

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co, Inc**

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

35-16-45 Cheyenne,CO

APC-Baughman Unit #1-35

Start Date: 2013.07.25 @ 00:06:00

End Date: 2013.07.25 @ 08:41:30

Job Ticket #: 53026 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.02 @ 09:19:30



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 53026

DST#: 1

Test Start: 2013.07.25 @ 00:06:00

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:40:15

Time Test Ended: 08:41:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Cornelio Landa III (

Unit No: 64

Interval: 4216.00 ft (KB) To 4227.00 ft (KB) (TVD)

Total Depth: 4227.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4229.00 ft (KB)

4218.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6772 Outside

Press @ Run Depth: 302.11 psig @ 4217.00 ft (KB)

Start Date: 2013.07.25

End Date:

2013.07.25

Start Time: 00:06:05

End Time:

08:41:30

Capacity: 8000.00 psig

Last Calib.: 2013.07.25

Time On Btm: 2013.07.25 @ 02:40:00

Time Off Btm: 2013.07.25 @ 05:36:45

TEST COMMENT: IF: BOB in 5 mins.

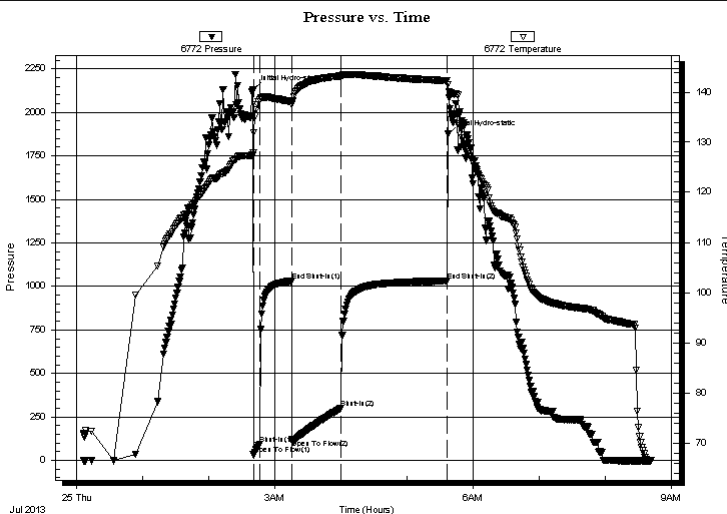
IS: Bled off in 2 1/2 mins.-built to 3/4" of blow back

FF: BOB in 5 mins.

FS: Bled off in 2 1/2 mins.-built to 7" of blow back

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2132.11	127.38	Initial Hydro-static
1	32.79	127.97	Open To Flow (1)
6	92.93	138.55	Shut-In(1)
35	1030.40	138.14	End Shut-In(1)
36	118.70	137.47	Open To Flow (2)
80	302.11	143.19	Shut-In(2)
176	1030.46	142.30	End Shut-In(2)
177	1874.67	141.49	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
60.00	GMW 10g 60w 30w	0.30
119.00	GW 10g 90w	0.59
476.00	GW 10g 90w	6.68
5.00	GO	0.07

Gas Rates

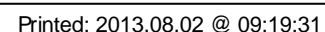
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Test Start: 2013.07.25 @ 00:06:00

KB to GR/CF: 11.00 ft

FSI: Bled off in 2 1/2 mins.-built to 7" of blow back





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 53026

DST#: 1

Test Start: 2013.07.25 @ 00:06:00

Tool Information

Drill Pipe:	Length: 4042.00 ft	Diameter: 3.80 inches	Volume: 56.70 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: 25000.00 lb
Drill Collar:	Length: 179.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume:	57.58 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4216.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	31.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Geared up for H2S meter read 110 PPM

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4197.00	
Shut In Tool	5.00			4202.00	
Hydraulic tool	5.00			4207.00	
Packer	5.00			4212.00	20.00 Bottom Of Top Packer
Packer	4.00			4216.00	
Stubb	1.00			4217.00	
Recorder	0.00	6772	Outside	4217.00	
Recorder	0.00	8845	Outside	4217.00	
Perforations	5.00			4222.00	
Bullnose	5.00			4227.00	11.00 Bottom Packers & Anchor
Total Tool Length:	31.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

35-16-45 Cheyenne, CO

Job Ticket: 53026

DST#: 1

ATTN: Phil Askey

Test Start: 2013.07.25 @ 00:06:00

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:

15000 ppm

Viscosity: 70.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.29 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GMW 10g 60w 30w	0.295
119.00	GW 10g 90w	0.585
476.00	GW 10g 90w	6.677
5.00	GO	0.070

Total Length: 660.00 ft

Total Volume: 7.627 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .42 @ 64 degrees

