



DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Company Inc.**

250 North Water Suite 300
Wichita Kansas 67202

ATTN: Phil Askey

15/17S/45W Kiowa/Col

APC-Scherler #1-15

Start Date: 2011.04.03 @ 03:17:00

End Date: 2011.04.03 @ 12:53:30

Job Ticket #: 15982 DST #: 5

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2011.04.04 @ 01:10:02

Mull Drilling Company Inc.

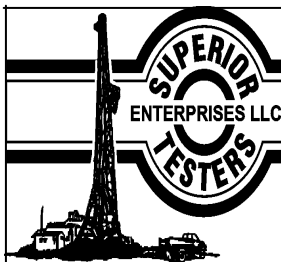
APC-Scherler #1-15

15/17S/45W Kiowa/Col

DST # 5

Mississippi

2011.04.03



DRILL STEM TEST REPORT

Mull Drilling Company Inc.

250 North Water Suite 300
Wichita Kansas 67202

ATTN: Phil Askey

APC-Scherler #1-15

15/17S/45W Kiowa/Col

Job Ticket: 15982

DST#: 5

Test Start: 2011.04.03 @ 03:17:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:06:30

Time Test Ended: 12:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Scott City/170

Interval: **5185.00 ft (KB) To 5235.00 ft (KB) (TVD)**

Total Depth: 5235.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 4128.00 ft (KB)

4117.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8400** Outside

Press @ Run Depth: 57.66 psia @ 5231.82 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.04.03

End Date:

2011.04.03

Last Calib.:

2011.04.04

Start Time: 03:17:00

End Time:

12:53:30

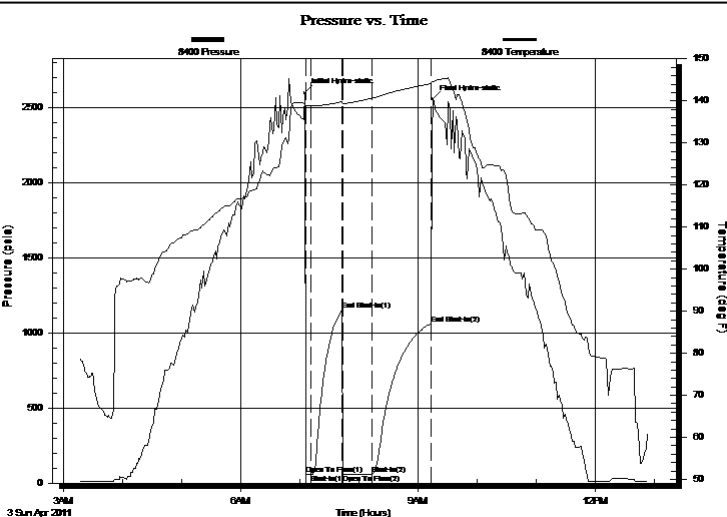
Time On Btm:

2011.04.03 @ 07:05:00

Time Off Btm:

2011.04.03 @ 09:15:00

TEST COMMENT: 1ST Opening 5 Minutes speed tool/blow was dead all the way through out
1ST Shut-In 30 Minutes no blow back
2ND Opening 30 Minutes opened tool /blow was dead all through out opening
2ND Shut-In 60 Minutes no blow back



PRESSURE SUMMARY

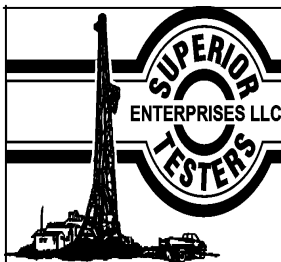
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2594.88	139.38	Initial Hydro-static
2	56.25	138.94	Open To Flow (1)
7	56.91	138.87	Shut-In(1)
38	1150.85	139.78	End Shut-In(1)
39	57.30	139.38	Open To Flow (2)
69	57.66	140.64	Shut-In(2)
129	1061.52	144.12	End Shut-In(2)
130	2554.44	144.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Mud @ 100%	0.03

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
--	----------------	-----------------	------------------



DRILL STEM TEST REPORT

Mull Drilling Company Inc.

