



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Pickrell Drig. Co., Inc.
 100 S. Main Ste. 505
 Wichita, KS 67202-3738
 ATTN: Jerry Smith

30-29s-6w Kingman Co., KS
Maple 'K' 3
 Job Ticket: 59911 **DST#: 1**
 Test Start: 2014.10.06 @ 01:30:43

GENERAL INFORMATION:

Formation: **Mississippian**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 04:09:43
 Time Test Ended: 11:14:28
 Interval: **4144.00 ft (KB) To 4162.00 ft (KB) (TVD)**
 Total Depth: 4162.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1529.00 ft (KB)
 1521.00 ft (CF)
 KB to GR/CF: 8.00 ft

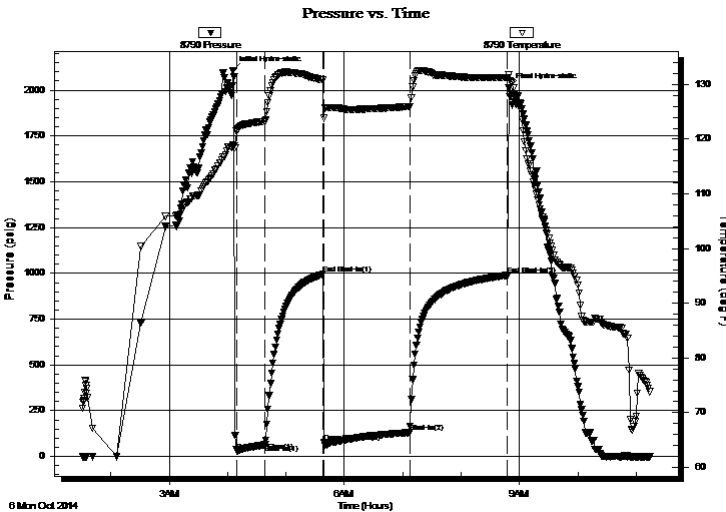
Serial #: 8790

Inside

Press@RunDepth: 131.17 psig @ 4145.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.06 End Date: 2014.10.06 Last Calib.: 2014.10.06
 Start Time: 01:30:48 End Time: 11:14:28 Time On Btm: 2014.10.06 @ 04:05:28
 Time Off Btm: 2014.10.06 @ 08:48:58

TEST COMMENT: IF: Strong blow . BOB @ 1min.
 IS: No blow .
 FF: Strong blow . BOB immed. GTS @ 2min. Gauged gas.
 FS: Good blow . surf. - 10"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2108.40	118.88	Initial Hydro-static
5	29.91	121.60	Open To Flow (1)
33	63.89	123.30	Shut-In(1)
93	995.87	130.79	End Shut-In(1)
94	78.68	123.86	Open To Flow (2)
182	131.17	126.00	Shut-In(2)
283	989.23	131.23	End Shut-In(2)
284	2012.22	131.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Clean Water	0.63
85.00	MWOCG 2% <i>m</i> , 8% <i>w</i> , 27% <i>o</i> , 63% <i>g</i>	1.19
120.00	MWVGO 16% <i>m</i> , 20% <i>w</i> , 24% <i>g</i> , 40% <i>o</i>	1.68
30.00	OGCM 5% <i>o</i> , 13% <i>g</i> , 82% <i>m</i>	0.42

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	11.00	9.69
Last Gas Rate	0.13	27.00	15.68
Max. Gas Rate	0.13	27.00	15.68



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FLUID SUMMARY

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Maple 'K' 3

Job Ticket: 59911

DST#: 1

ATTN: Jerry Smith

Test Start: 2014.10.06 @ 01:30:43

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: 110000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
45.00	Clean Water	0.631
85.00	MWOCG 2% <i>m</i> , 8% <i>w</i> , 27% <i>o</i> , 63% <i>g</i>	1.192
120.00	MWGCO 16% <i>m</i> , 20% <i>w</i> , 24% <i>g</i> , 40% <i>o</i>	1.683
30.00	OGCM 5% <i>o</i> , 13% <i>g</i> , 82% <i>m</i>	0.421

Total Length: 280.00 ft

Total Volume: 3.927 bbf

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: RR-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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GAS RATES

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Maple 'K' 3

Job Ticket: 59911

DST#: 1

ATTN: Jerry Smith

Test Start: 2014.10.06 @ 01:30:43

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)
2	10	0.13	11.00	9.69
2	20	0.13	16.00	11.57
2	30	0.13	20.00	13.06
2	40	0.13	23.00	14.18
2	50	0.13	26.00	15.31
2	60	0.13	26.00	15.31
2	70	0.13	26.00	15.31
2	80	0.13	27.00	15.68
2	90	0.13	27.00	15.68

Pressure vs. Time

