



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Russell Oil Inc.  
PO Box 8050  
Edmond, OK 73083  
ATTN: Kitt Noah

**16/11s/32w Logan KS**  
**Rumback 'A' #16-1**  
Job Ticket: 62692      **DST#: 3**  
Test Start: 2016.09.20 @ 02:05:00

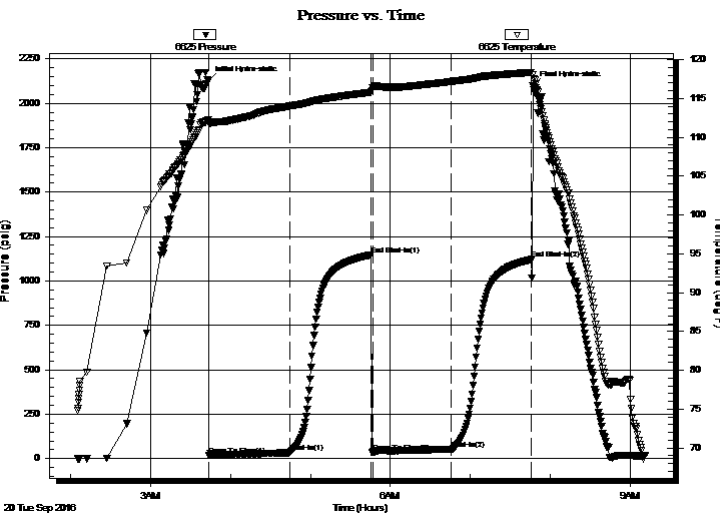
## GENERAL INFORMATION:

Formation: **LKC "J"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 03:43:30  
Time Test Ended: 09:11:00  
Interval: **4227.00 ft (KB) To 4258.00 ft (KB) (TVD)**  
Total Depth: 4258.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: James Winder  
Unit No: 83  
Reference Elevations: 3025.00 ft (KB)  
3020.00 ft (CF)  
KB to GR/CF: 5.00 ft

## Serial #: 6625 Inside

Press@RunDepth: 53.01 psig @ 4228.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2016.09.20 End Date: 2016.09.20 Last Calib.: 2016.09.20  
Start Time: 02:05:05 End Time: 09:10:59 Time On Btm: 2016.09.20 @ 03:43:15  
Time Off Btm: 2016.09.20 @ 07:47:00

TEST COMMENT: 60 - IF: 1/4" Blow at open, built to 6 1/2"  
60 - IS: No blow back  
60 - FF: Blow started at 1 min., built to 7"  
60 - FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2128.72	112.24	Initial Hydro-static
1	17.47	111.83	Open To Flow (1)
61	33.59	114.00	Shut-In(1)
123	1147.22	115.81	End Shut-In(1)
124	35.27	116.38	Open To Flow (2)
183	53.01	117.19	Shut-In(2)
243	1121.39	118.36	End Shut-In(2)
244	2101.33	118.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	GOCM 57% m, 30% o, 13% g	0.32
30.00	SMCO 90% o, 7% g, 3% m	0.15
0.00	GIP = 150'	0.00

\* Recovery from multiple tests

## Gas Rates

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



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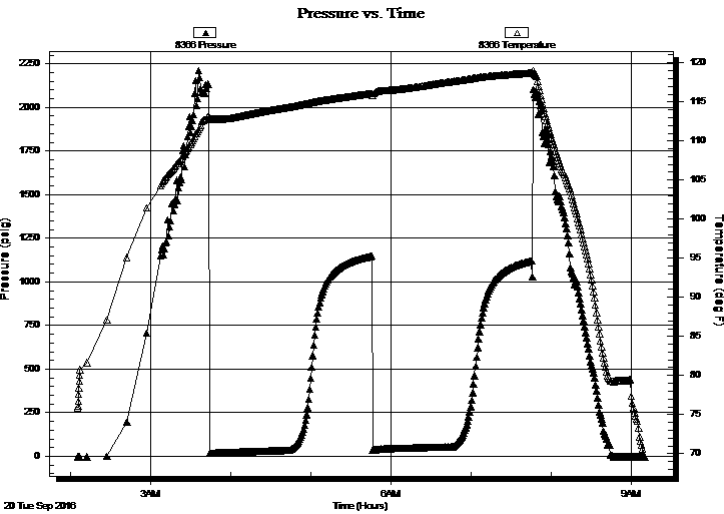
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 Tester: James Winder  
 Unit No: 83  
 Reference Elevations: 3025.00 ft (KB)  
 3020.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8366 Outside**  
 Press@RunDepth: psig @ 4228.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.09.20 End Date: 2016.09.20 Last Calib.: 2016.09.20  
 Start Time: 02:05:05 End Time: 09:10:44 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 60 - IF: 1/4" Blow at open, built to 6 1/2"  
 60 - IS: No blow back  
 60 - FF: Blow started at 1 min., built to 7"  
 60 - FS: No blow back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	GOCM 57% m, 30% o, 13% g	0.32
30.00	SMCO 90% o, 7% g, 3% m	0.15
0.00	GIP = 150'	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**

Russell Oil Inc.

