



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Herman L Leob LLC
 PO Box 838
 Lawrenceville IL, 62439
 ATTN: Jon Christensen

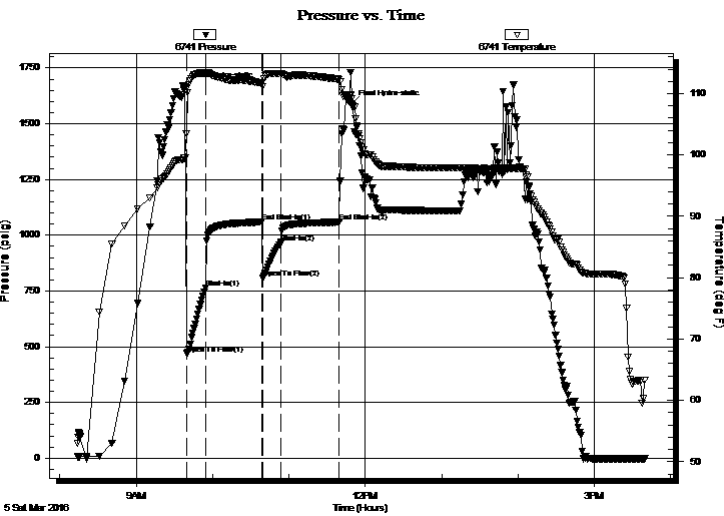
34/16S/11W/Barton
Kroutworst #20
 Job Ticket: 65082 **DST#: 2**
 Test Start: 2016.03.05 @ 08:14:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:39:30
 Time Test Ended: 15:40:00
 Interval: **3354.00 ft (KB) To 3380.00 ft (KB) (TVD)**
 Total Depth: 3380.00 ft (KB) (TVD)
 Hole Diameter: 7.80 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72 Great Bend 50
 Reference Elevations: 1936.00 ft (KB)
 1925.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6741 Inside
 Press@RunDepth: 967.44 psig @ 3376.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.03.05 End Date: 2016.03.05 Last Calib.: 2016.03.05
 Start Time: 08:14:05 End Time: 15:39:59 Time On Btm: 2016.03.05 @ 09:38:30
 Time Off Btm: 2016.03.05 @ 11:49:30

TEST COMMENT: Initial flow 15 min/blow built to bottom of bucket in 30 seconds
 Initial shut in 45 min/blow back built to 3 1/2 inches
 Final flow 15 min/blow built to bottom of bucket in 30 seconds
 Final shut in 45 min/blow back built to bottom of bucket in 5 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1664.76	99.49	Initial Hydro-static
1	469.25	103.43	Open To Flow (1)
16	763.25	113.39	Shut-In(1)
60	1058.78	111.74	End Shut-In(1)
61	807.20	111.19	Open To Flow (2)
76	967.44	113.25	Shut-In(2)
121	1058.65	112.32	End Shut-In(2)
131	1587.82	109.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	Mud cut water with show of oil	2.43
0.00	Mud 5% Water 95%	0.00
2268.00	Clean gassy Oil	31.81
0.00	Gas 35% Oil 65%	0.00
0.00	252 feet of Gas in pipe	0.00

Gas Rates

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



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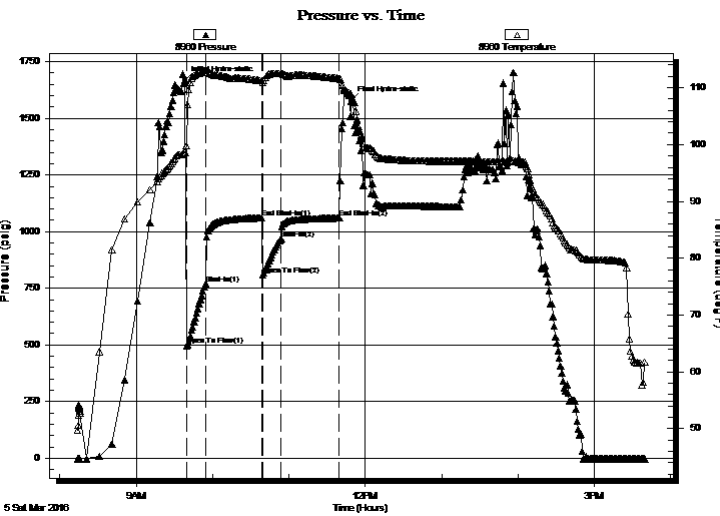
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 Tester: Ken Swinney
 Unit No: 72 Great Bend 50
 Reference Elevations: 1936.00 ft (KB)
 1925.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8960 Outside
 Press@RunDepth: 1060.26 psig @ 3377.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.03.05 End Date: 2016.03.05 Last Calib.: 2016.03.05
 Start Time: 08:14:05 End Time: 15:39:59 Time On Btm: 2016.03.05 @ 09:38:30
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 Final shut in 45 min/blow back built to bottom of bucket in 5 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1665.27	98.57	Initial Hydro-static
1	497.52	99.74	Open To Flow (1)
16	770.78	112.66	Shut-In(1)
60	1060.40	111.29	End Shut-In(1)
61	808.77	110.86	Open To Flow (2)
76	969.20	112.48	Shut-In(2)
121	1060.26	111.60	End Shut-In(2)
131	1576.03	108.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	Mud cut water with show of oil	2.43
0.00	Mud 5% Water 95%	0.00
2268.00	Clean gassy Oil	31.81
0.00	Gas 35% Oil 65%	0.00
0.00	252 feet of Gas in pipe	0.00