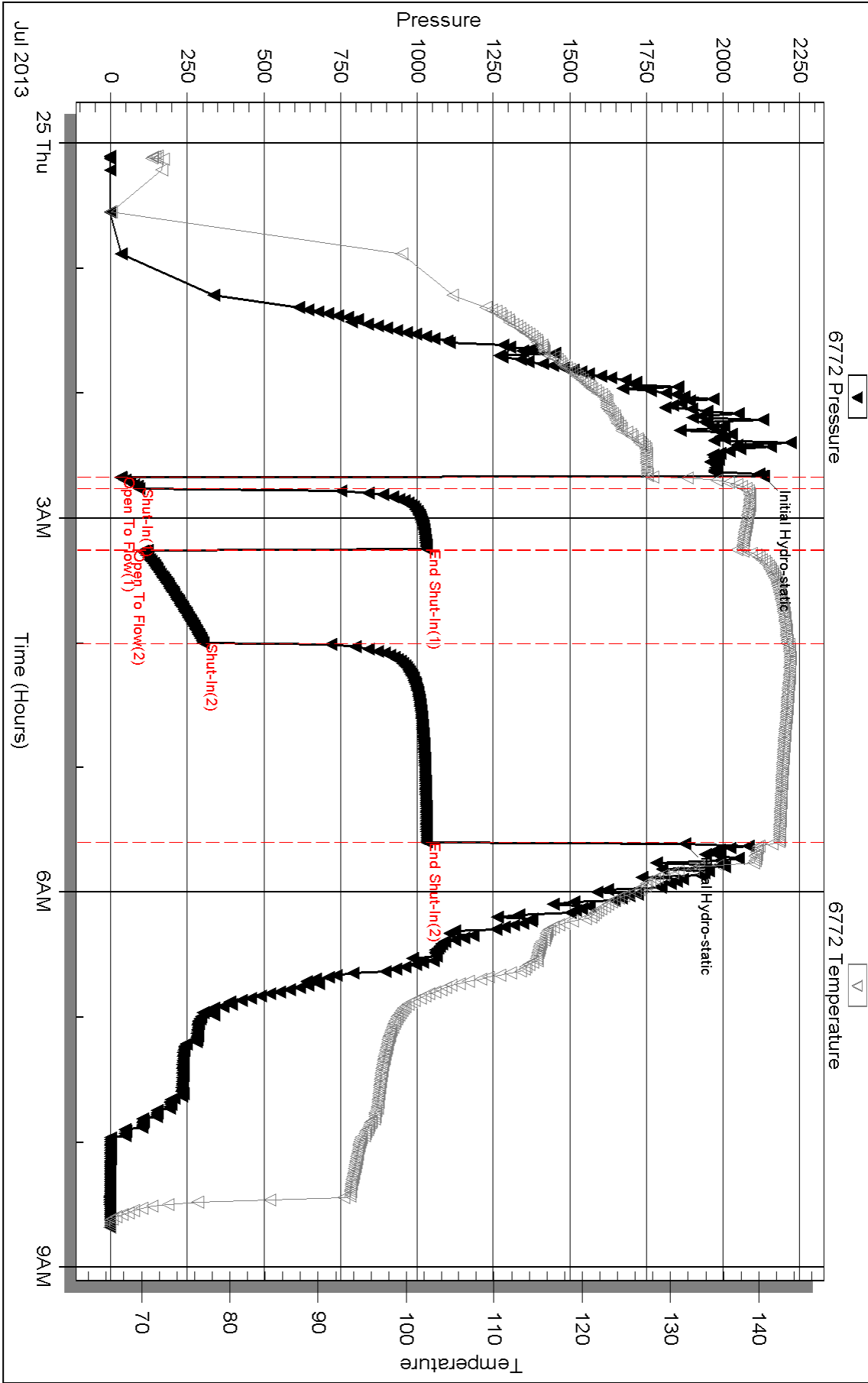
Serial #: 6772

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 1

Pressure vs. Time

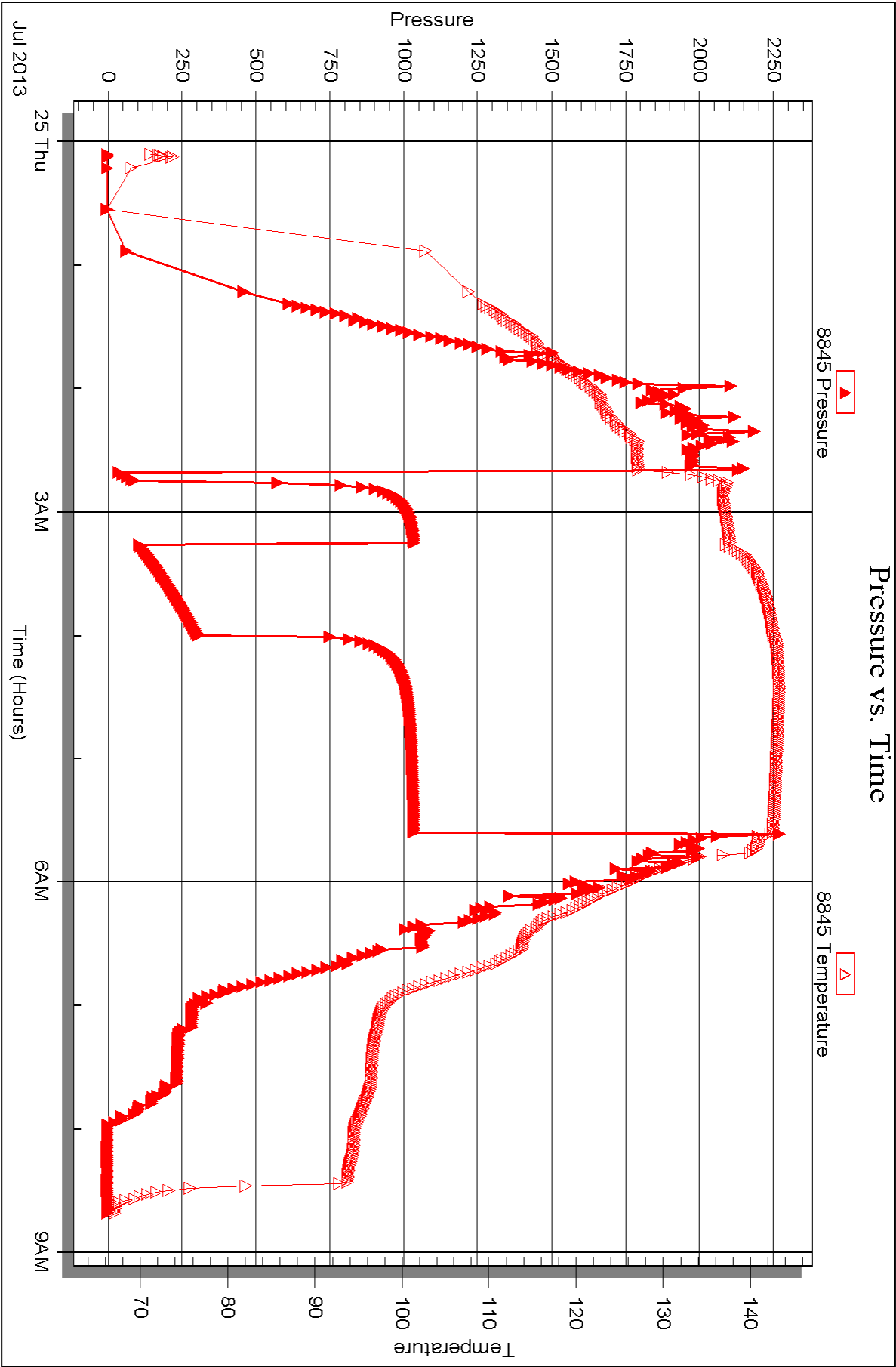


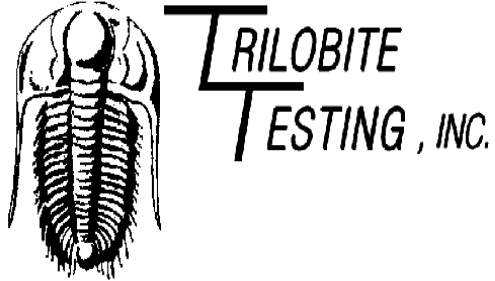
Serial #: 8845

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co, Inc**

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

35-16-45 Cheyenne,CO

APC-Baughman Unit #1-35

Start Date: 2013.07.26 @ 00:04:00

End Date: 2013.07.26 @ 11:21:45

Job Ticket #: 53027 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.02 @ 09:18:23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 53027

DST#: 2

Test Start: 2013.07.26 @ 00:04:00

GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:37:15

