



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: 2011.03.29 @ 04:30:00

End Date: 2011.03.29 @ 00:00:00

Job Ticket #: 15980 DST #: 3

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

Printed: 2011.03.29 @ 23:03:41

Mull Drilling Company Inc.

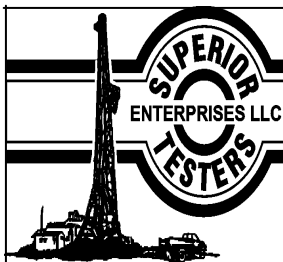
APC-Scherler #1-15

15/17S/45W KiowaCol

DST # 3

Marmoton

2011.03.29



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: 15980

DST#: 3

Test Start: 2011.03.29 @ 04:30:00

GENERAL INFORMATION:

Formation: **Marmoton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Interval: **4418.00 ft (KB) To 4452.00 ft (KB) (TVD)**

Total Depth: 4452.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Scott City/170

Reference Elevations: 4128.00 ft (KB)

4117.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8405** Inside

Press @ RunDepth: 127.38 psia @ 4448.00 ft (KB)

Start Date: 2011.03.29

End Date:

2011.03.29

Start Time: 04:30:51

End Time:

09:49:24

Capacity: 5000.00 psia

Last Calib.: 2011.03.29

Time On Btm: 2011.03.29 @ 07:10:24

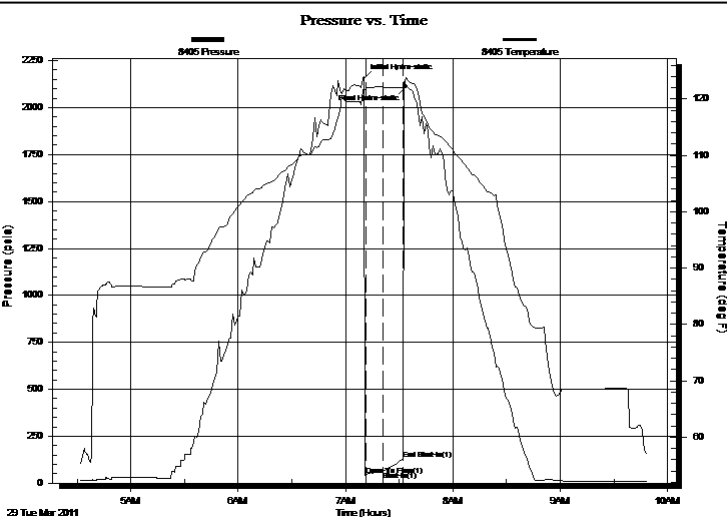
Time Off Btm: 2011.03.29 @ 07:33:54

TEST COMMENT: 1ST Opening 8 Minutes weak blow/blow built ti 1.50 inches into bucket of water

1ST Shut-In 12 Minutes no blow back

2ND Opening N/A n/a n/a n/a n/a

2ND Shut-In N/A n/a n/a n/a n/a



PRESSURE SUMMARY

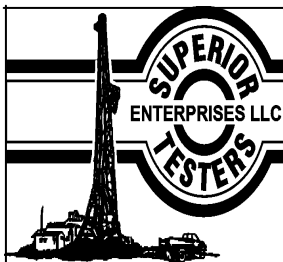
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2156.42	122.04	Initial Hydro-static
1	44.31	121.89	Open To Flow (1)
11	63.43	122.09	Shut-In(1)
22	127.38	121.98	End Shut-In(1)
24	2112.16	123.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w with Gassy odor 100% Mud	0.10

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
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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: 15980

DST#: 3

Test Start: 2011.03.29 @ 04:30:00

GENERAL INFORMATION:

Formation: **Marmoton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Interval: **4418.00 ft (KB) To 4452.00 ft (KB) (TVD)**

Total Depth: 4452.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Scott City/170

Reference Elevations: 4128.00 ft (KB)

4117.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8400** Outside

Press@RunDepth: 127.51 psia @ 4449.00 ft (KB)

Start Date: 2011.03.29

End Date:

2011.03.29

Start Time: 04:30:00

End Time:

09:48:30

Capacity: 5000.00 psia

Last Calib.: 2011.03.29

Time On Btm: 2011.03.29 @ 07:08:00

Time Off Btm: 2011.03.29 @ 07:32:30

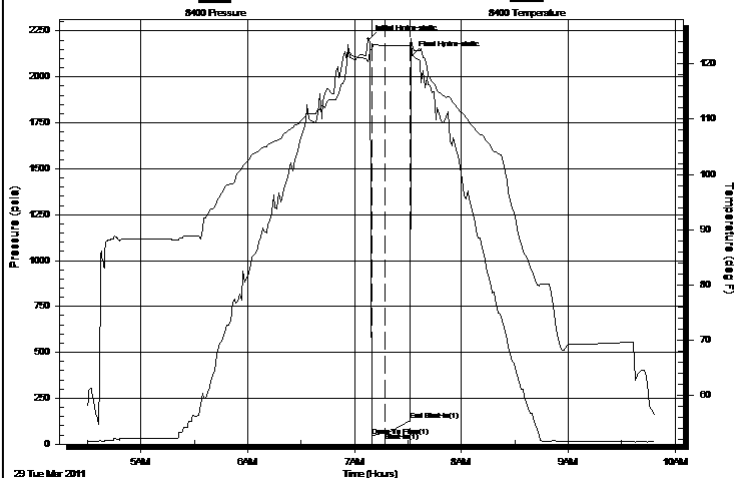
TEST COMMENT: 1ST Opening 8 Minutes weak blow/blow built ti 1.50 inches into bucket of water

1ST Shut-In 12 Minutes no blow back

2ND Opening N/A n/a n/a n/a n/a

2ND Shut-In N/A n/a n/a n/a n/a

Pressure vs. Time



PRESSURE SUMMARY

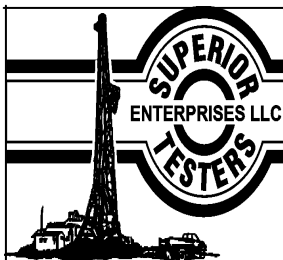
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2205.07	121.00	Initial Hydro-static
2	42.93	122.57	Open To Flow (1)
9	64.94	123.31	Shut-In(1)
23	127.51	123.31	End Shut-In(1)
25	2116.13	123.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w with Gassy odor 100% Mud	0.10

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
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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: 15980

DST#: 3

ATTN: Phil Askey

Test Start: 2011.03.29 @ 04:30:00

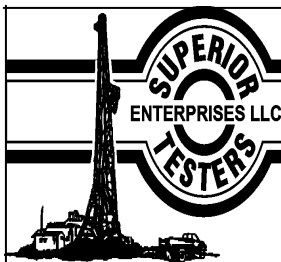
Tool Information

Drill Pipe:	Length:	4217.00 ft	Diameter:	3.80 inches	Volume:	59.15 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:	186.11 ft	Diameter:	2.25 inches	Volume:	0.92 bbl	Weight to Pull Loose:	10000.00 lb
					Total Volume:	60.07 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.11 ft							
Depth to Top Packer:	4418.00 ft							
Depth to Bottom Packer:	ft							
Interval between Packers:	34.00 ft							
Tool Length:	54.00 ft							
Number of Packers:	2		Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			4403.00	
Hydraulic Tool	5.00			4408.00	
Packer	5.00			4413.00	20.00 Bottom Of Top Packer
Packer	5.00			4418.00	
Perforations	29.00			4447.00	
Recorder	1.00	8405	Inside	4448.00	
Recorder	1.00	8400	Outside	4449.00	
Bull Plug	3.00			4452.00	34.00 Bottom Packers & Anchor

Total Tool Length: 54.00



DRILL STEM TEST REPORT

FLUID SUMMARY

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250 North Water Suite 300
Wichita Kansas 67202

15/17S/45W Kiowa/Col

Job Ticket: 15980

DST#: 3

ATTN: Phil Askey

Test Start: 2011.03.29 @ 04:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.80 in³

Resistivity: ohm.m

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psia

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud with Gassy odor 100% Mud	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

