



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco LLC.
2020 N. Bramblewood
Wichita, KS 67206-1094
ATTN: David Gould

23-30s.-19w. Kiowa Co.
Crowe 4-23
Job Ticket: 49708 **DST#: 2**
Test Start: 2012.12.06 @ 04:14:30

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 08:54:15
Time Test Ended: 16:40:45
Interval: **5100.00 ft (KB) To 5137.00 ft (KB) (TVD)**
Total Depth: 5137.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Reset)
Tester: Ryan Reynolds
Unit No: 48
Reference Elevations: 2265.00 ft (KB)
2252.00 ft (CF)
KB to GR/CF: 13.00 ft

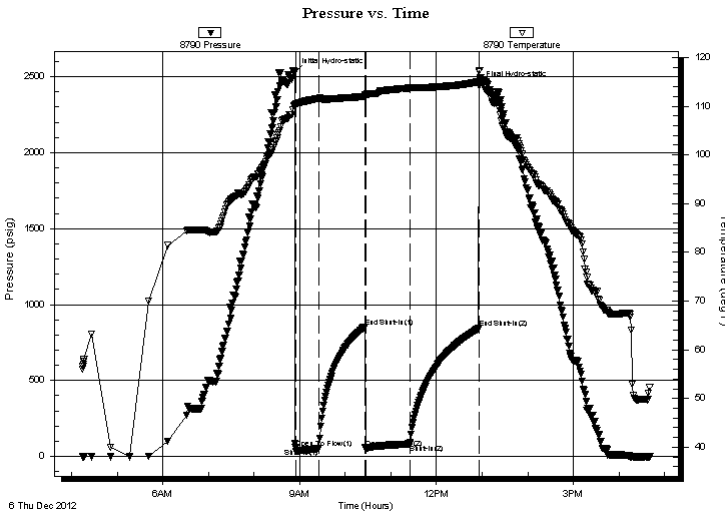
Serial #: 8790

Inside

Press @ Run Depth: 82.03 psig @ 5101.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.12.06 End Date: 2012.12.06 Last Calib.: 2012.12.06
Start Time: 04:14:35 End Time: 16:40:45 Time On Btm: 2012.12.06 @ 08:53:30
Time Off Btm: 2012.12.06 @ 12:56:15

TEST COMMENT: IF: Strong blow . BOB 15sec. GTS @ 28min.
IS: No blow
FF: Strong blow . BOB immed. Guaged gas throughout
FSI: Weak surf. blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2529.50	110.21	Initial Hydro-static
1	56.47	110.30	Open To Flow (1)
33	53.78	111.61	Shut-In(1)
93	855.36	111.98	End Shut-In(1)
94	51.82	112.27	Open To Flow (2)
152	82.03	113.72	Shut-In(2)
242	843.88	115.00	End Shut-In(2)
243	2440.61	117.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	OWGM 13%oil, 17%w tr, 20%gas, 50%0.44	
45.00	SLI OCM TRc%oil, 99%mud	0.22

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	6.00	7.63
Last Gas Rate	0.13	5.75	7.54
Max. Gas Rate	0.13	6.00	7.63



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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: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

25000 ppm

Viscosity: 43.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
90.00	OWGM 13%oil, 17%w tr, 20%gas, 50% muc	0.443
45.00	SLI OCM TRc%oil, 99% mud	0.221

Total Length: 135.00 ft

Total Volume: 0.664 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: RR-2

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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GAS RATES

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Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	30	0.13	6.00	7.63
1	30	0.13	5.00	7.26
2	10	0.13	5.25	7.36
2	20	0.13	5.50	7.45
2	30	0.13	5.50	7.45
2	40	0.13	5.75	7.54
2	50	0.13	5.75	7.54