Time Test Ended: 11:21:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III (

Unit No: 64

Interval: 4301.00 ft (KB) To 4325.00 ft (KB) (TVD)

Total Depth: 4325.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4229.00 ft (KB)

4218.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6772 Outside

Press @ Run Depth: 797.69 psig @ 4305.00 ft (KB)

Start Date: 2013.07.26

End Date:

2013.07.26

Start Time: 00:04:05

End Time:

11:21:45

Capacity: 8000.00 psig

Last Calib.: 2013.07.26

Time On Btm: 2013.07.26 @ 02:37:00

Time Off Btm: 2013.07.26 @ 07:18:15

TEST COMMENT: IF: BOB in 45 sec.

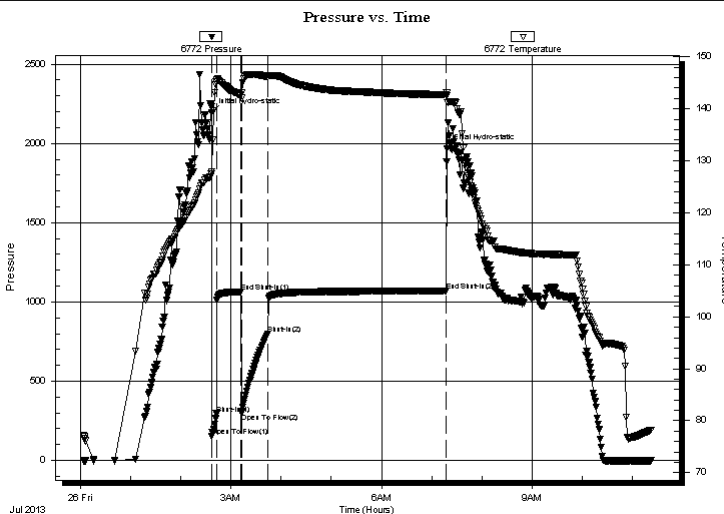
ISI: Bled off in 11 mins. - 2" Immediately-built to 6" of blow back

FF: BOB in 45 sec. shut in after 33 mins. open H2S to surface.

