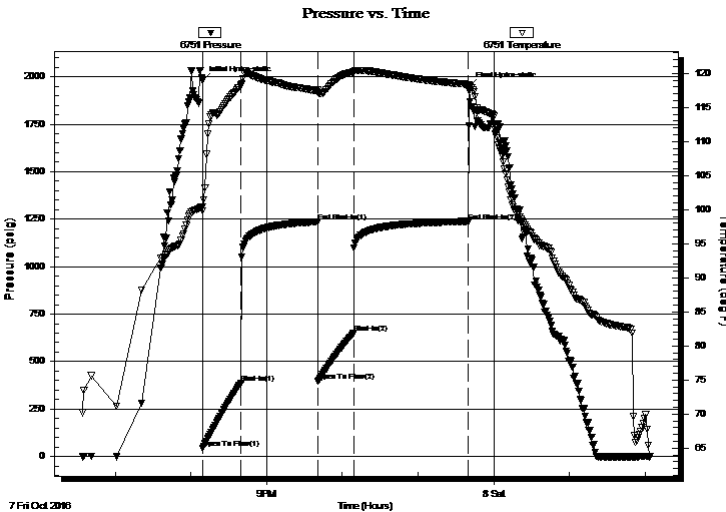
02:03:15

Time On Btm: 2016.10.07 @ 20:09:15

Time Off Btm: 2016.10.07 @ 23:40:30

**TEST COMMENT:** IF:BOB in 4 min.  
IS:No return blow  
FF:BOB in 4 min.  
FS:No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1980.01	100.38	Initial Hydro-static
1	41.78	99.81	Open To Flow (1)
31	388.02	118.28	Shut-In(1)
92	1234.94	117.52	End Shut-In(1)
92	396.49	117.21	Open To Flow (2)
120	649.60	120.18	Shut-In(2)
211	1238.26	118.37	End Shut-In(2)
212	1946.16	117.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
496.00	sw cm 20%sw 80%m	7.03
992.00	sw 100%sw	14.06

\* Recovery from multiple tests

## Gas Rates

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



# DRILL STEM TEST REPORT

Culbreath Oil & Gas Company Inc.

**5-15S-34W Logan, KS**

3501 S. Yale Ave.  
Tulsa, OK 74135

**Sowers #1-5**

Job Ticket: 65616

**DST#: 2**

ATTN: Richard Bell

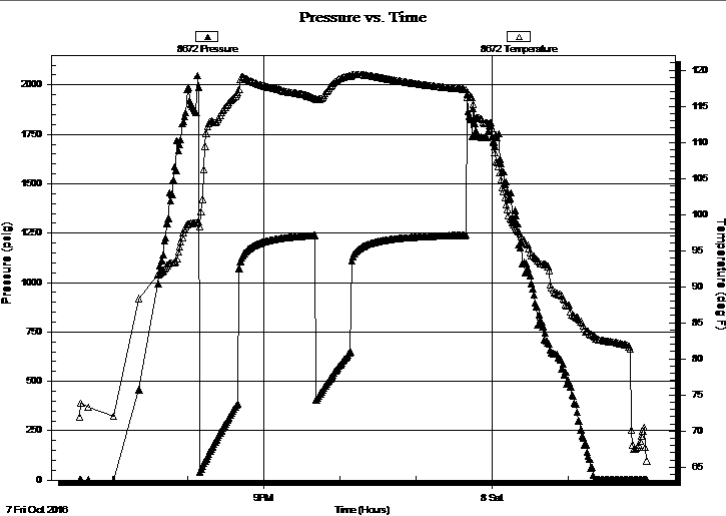
Test Start: 2016.10.07 @ 18:34:15

## GENERAL INFORMATION:

Formation: <b>LKC J</b>			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Reset)	
Time Tool Opened: 20:09:30		Tester: Mike Roberts	
Time Test Ended: 02:03:15		Unit No: 81	
<b>Interval: 4023.00 ft (KB) To 4064.00 ft (KB) (TVD)</b>		Reference Elevations: 2922.00 ft (KB)	
Total Depth: 4064.00 ft (KB) (TVD)		2912.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Poor	KB to GR/CF: 10.00 ft	

<b>Serial #: 8672</b>	<b>Inside</b>				
Press@RunDepth: psig @	4025.00 ft (KB)	Capacity: 8000.00 psig			
Start Date: 2016.10.07	End Date: 2016.10.08	Last Calib.: 1899.12.30			
Start Time: 18:34:15	End Time: 02:03:00	Time On Btm:			
		Time Off Btm:			

TEST COMMENT: IF:BOB in 4 min.  
IS:No return blow  
FF:BOB in 4 min.  
FS:No return blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
496.00	sw cm 20%sw 80%m	7.03
992.00	sw 100%sw	14.06

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Culbreath Oil & Gas Company Inc.

