



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Grand Mesa Operating Comp.
 1700 North Waterfront PKWY
 BLDG 600
 Wichita KS 67206
 ATTN: John Goldsmith

21-13s-31w Gove KS

CSC #1-21

Job Ticket: 46552

DST#: 5

Test Start: 2012.04.23 @ 00:50:05

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:48:15

Time Test Ended: 08:34:29

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 48

Interval: 4510.00 ft (KB) To 4553.00 ft (KB) (TVD)

Reference Elevations: 2893.00 ft (KB)

Total Depth: 4553.00 ft (KB) (TVD)

2889.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 4.00 ft

Serial #: 8736

Inside

Press @ Run Depth: 58.99 psig @ 4515.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.23

End Date:

2012.04.23

Last Calib.:

2012.04.24

Start Time: 00:50:05

End Time:

08:34:29

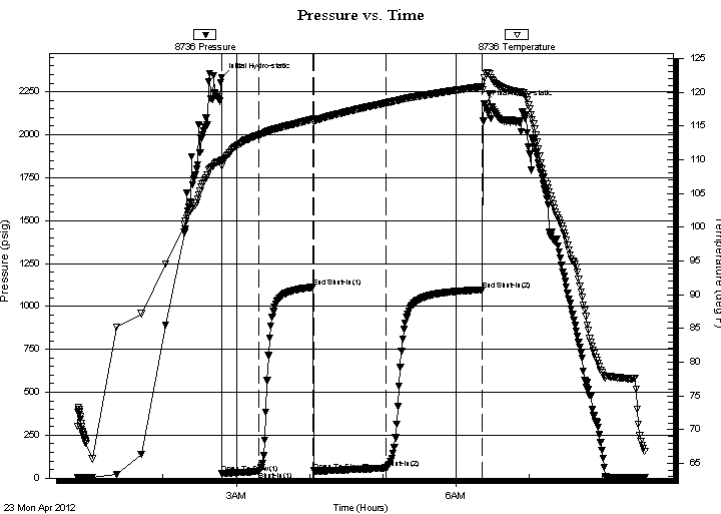
Time On Btm:

2012.04.23 @ 02:48:00

Time Off Btm:

2012.04.23 @ 06:23:14

TEST COMMENT: IF: Built to 1" blow
 IS: No return blow
 FF: Built to weak surface blow
 FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2331.06	110.05	Initial Hydro-static
1	26.48	109.05	Open To Flow (1)
31	40.91	113.71	Shut-In(1)
75	1111.76	116.01	End Shut-In(1)
76	41.95	115.73	Open To Flow (2)
135	58.99	118.43	Shut-In(2)
214	1097.26	120.87	End Shut-In(2)
216	2178.20	122.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	sw 100%sw	0.34

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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Job Ticket: 46552 **DST#: 5**
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Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 25000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.77 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 3000.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	sw 100%sw	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW= .334@65*=25,000ppm

Pressure vs. Time