FSI: Bled off in 5 mins-surface blow -built to 5" of blow back-died after 2 1/4 hrs.

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2192.87	127.57	Initial Hydro-static
1	151.37	127.96	Open To Flow (1)
6	294.68	145.14	Shut-In(1)
35	1064.47	142.61	End Shut-In(1)
36	300.23	142.05	Open To Flow (2)
68	797.69	146.13	Shut-In(2)
281	1068.66	142.74	End Shut-In(2)
282	1964.91	142.49	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
2073.00	Go 30g 70o	27.45
0.00	Gas to surface 2252'	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 53027

DST#: 2

Test Start: 2013.07.26 @ 00:04:00

Tool Information

Drill Pipe:	Length: 4106.00 ft	Diameter: 3.80 inches	Volume: 57.60 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: 30000.00 lb
Drill Collar:	Length: 179.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	58.48 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4301.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter:	6.75 inches	

Tool Comments: Geared up for H2S, meter read 100 ppm

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4282.00	
Shut In Tool	5.00			4287.00	
Hydraulic tool	5.00			4292.00	
Packer	5.00			4297.00	20.00 Bottom Of Top Packer
Packer	4.00			4301.00	
Stubb	1.00			4302.00	
Perforations	3.00			4305.00	
Recorder	0.00	6772	Outside	4305.00	
Recorder	0.00	8845	Outside	4305.00	
Perforations	15.00			4320.00	
Bullnose	5.00			4325.00	24.00 Bottom Packers & Anchor

Total Tool Length: 44.00



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FLUID SUMMARY

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

35-16-45 Cheyenne, CO

Job Ticket: 53027

DST#: 2

ATTN: Phil Askey

Test Start: 2013.07.26 @ 00:04:00

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: 58.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2073.00	Go 30g 70o	27.448
0.00	Gas to surface 2252'	0.000

Total Length: 2073.00 ft Total Volume: 27.448 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

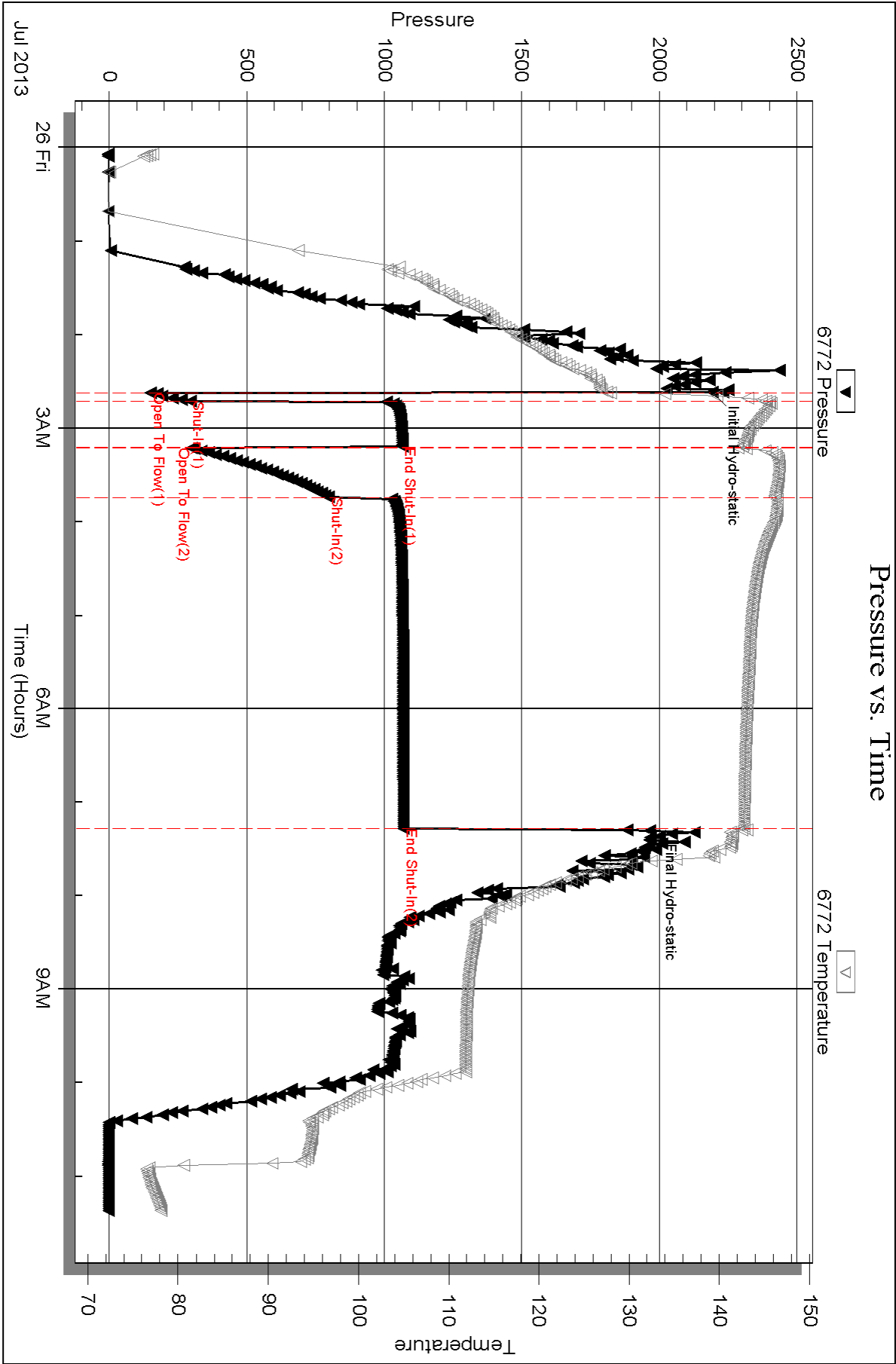
Recovery Comments: H2S meter read 5 ppm on rig floor and- Dropped bar and circulated fluid out through reserve.

