



DRILL STEM TEST REPORT

Prepared For: **MULL DRILLING COMPANY INC**

1700 N WATERFRONT PKWY BLDG 1200
WICHITA KS 67206

ATTN: KEVIN KESSLER

10-15S-27W

JLT 1-10

Start Date: 2011.03.06 @ 00:00:00

End Date: 2011.03.06 @ 08:31:00

Job Ticket #: 1074 DST #: 1

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.03.06 @ 00:20:22

MULL DRILLING COMPANY INC
JLT 1-10
10-15S-27W
DST # 1
LKC -EF
2011.03.06



DRILL STEM TEST REPORT

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JLT 1-10

1700 N WATERFRONT PKWY BLDG 1200
WICHITA KS 67206

10-15S-27W

Job Ticket: 1074

DST#: 1

ATTN: KEVIN KESSLER

Test Start: 2011.03.06 @ 00:00:00

GENERAL INFORMATION:

Formation: **LKC -E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:45:00

Time Test Ended: 08:31:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: 3690.00 ft (KB) To 3720.00 ft (KB) (TVD)

Reference Elevations: 2440.00 ft (KB)

Total Depth: 3720.00 ft (KB) (TVD)

2434.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

Serial #: 6666 Outside

Press @ RunDepth: 929.20 psig @ 3717.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.03.06

End Date: 2011.03.06

Last Calib.: 2011.03.06

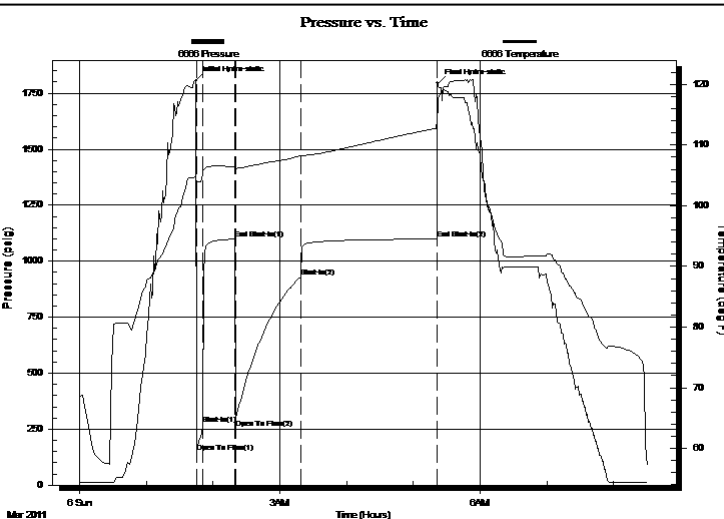
Start Time: 00:00:00

End Time: 08:31:00

Time On Btm: 2011.03.06 @ 01:44:30

Time Off Btm: 2011.03.06 @ 05:22:00

TEST COMMENT: 5-INITIAL OPENING GOOD BLOW BOTTOM BUCKET IN 1 MIN
30-INITIAL SHUT IN WEAK BLOW BACK
60-FINAL OPENING GOOD BLOW BOTTOM BUCKET IN 1 MIN
120-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1805.20	104.54	Initial Hydro-static
1	145.62	104.01	Open To Flow (1)
7	269.84	105.64	Shut-In(1)
35	1098.87	106.44	End Shut-In(1)
36	294.88	106.25	Open To Flow (2)
94	929.20	108.29	Shut-In(2)
217	1100.32	112.80	End Shut-In(2)
218	1794.98	116.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MUDDY WATER 405M60%WATER	0.59
1740.00	GASSY WATER 5%GAS95%WATER	25.45

Gas Rates

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



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ATTN: KEVIN KESSLER

Job Ticket: 1074

DST#: 1

Test Start: 2011.03.06 @ 00:00:00

GENERAL INFORMATION:

Formation: **LKC -E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:45:00

Time Test Ended: 08:31:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: 3690.00 ft (KB) To 3720.00 ft (KB) (TVD)