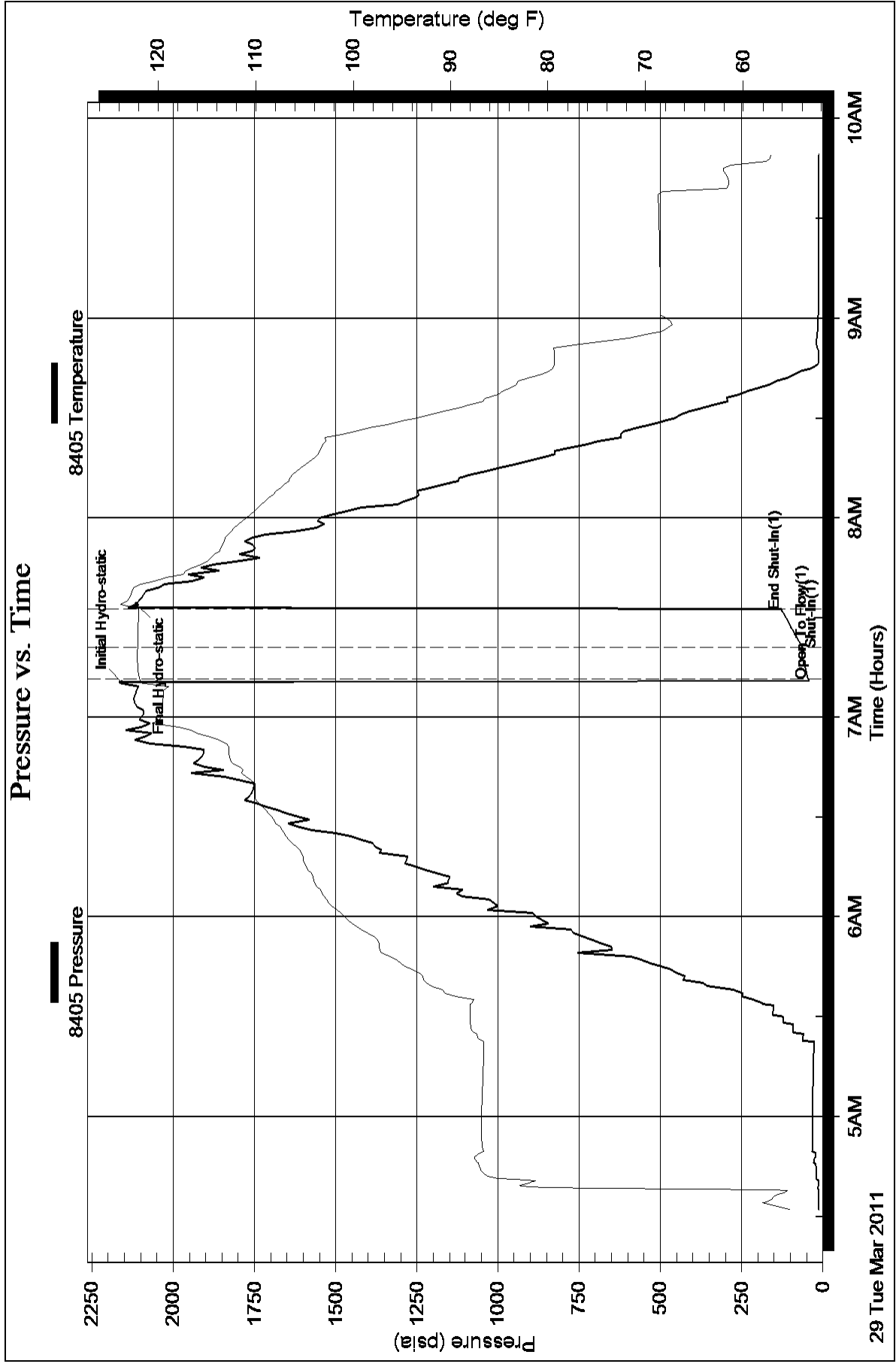
Serial #: 8405

Inside

Mull Drilling Company Inc.

15/17S/45W Kiow a/Col

DST Test Number: 3



Serial #: 8400

Outside Mull Drilling Company Inc.

15/17S/45W Kiow a/Col

DST Test Number: 3