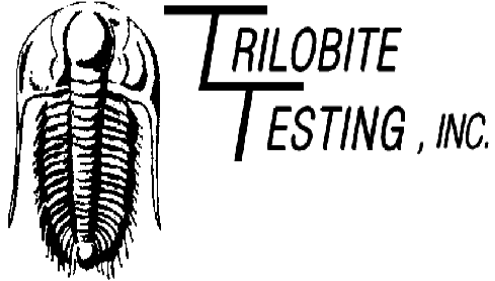
Serial #: 6772

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co, Inc**

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

35-16-45 Cheyenne,CO

APC-Baughman Unit #1-35

Start Date: 2013.07.27 @ 05:26:00

End Date: 2013.07.27 @ 13:56:00

Job Ticket #: 52810 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.02 @ 09:17:33

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

35-16-45 Cheyenne,CO

DST # 3

Pleasanton

2013.07.27



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52810

DST#: 3

Test Start: 2013.07.27 @ 05:26:00

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:39:30

Time Test Ended: 13:56:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

Interval: 4400.00 ft (KB) To 4432.00 ft (KB) (TVD)

Total Depth: 4432.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4229.00 ft (KB)

4218.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8845 Outside

Press @ Run Depth: 201.02 psig @ 4401.00 ft (KB)

Start Date: 2013.07.27

End Date:

2013.07.27

Start Time: 05:26:05

End Time:

13:55:59

Capacity: 8000.00 psig

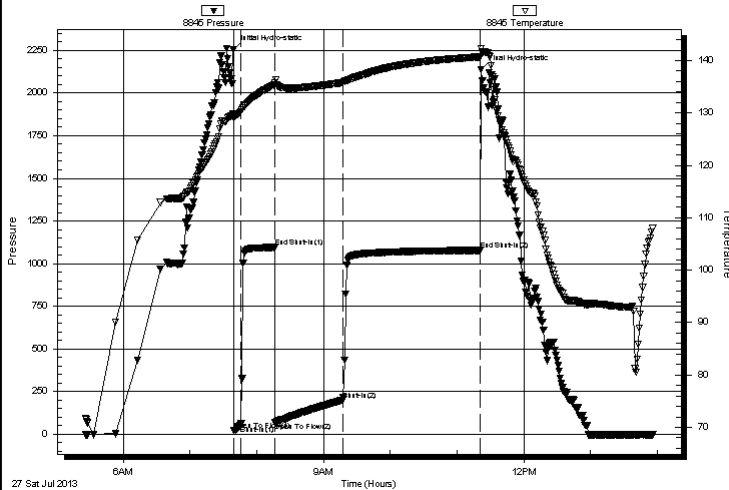
Last Calib.: 2013.07.27

Time On Btm: 2013.07.27 @ 07:39:15

Time Off Btm: 2013.07.27 @ 11:21:45

TEST COMMENT: IF: 5 1/2" Blow.
ISl: 1/4" Return.
FF: BOB @ 12 min. GTS @ 47 min.
FSl: 1" Return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2253.44	129.80	Initial Hydro-static
1	23.50	129.03	Open To Flow (1)
7	54.98	130.23	Shut-In(1)
37	1095.60	135.35	End Shut-In(1)
37	69.62	135.84	Open To Flow (2)
99	201.02	135.81	Shut-In(2)
222	1077.66	140.71	End Shut-In(2)
223	2136.89	142.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GMCW 5m 10g 85w	1.88
220.00	GWCM 20g 20w 60m	3.09

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



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DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52810

DST#: 3

Test Start: 2013.07.27 @ 05:26:00

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:39:30

Time Test Ended: 13:56:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

Interval: 4400.00 ft (KB) To 4432.00 ft (KB) (TVD)

Total Depth: 4432.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4229.00 ft (KB)

4218.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6772 Outside

Press @ Run Depth: psig @ 4401.00 ft (KB)

Start Date: 2013.07.27

End Date:

2013.07.27

Start Time: 05:27:43

End Time:

13:57:22

Capacity: 8000.00 psig

Last Calib.:

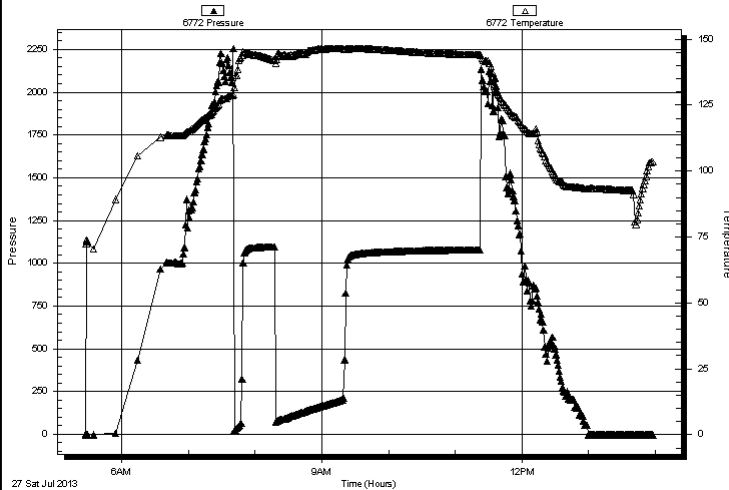
2013.07.27

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 5 1/2" Blow.
ISl: 1/4" Return.
FF: BOB @ 12 min. GTS @ 47 min.
FSl: 1" Return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
250.00	GMCW 5m 10g 85w	1.88
220.00	GWCM 20g 20w 60m	3.09

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52810

DST#: 3

Test Start: 2013.07.27 @ 05:26:00

Tool Information

Drill Pipe:	Length:	4231.00 ft	Diameter:	3.80 inches	Volume:	59.35 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:	30000.00 lb
Drill Collar:	Length:	179.00 ft	Diameter:	2.25 inches	Volume:	0.88 bbl	Weight to Pull Loose:	85000.00 lb
					Total Volume:	60.23 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight: Initial	62000.00 lb
Depth to Top Packer:		4400.00 ft					Final	65000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		32.00 ft						
Tool Length:		52.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4381.00	
Shut In Tool	5.00			4386.00	
Hydraulic tool	5.00			4391.00	
Packer	5.00			4396.00	20.00 Bottom Of Top Packer
Packer	4.00			4400.00	
Stubb	1.00			4401.00	
Recorder	0.00	6772	Outside	4401.00	
Recorder	0.00	8845	Outside	4401.00	
Perforations	26.00			4427.00	
Bullnose	5.00			4432.00	32.00 Bottom Packers & Anchor
Total Tool Length:	52.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

35-16-45 Cheyenne, CO

Job Ticket: 52810

DST#: 3

ATTN: Phil Askey

Test Start: 2013.07.27 @ 05:26:00

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:

29000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 6.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	GMCW 5m 10g 85w	1.876
220.00	GWCM 20g 20w 60m	3.086

Total Length: 470.00 ft

Total Volume: 4.962 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

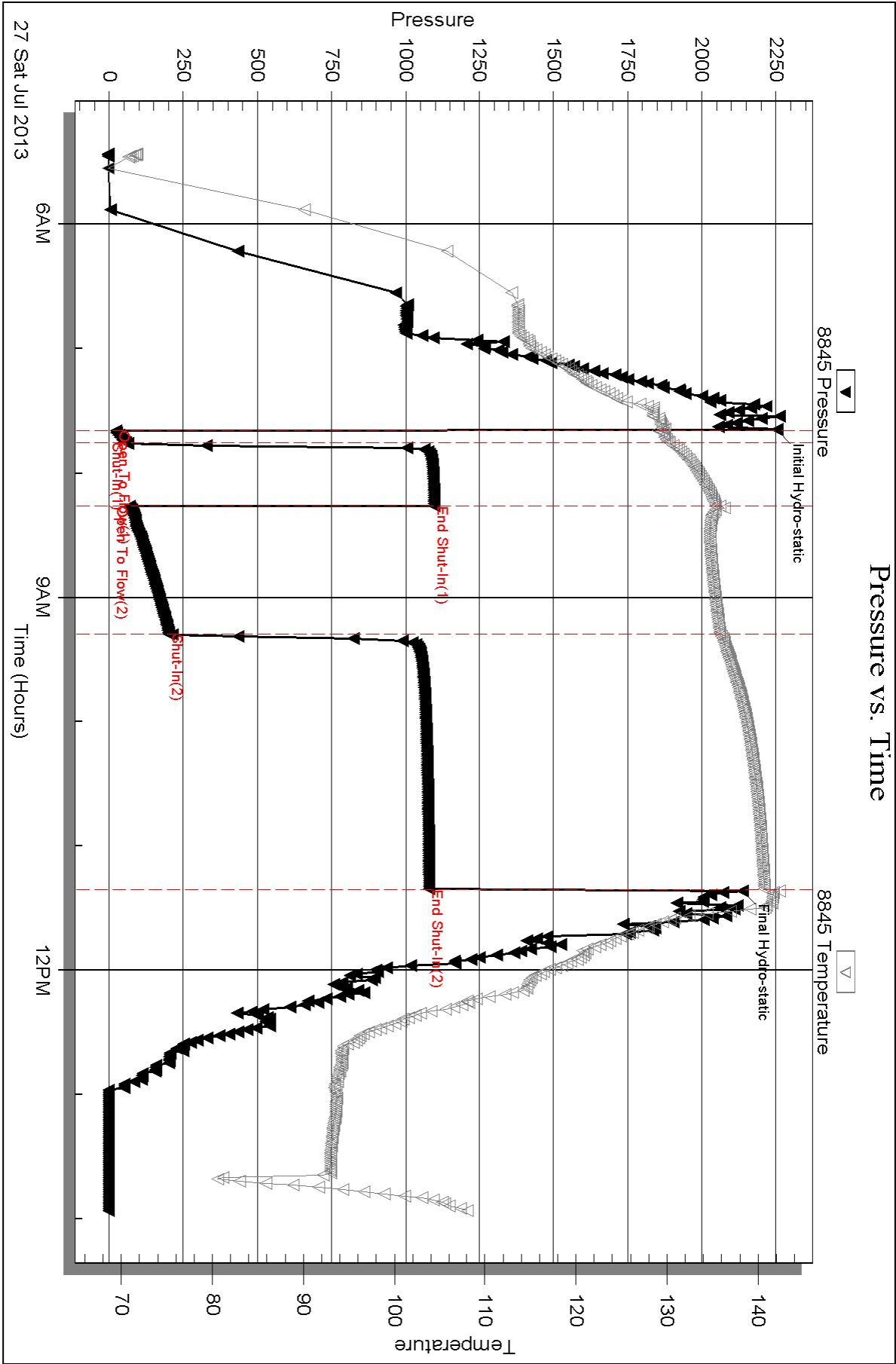
Recovery Comments: Water Salinity: .165 @ 96 degrees= 29,000 ppm