Total Depth: 3720.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2440.00 ft (KB)

2434.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 6651

Inside

Press @ Run Depth: 1102.20 psig @ 3716.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.03.06

End Date: 2011.03.06

Last Calib.: 2011.03.06

Start Time: 00:00:00

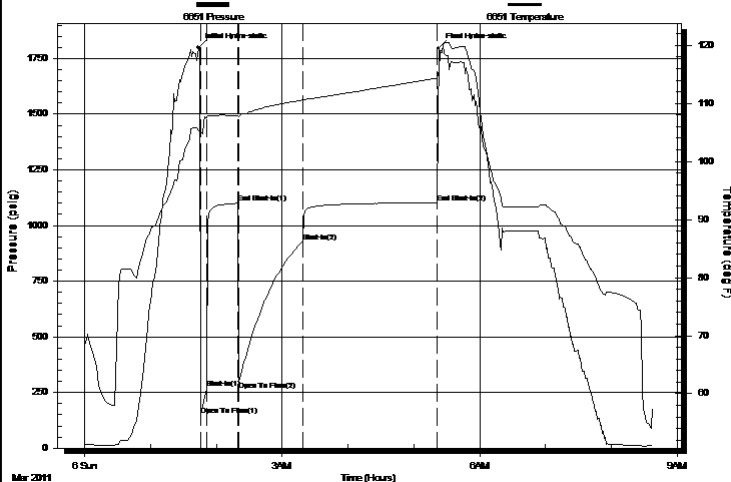
End Time: 08:38:00

Time On Btm: 2011.03.06 @ 01:43:30

Time Off Btm: 2011.03.06 @ 05:22:30

TEST COMMENT: 5-INITIAL OPENING GOOD BLOW BOTTOM BUCKET IN 1 MIN
30-INITIAL SHUT IN WEAK BLOW BACK
60-FINAL OPENING GOOD BLOW BOTTOM BUCKET IN 1 MIN
120-FINAL SHUT IN NO BLOW BACK

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1798.97	105.32	Initial Hydro-static
2	146.53	104.62	Open To Flow (1)
8	270.11	107.56	Shut-In(1)
37	1099.73	107.93	End Shut-In(1)
37	299.82	107.71	Open To Flow (2)
96	928.21	110.59	Shut-In(2)
218	1102.20	114.35	End Shut-In(2)
219	1798.09	115.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MUDDY WATER 405M60%WATER	0.59
1740.00	GASSY WATER 5%GAS95%WATER	25.45

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

MULL DRILLING COMPANY INC
 1700 N WATERFRONT PKWY BLDG 1200
 WICHITA KS 67206
 ATTN: KEVIN KESSLER

JLT 1-10
10-15S-27W
 Job Ticket: 1074 **DST#: 1**
 Test Start: 2011.03.06 @ 00:00:00

Tool Information

Drill Pipe:	Length: 3544.00 ft	Diameter: 3.88 inches	Volume: 51.83 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 52.42 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	3690.00 ft			Final	66000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	58.75 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			3666.25	
Hydraulic tool	5.00			3671.25	
Change over sub	0.75			3672.00	
Jars	6.00			3678.00	
Safety Joint	2.00			3680.00	
Packer	5.00			3685.00	28.75 Bottom Of Top Packer
Packer	5.00			3690.00	
Anchor	25.00			3715.00	
Recorder	1.00	6651	Inside	3716.00	
Recorder	1.00	6666	Outside	3717.00	
Bull plug	3.00			3720.00	30.00 Bottom Packers & Anchor

Total Tool Length: 58.75



DRILL STEM TEST REPORT

FLUID SUMMARY

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Job Ticket: 1074 **DST#: 1**
Test Start: 2011.03.06 @ 00:00:00

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:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MUDDY WATER 405M60%WATER	0.590
1740.00	GASSY WATER 5%GAS95%WATER	25.446

