



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Herman L. Loeb, LLC.  
 P.O. Box 838  
 Lawrenceville, IL. 62439  
 ATTN: Jon Christensen

**32-27s-18w Kiowa Co., Ks.**  
**Naumann #2-32**  
 Job Ticket: 54194      **DST#: 3**  
 Test Start: 2014.07.09 @ 18:28:35

## GENERAL INFORMATION:

Formation: **K.C. "J"**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 20:38:05  
 Time Test Ended: 02:27:35  
 Interval: **4454.00 ft (KB) To 4470.00 ft (KB) (TVD)**  
 Total Depth: 4470.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Matt Smith  
 Unit No: 53  
 Reference Elevations: 2223.00 ft (KB)  
 2210.00 ft (CF)  
 KB to GR/CF: 13.00 ft

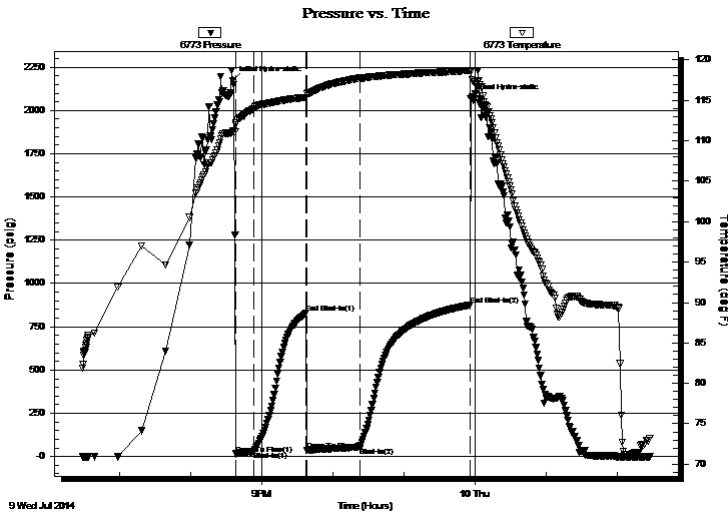
## Serial #: 6773

Outside

Press@RunDepth: 54.73 psig @ 4455.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2014.07.09      End Date: 2014.07.10      Last Calib.: 2014.07.10  
 Start Time: 18:28:40      End Time: 02:27:34      Time On Btm: 2014.07.09 @ 20:35:20  
 Time Off Btm: 2014.07.09 @ 23:56:20

TEST COMMENT: IF: Strong blow . Surf., - 11".  
 IS: No blow . Bleed off in 3 1/2 mins.  
 FF: Strong blow . B.O.B. in 17 mins.  
 FS: Weak blow . Bleed off in 4 mins. Surf., - 1/4".

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2171.52	111.20	Initial Hydro-static
3	15.53	111.99	Open To Flow (1)
18	30.16	113.97	Shut-In(1)
62	828.94	115.36	End Shut-In(1)
63	35.52	115.84	Open To Flow (2)
108	54.73	117.75	Shut-In(2)
201	876.49	118.70	End Shut-In(2)
201	2066.53	118.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOWCM 10%g 15%o 23%w 42%m	0.30
0.00	528' G.I.P. 100%g	0.00

\* 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:	deg API
Mud Weight: lb/gal	Cushion Length: ft	Water Salinity:	13000 ppm
Viscosity: 76.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 13000.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOWCM 10%g 15%o 23%w 42%m	0.295
0.00	528' G.I.P. 100%g	0.000

Total Length: 60.00 ft      Total Volume: 0.295 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