Serial #: 8845

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 3

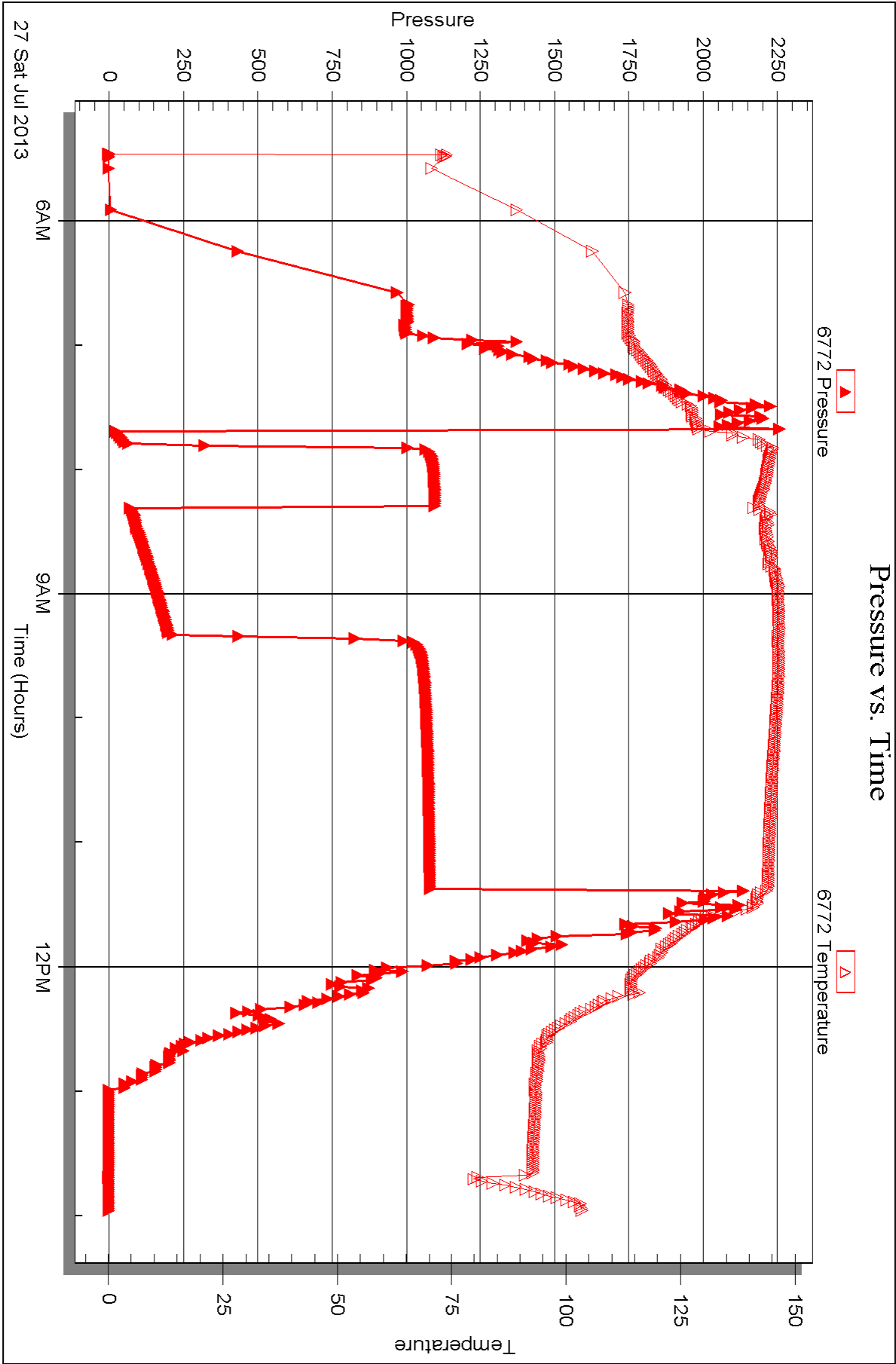


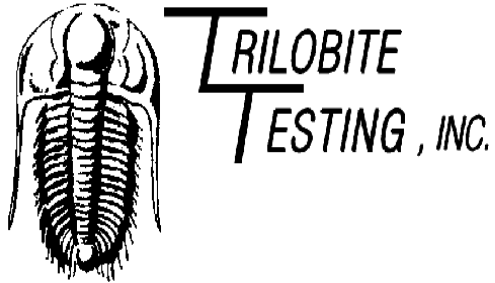
Serial #: 6772

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co, Inc**

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

35-16-45 Cheyenne,CO

APC-Baughman Unit #1-35

Start Date: 2013.07.28 @ 04:27:00

End Date: 2013.07.28 @ 12:36:45

Job Ticket #: 52811 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.02 @ 09:16:54

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

35-16-45 Cheyenne,CO

DST # 4

Marmaton

2013.07.28



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52811

DST#: 4

Test Start: 2013.07.28 @ 04:27:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:32:15

Time Test Ended: 12:36:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

Interval: 4450.00 ft (KB) To 4515.00 ft (KB) (TVD)

Total Depth: 4515.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4229.00 ft (KB)

4218.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6772 Outside

Press @ Run Depth: 304.14 psig @ 4451.00 ft (KB)

Start Date: 2013.07.28

End Date:

2013.07.28

Start Time: 04:27:05

End Time:

12:36:44

Capacity: 8000.00 psig

Last Calib.: 2013.07.28

Time On Btm: 2013.07.28 @ 06:32:00

Time Off Btm: 2013.07.28 @ 10:25:00

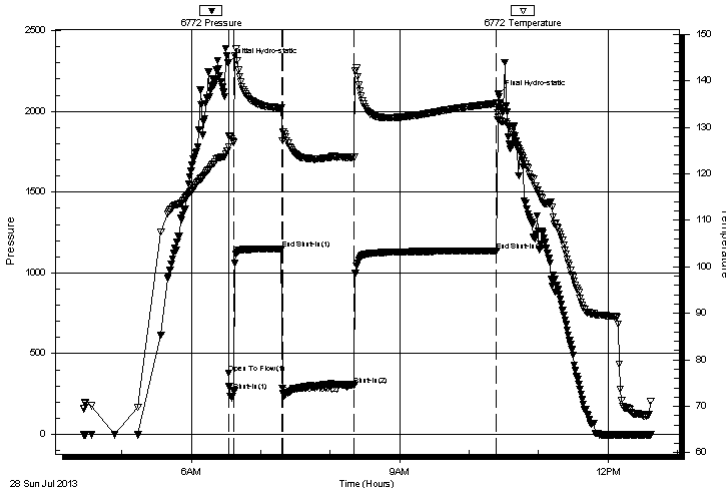
TEST COMMENT: IF: BOB @ 30 sec. GTS @ 4 min.