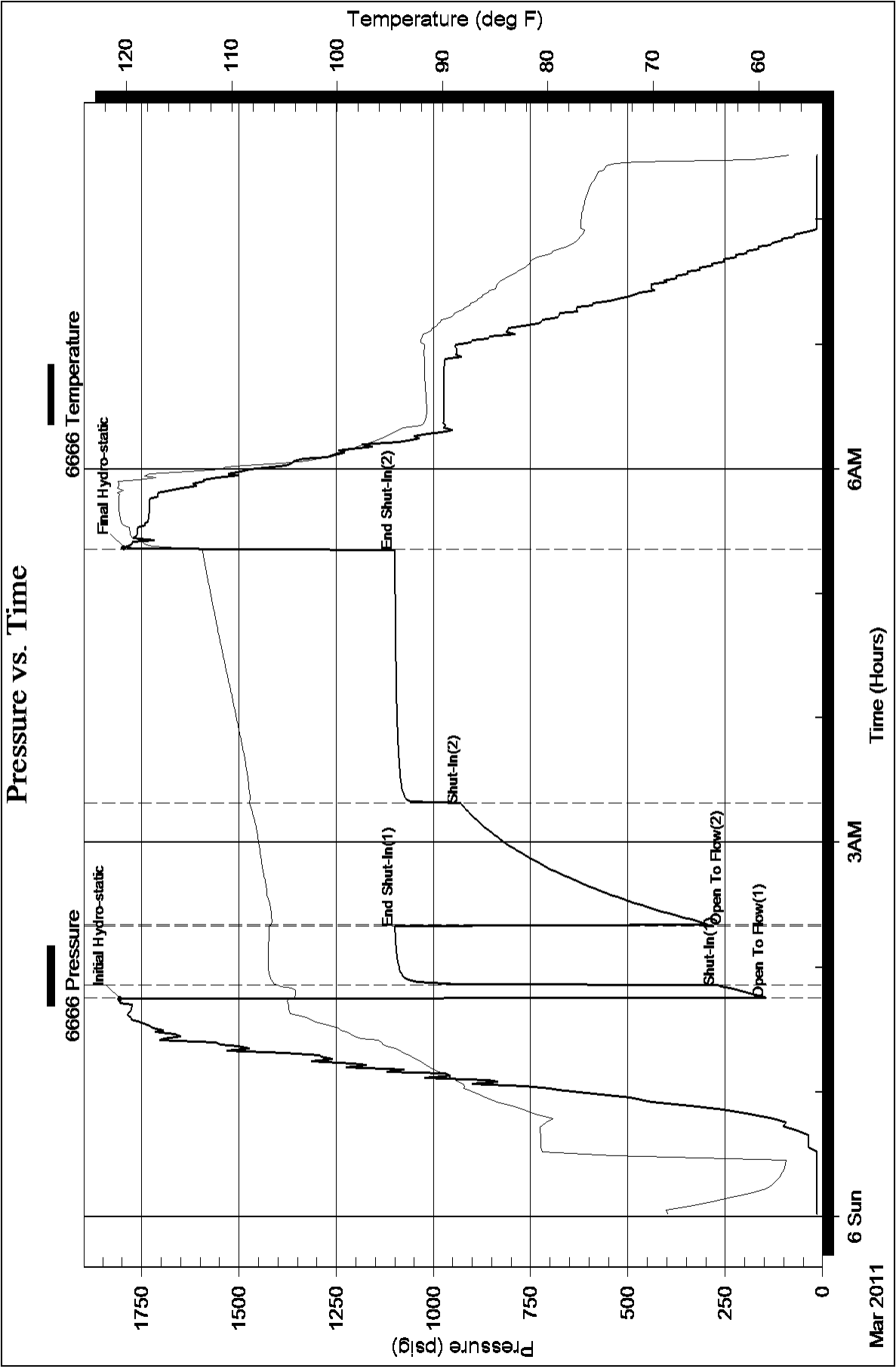
Total Length: 1860.00 ft Total Volume: 26.036 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RECOVERY CHLORIDES 48,000 PPM

Pressure vs. Time



Pressure vs. Time

