



**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: 54192 **DST#: 1**
Test Start: 2014.07.07 @ 21:42:30

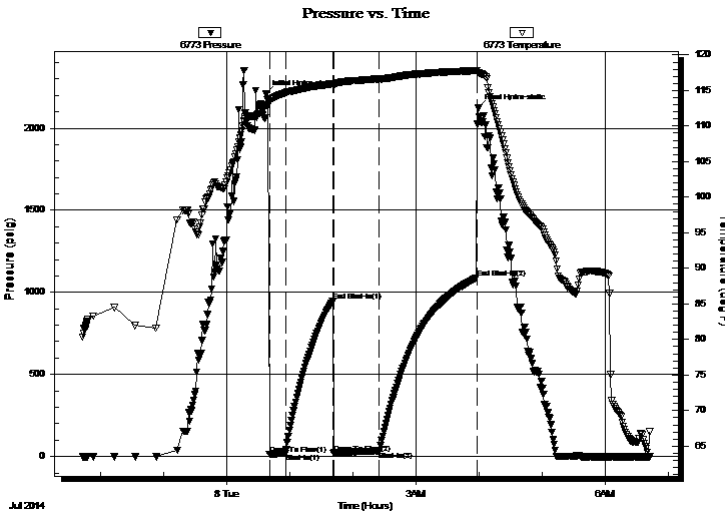
GENERAL INFORMATION:

Formation: **Lansing "A"**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 00:40:15
Time Test Ended: 06:42:15
Interval: **4214.00 ft (KB) To 4230.00 ft (KB) (TVD)**
Total Depth: 4230.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
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: 34.00 psig @ 4215.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.07.07 End Date: 2014.07.08 Last Calib.: 2014.07.08
Start Time: 21:42:35 End Time: 06:42:15 Time On Btm: 2014.07.08 @ 00:37:15
Time Off Btm: 2014.07.08 @ 03:59:15

TEST COMMENT: IF: Strong blow . B.O.B. in 30 secs.
IS: No blow .
FF: Strong blow . B.O.B. in 10 secs.
FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.44	112.86	Initial Hydro-static
3	11.61	113.58	Open To Flow (1)
19	21.47	114.66	Shut-In(1)
64	946.62	115.87	End Shut-In(1)
64	20.73	115.74	Open To Flow (2)
108	34.00	116.63	Shut-In(2)
201	1090.10	117.79	End Shut-In(2)
202	2122.47	117.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GCWM15%w 20%g 65%m	0.30
0.00	816' G.I.P. 100%g	0.00

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: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.98 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GCWM15%w 20%g 65%m	0.295
0.00	816' 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: RW is .23 @ 66 degrees = 34,000