**5-15S-34W Logan, KS**

3501 S. Yale Ave.  
Tulsa, OK 74135

**Sowers #1-5**

Job Ticket: 65616

**DST#: 2**

ATTN: Richard Bell

Test Start: 2016.10.07 @ 18:34:15

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 50.00 sec/qt  
Water Loss: 8.77 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 20000.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: 0 deg API  
Water Salinity: 17000 ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
496.00	sw cm 20%sw 80%m	7.031
992.00	sw 100%sw	14.062

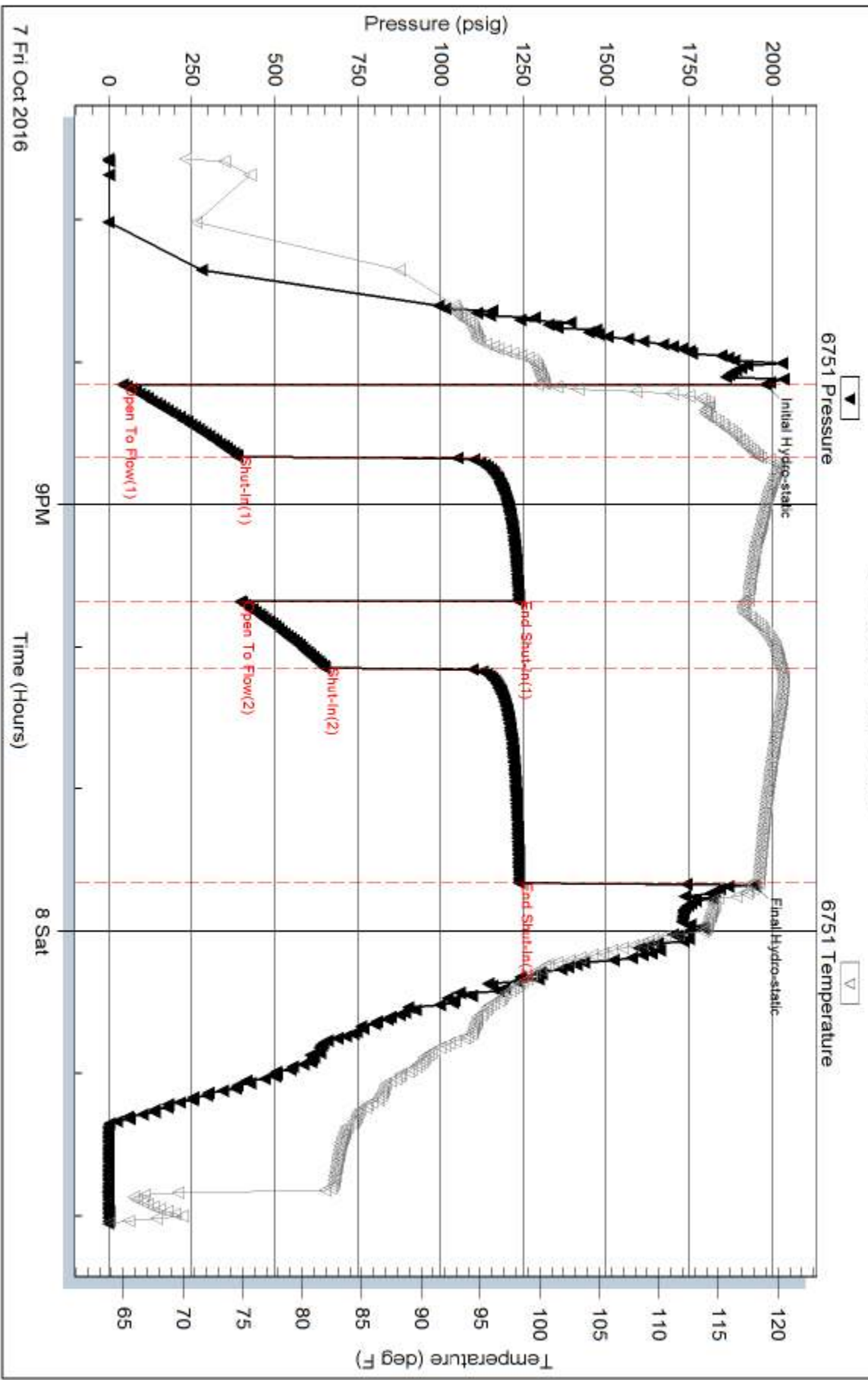
Total Length: 1488.00 ft      Total Volume: 21.093 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: RW= .558@49.6= 17,000 ppm

