



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Production Drilling
1023 Reservatiron Road
Hays, KS 67601
ATTN: Marty Patterson

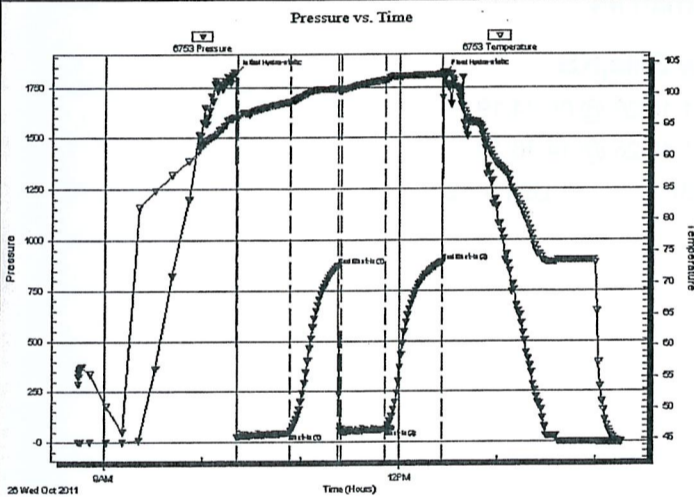
1-13s 18w Ellis,KS
Chrissman #4
Job Ticket: 44837 DST#: 2
Test Start: 2011.10.26 @ 08:44:19

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:20:49
Time Test Ended: 14:16:19
Interval: **3620.00 ft (KB) To 3646.00 ft (KB) (TVD)**
Total Depth: 3646.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Paul Simpson
Unit No: 47
Reference Elevations: 2117.00 ft (KB)
2109.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6753 Outside
Press@RunDepth: 62.00 psig @ 3623.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.10.26 End Date: 2011.10.26 Last Calib.: 1899.12.30
Start Time: 08:44:24 End Time: 14:16:18 Time On Btm: 2011.10.26 @ 10:19:49
Time Off Btm: 2011.10.26 @ 12:27:19

TEST COMMENT: IF - 3/4" blow building to 9"
ISI - surface died
FF - 1/2" blow building to 7 1/2" blow
FSI - surface blow died in 2 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1820.70	96.33	Initial Hydro-static
1	22.94	95.98	Open To Flow (1)
33	44.56	98.71	Shut-In(1)
63	870.04	100.83	End Shut-In(1)
65	50.35	100.47	Open To Flow (2)
92	62.00	102.22	Shut-In(2)
127	891.87	103.10	End Shut-In(2)
128	1815.43	103.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud cut oil 60%oil 40% mud	0.15
100.00	clean oil	1.39

Gas Rates

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



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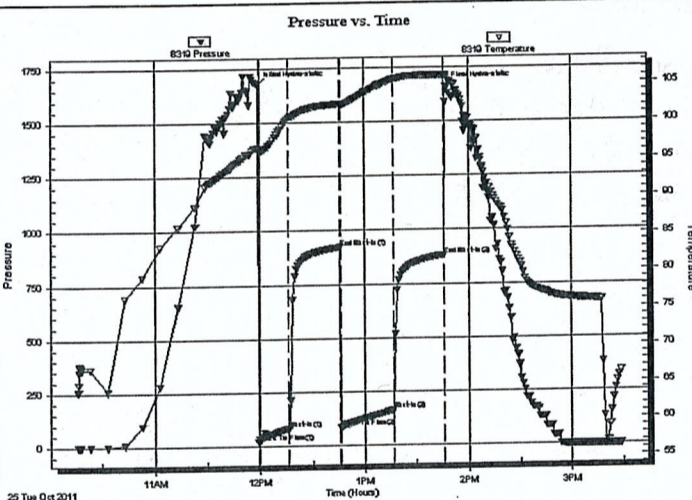
1-13s 18w Ellis,KS
Chrissman #4
Job Ticket: 44836 DST#: 1
Test Start: 2011.10.25 @ 10:16:06

GENERAL INFORMATION:

Formation: **Lansing C-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:59:06
Time Test Ended: 15:29:06
Test Type: Conventional Bottom Hole (Initial)
Tester: Paul Simpson
Unit No: 47
Interval: **3410.00 ft (KB) To 3450.00 ft (KB) (TVD)**
Total Depth: 3450.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2117.00 ft (KB)
2109.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8319 **Outside**
Press@RunDepth: 164.37 psig @ 3411.00 ft (KB)
Start Date: 2011.10.25 End Date: 2011.10.25
Start Time: 10:16:11 End Time: 15:29:05
Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2011.10.25 @ 11:58:36
Time Off Btm: 2011.10.25 @ 13:47:06

TEST COMMENT: IF- strong bottom of bucket in 2 minutes
IS- blow built to 4 "
FF- strong blow bottom of bucket in 3 minutes
FSI- bottom of bucket in 7 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1675.15	96.47	Initial Hydro-static
1	19.36	96.07	Open To Flow (1)
18	81.85	100.57	Shut-In(1)
47	923.66	102.32	End Shut-In(1)
48	86.89	102.14	Open To Flow (2)
78	164.37	105.58	Shut-In(2)
107	883.19	106.02	End Shut-In(2)
109	1659.35	105.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	sl oil & MCW 3%o 92%w 5%m	0.56
120.00	gsy sl w & mco 10%g 80%o 5%w 5%m	1.68
200.00	gsy oil 20%g 80@o	2.81
0.00	2270' gas in pipe	0.00

Gas Rates

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