**16/11s/32w Logan KS**

PO Box 8050  
Edmond, OK 73083

**Rumback 'A' #16-1**

Job Ticket: 62692

**DST#: 3**

ATTN: Kitt Noah

Test Start: 2016.09.20 @ 02:05:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	GOCM 57% <i>m</i> , 30% <i>o</i> , 13% <i>g</i>	0.320
30.00	SMCO 90% <i>o</i> , 7% <i>g</i> , 3% <i>m</i>	0.148
0.00	GIP = 150'	0.000

Total Length: 95.00 ft      Total Volume: 0.468 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

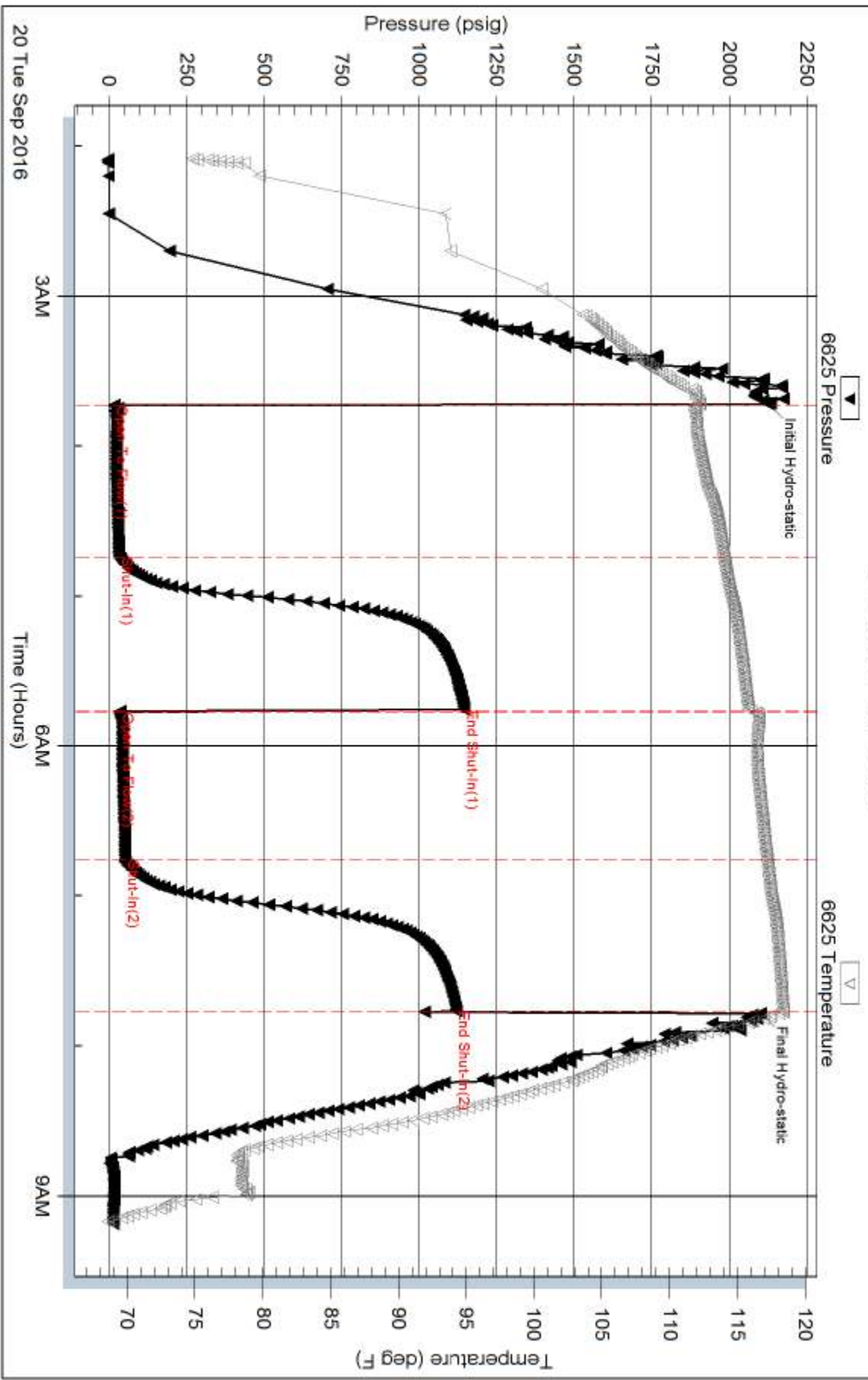
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 38.6 api @ 68 deg F

Corrected Gravity = 37.8 api

### Pressure vs. Time



Serial #: 8366

Outside Russell Oil Inc.

Runback 'A' #16-1

DST Test Number: 3