250 North Water Suite 300
Wichita Kansas 67202

ATTN: Phil Askey

APC-Scherler #1-15

15/17S/45W Kiowa/Col

Job Ticket: 15982

DST#: 5

Test Start: 2011.04.03 @ 03:17:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:06:30

Time Test Ended: 12:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Scott City/170

Interval: **5185.00 ft (KB) To 5235.00 ft (KB) (TVD)**

Total Depth: 5235.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 4128.00 ft (KB)

4117.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8405** Inside

Press @ RunDepth: 1060.46 psia @ 5230.82 ft (KB)

Start Date: 2011.04.03

End Date:

2011.04.03

Start Time: 03:17:00

End Time:

12:53:01

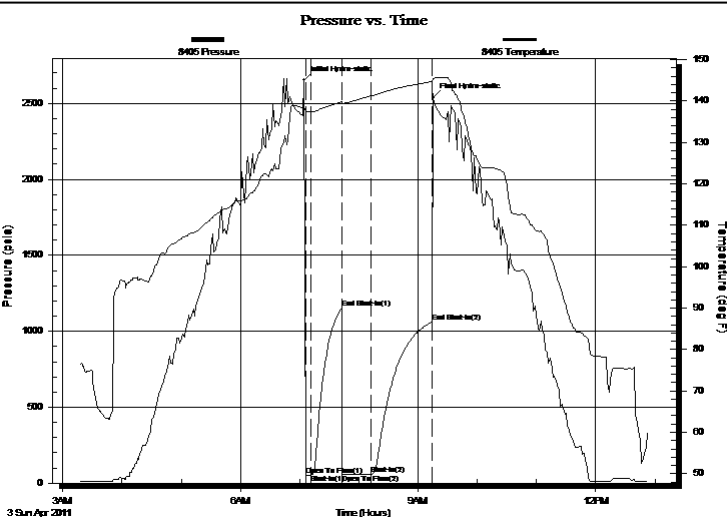
Capacity: 5000.00 psia

Last Calib.: 2011.04.04

Time On Btm: 2011.04.03 @ 07:04:31

Time Off Btm: 2011.04.03 @ 09:15:31

TEST COMMENT: 1ST Opening 5 Minutes speed tool/blow was dead all the way through out
1ST Shut-In 30 Minutes no blow back
2ND Opening 30 Minutes opened tool /blow was dead all through out opening
2ND Shut-In 60 Minutes no blow back



PRESSURE SUMMARY

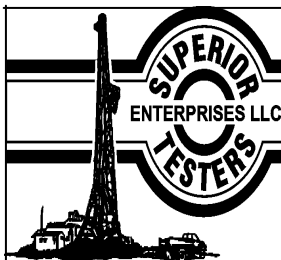
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2652.15	138.32	Initial Hydro-static
2	53.59	137.61	Open To Flow (1)
7	55.23	137.45	Shut-In(1)
38	1152.16	139.80	End Shut-In(1)
39	54.76	139.41	Open To Flow (2)
68	56.79	141.25	Shut-In(2)
129	1060.46	144.70	End Shut-In(2)
131	2538.15	145.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Mud @ 100%	0.03

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
--	----------------	-----------------	------------------



DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Company Inc.

APC-Scherler #1-15

250 North Water Suite 300
Wichita Kansas 67202

15/17S/45W Kiowa/Col

Job Ticket: 15982

DST#: 5

ATTN: Phil Askey

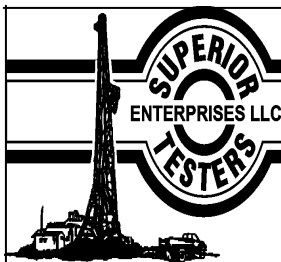
Test Start: 2011.04.03 @ 03:17:00

Tool Information

Drill Pipe:	Length: 4990.00 ft	Diameter: 3.80 inches	Volume: 70.00 bbl	Tool Weight: 20000.00 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: 186.11 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 25000.00 lb
			Total Volume: 70.92 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.11 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	5185.00 ft			Final 79000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.82 ft			
Tool Length:	77.82 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			5162.00	
Hydrolic Tool	5.00			5167.00	
Jars	6.00			5173.00	
Safety Joint	2.00			5175.00	
Packer	5.00			5180.00	28.00 Bottom Of Top Packer
Packer	5.00			5185.00	
Perforations	5.00			5190.00	
Change Over Sub	0.75			5190.75	
Drill Pipe	31.32			5222.07	
Change Over Sub	0.75			5222.82	
Perforations	7.00			5229.82	
Recorder	1.00	8405	Inside	5230.82	
Recorder	1.00	8400	Outside	5231.82	
Bull Plug	3.00			5234.82	49.82 Bottom Packers & Anchor

Total Tool Length: 77.82



DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Company Inc.

