



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Herman L. Loeb, LLC.
 P.O. Box 838
 Lawrenceville, IL. 62439
 ATTN: Jon Christensen

28-27s-18w Kiowa, Co., Ks.
Yost #2-28
 Job Ticket: 57813 **DST#: 2**
 Test Start: 2015.03.28 @ 12:35:05

GENERAL INFORMATION:

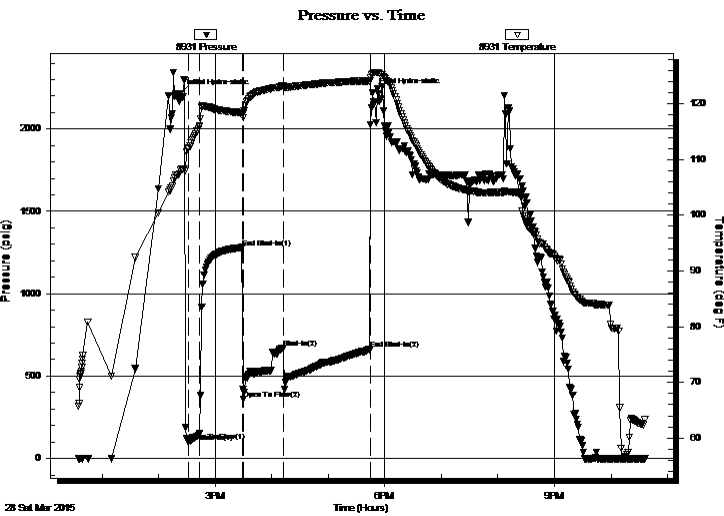
Formation: **KC "J"**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 14:31:50
 Time Test Ended: 22:35:50
 Interval: **4458.00 ft (KB) To 4473.00 ft (KB) (TVD)**
 Total Depth: 4473.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Matt Smith
 Unit No: 53
 Reference Elevations: 2225.00 ft (KB)
 2212.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8931

Inside

Press @ Run Depth: 671.26 psig @ 4459.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.03.28 End Date: 2015.03.28 Last Calib.: 2015.03.28
 Start Time: 12:35:10 End Time: 22:35:50 Time On Btm: 2015.03.28 @ 14:23:20
 Time Off Btm: 2015.03.28 @ 17:47:05

TEST COMMENT: IF: Strong blow . B.O.B. in 25 secs. G.T.S. in 10 mins. Gauged gas, see gas report.
 IS: Fair - Strong blow . Bled off for 30 mins., never died. Surf., - 9", blow back.
 FF: Strong blow . B.O.B. immediate. G.T.S., Gauged gas, see gas report.
 FS: Strong blow . Bled off for 30 mins. B.O.B. immediate.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2212.67	108.11	Initial Hydro-static
9	101.82	111.98	Open To Flow (1)
21	151.94	115.96	Shut-In(1)
66	1280.92	118.40	End Shut-In(1)
67	359.90	118.26	Open To Flow (2)
110	671.26	123.17	Shut-In(2)
201	662.24	124.07	End Shut-In(2)
204	2217.91	125.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	Drig Mud 100% <i>m</i>	0.31
3456.00	GO 100% <i>o</i>	48.48
0.00	896' G.I.P. G.T.S. 100% <i>g</i>	0.00
0.00	Oil gravity w as 38 @ 80 degrees, correc <i>o</i>	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	14.00	104.04
Last Gas Rate	0.13	21.00	13.25
Max. Gas Rate	0.13	21.00	13.25



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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:	5000 ppm
Viscosity: 66.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	Drig Mud 100%m	0.309
3456.00	GO 100%o	48.479
0.00	896' G.I.P. G.T.S. 100%g	0.000
0.00	Oil gravity w as 38 @ 80 degrees, correct	0.000

Total Length: 3517.00 ft Total Volume: 48.788 bbl

Num Fluid Samples: 1 Num Gas Bombs: 2 Serial #: MAS Pratt

Laboratory Name: Caraway Laboratory Location: Liberal, KS

Recovery Comments: Gravity w as 38 @ 80 degrees. Corrected 36 @ 60 degrees.
Reversed fluid out to vac truck.



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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	10	0.38	14.00	104.04
1	15	0.38	14.50	105.87
2	10	0.13	6.50	7.82
2	20	0.13	11.00	9.51
2	30	0.13	15.00	11.00
2	40	0.13	20.00	12.88
2	45	0.13	21.00	13.25

Pressure vs. Time

