



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

DNOC
POB 1019
Hays, KS 67601
ATTN: Marc Downing

Alma Herl 1-13
13-13s-19w Ellis,KS
Job Ticket: 041816 **DST#: 4**
Test Start: 2011.04.26 @ 21:10:05

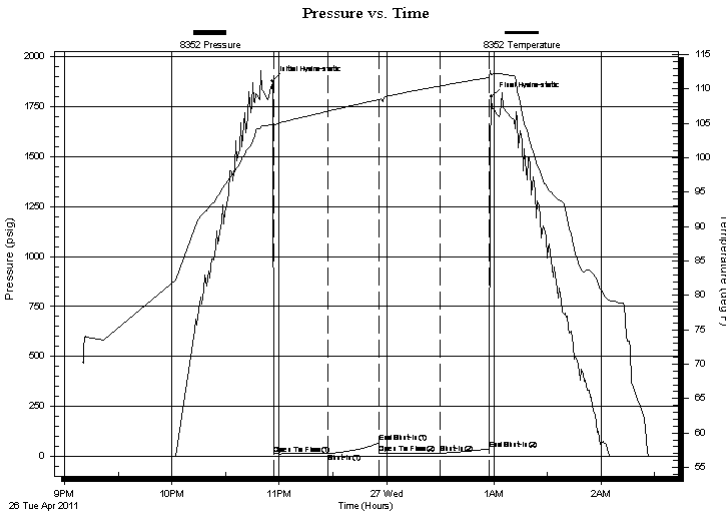
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:56:50
Time Test Ended: 02:27:39
Interval: **3666.00 ft (KB) To 3684.00 ft (KB) (TVD)**
Total Depth: 3684.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 39
Reference Elevations: 2062.00 ft (KB)
2054.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8352 Outside
Press @ RunDepth: 15.90 psig @ 3667.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.04.26 End Date: 2011.04.27 Last Calib.: 2011.04.27
Start Time: 21:10:05 End Time: 02:27:40 Time On Btm: 2011.04.26 @ 22:56:20
Time Off Btm: 2011.04.27 @ 00:58:50

TEST COMMENT: IF:(30min) Blow diecd in 5 min.
IS:(30min) No Return
FF:(30min) No blow ,Flushed, Surge, No blow
FS: No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1879.32	104.85	Initial Hydro-static
1	12.82	103.79	Open To Flow (1)
31	13.93	106.77	Shut-In(1)
60	68.86	108.49	End Shut-In(1)
60	14.46	108.47	Open To Flow (2)
94	15.90	110.45	Shut-In(2)
121	37.90	111.68	End Shut-In(2)
123	1800.48	112.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud w / oil specks in tool	0.01

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud w / oil specks in tool	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time