Gas Rates

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



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TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

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ATTN: Jon Christensen

34/16S/11W/Barton
Kroutworst #20
Job Ticket: 65082 **DST#: 2**
Test Start: 2016.03.05 @ 08:14:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 44 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 24000 ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.60 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5700.00 ppm		
Filter Cake: 1.00 inches		

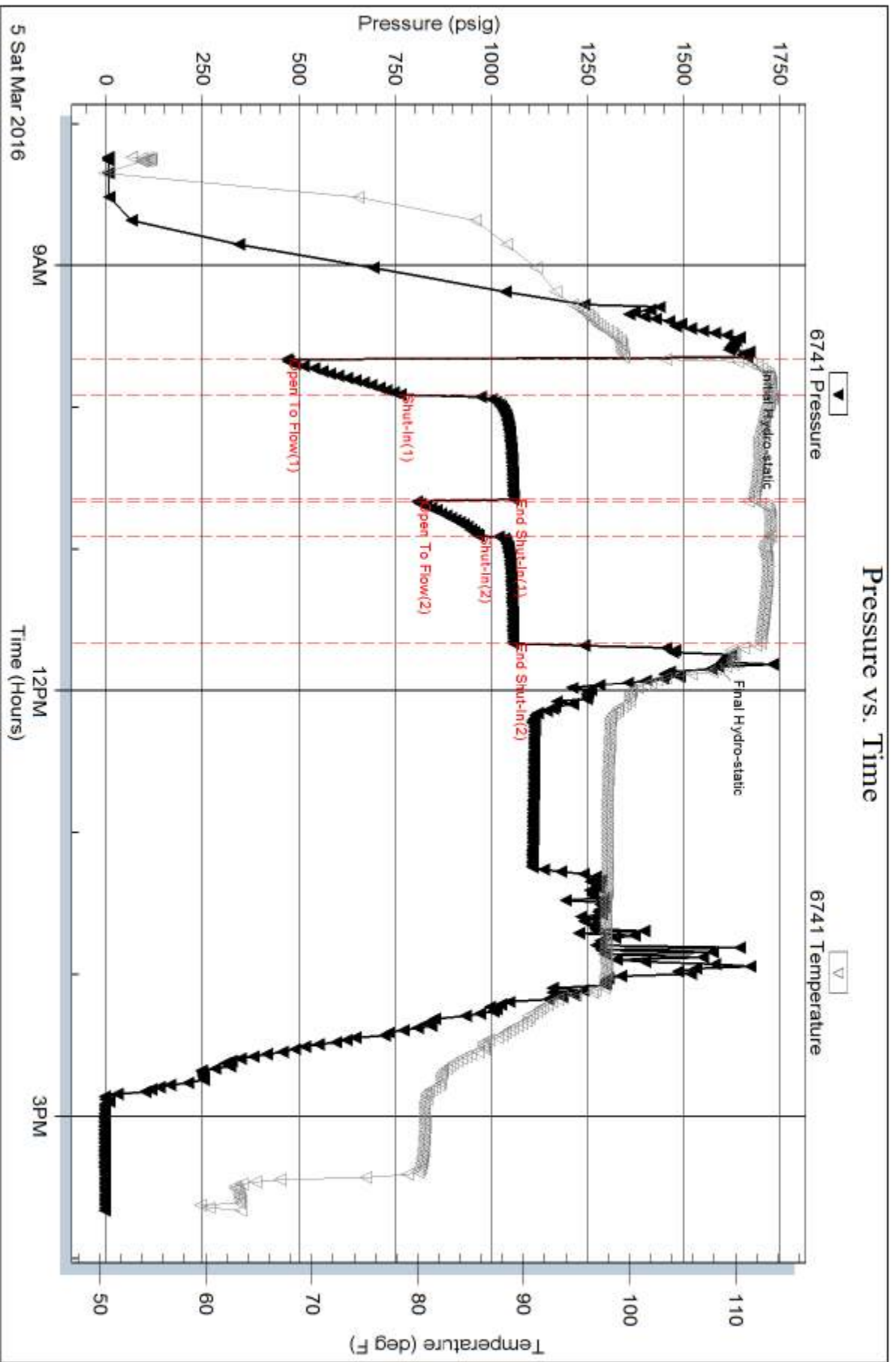
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	Mud cut water with show of oil	2.435
0.00	Mud 5% Water 95%	0.000
2268.00	Clean gassy Oil	31.814
0.00	Gas 35% Oil 65%	0.000
0.00	252 feet of Gas in pipe	0.000

Total Length: 2583.00 ft Total Volume: 34.249 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time



Pressure vs. Time

