



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

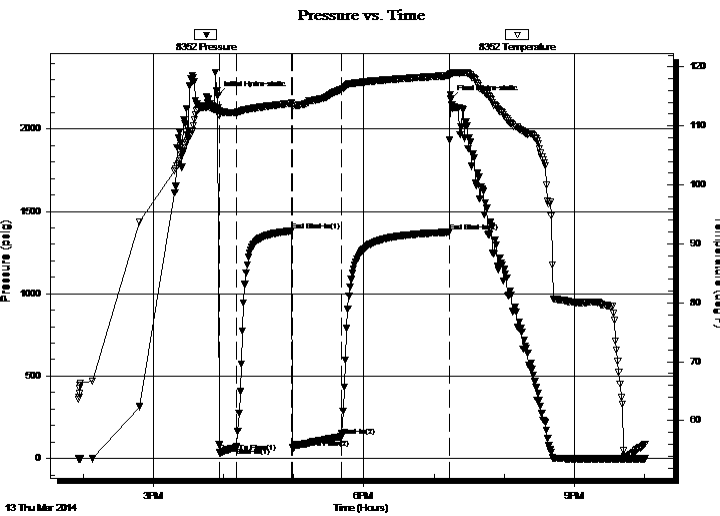
20-27s-18w Kiowa Ks.
Randel#2-20
 Job Ticket: 51886 **DST#: 2**
 Test Start: 2014.03.13 @ 13:55:56

GENERAL INFORMATION:

Formation: **Lans. KC I**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 15:56:41 Tester: Gary Pevoteaux
 Time Test Ended: 22:00:41 Unit No: 56
 Interval: **4407.00 ft (KB) To 4425.00 ft (KB) (TVD)** Reference Elevations: 2218.00 ft (KB)
 Total Depth: 4425.00 ft (KB) (TVD) 2205.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 8352 Inside
 Press @ Run Depth: 132.41 psig @ 4408.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.03.13 End Date: 2014.03.13 Last Calib.: 2014.03.13
 Start Time: 13:56:01 End Time: 22:00:40 Time On Btm: 2014.03.13 @ 15:55:11
 Time Off Btm: 2014.03.13 @ 19:14:26

TEST COMMENT: IF: Strong blow . B.O.B. in 90 secs.
 IS: Weak blow . 1 - 4 1/2".
 FF: Strong blow . B.O.B. in 45 secs. GTS in 19 mins. (TSTM)
 FS: Fair blow . 1 - 6".



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2201.97	113.00	Initial Hydro-static
2	35.28	112.48	Open To Flow (1)
16	65.12	112.25	Shut-In(1)
63	1381.20	113.84	End Shut-In(1)
64	63.57	113.47	Open To Flow (2)
106	132.41	116.19	Shut-In(2)
198	1373.93	118.52	End Shut-In(2)
200	2181.34	118.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCW 3%o 97%w /Rw .18@63deg	0.30
230.00	GW&MCO 55%g 12%w 8%m 25%o	1.13
65.00	CGO 45%g 55%o	0.64

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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Lawrenceville Ill. 62439

Randel#2-20

Job Ticket: 51886

DST#: 2

ATTN: Jon Christensen

Test Start: 2014.03.13 @ 13:55:56

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40.4 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

48000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	SOCW 3%o 97%w /Rw .18@63deg	0.295
230.00	GW&MCO 55%g 12%w 8%m 25%o	1.131
65.00	CGO 45%g 55%o	0.638

Total Length: 355.00 ft

Total Volume: 2.064 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