# Pressure vs. Time



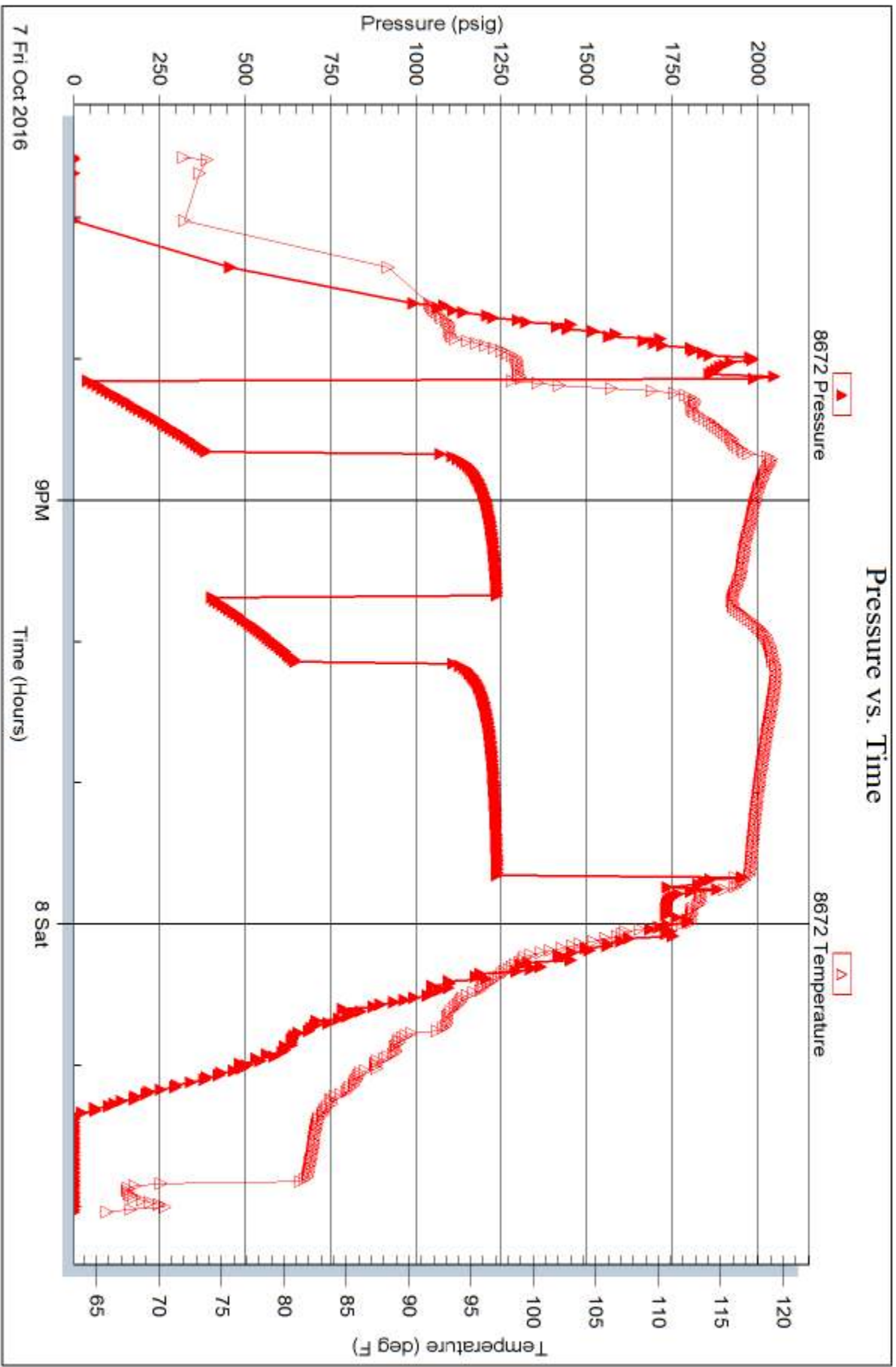
Serial #: 8672

Inside

Culbreath Oil & Gas Company Inc.

Sowers #1-5

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 65616

Printed: 2016, 10, 08 @ 08:01:13