APC-Scherler #1-15

250 North Water Suite 300
Wichita Kansas 67202

15/17S/45W Kiowa/Col

Job Ticket: 15982

DST#: 5

ATTN: Phil Askey

Test Start: 2011.04.03 @ 03:17:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 2300.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psia

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
7.00	Mud @ 100%	0.034

Total Length: 7.00 ft Total Volume: 0.034 bbl

Num Fluid Samples: 0

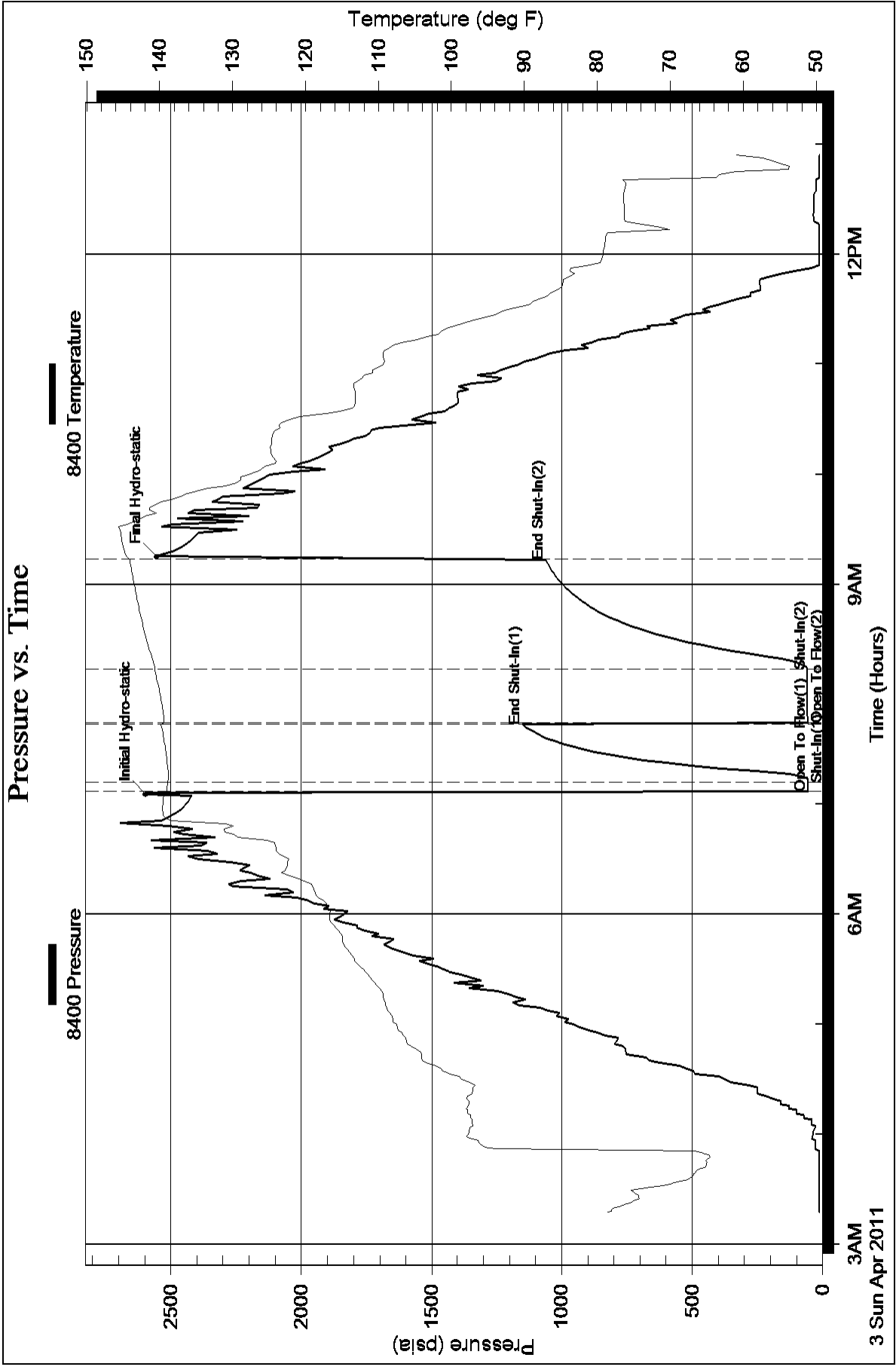
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8405

Inside

Mull Drilling Company Inc.

15/17S/45W Kiow a/Col

DST Test Number: 5