ISI: No Return.

FF: BOB Immediately

FSI: 1/2" Return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2300.59	125.01	Initial Hydro-static
1	378.92	125.80	Open To Flow (1)
5	269.04	126.70	Shut-In (1)
46	1148.13	134.20	End Shut-In (1)
48	251.34	128.91	Open To Flow (2)
109	304.14	123.54	Shut-In (2)
232	1136.88	135.12	End Shut-In (2)
233	2105.80	132.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GM 30g 70m (Oil Spots)	1.88

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	50.00	1005.92
Last Gas Rate	0.75	100.00	1786.91
Max. Gas Rate	0.75	100.00	1786.91

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52811

DST#: 4

Test Start: 2013.07.28 @ 04:27:00

Tool Information

Drill Pipe:	Length:	4262.00 ft	Diameter:	3.80 inches	Volume:	59.78 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:	30000.00 lb
Drill Collar:	Length:	179.00 ft	Diameter:	2.25 inches	Volume:	0.88 bbl	Weight to Pull Loose:	90000.00 lb
					Total Volume:	60.66 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		11.00 ft					String Weight: Initial	64000.00 lb
Depth to Top Packer:		4450.00 ft					Final	64000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		65.00 ft						
Tool Length:		85.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4431.00	
Shut In Tool	5.00			4436.00	
Hydraulic tool	5.00			4441.00	
Packer	5.00			4446.00	20.00 Bottom Of Top Packer
Packer	4.00			4450.00	
Stubb	1.00			4451.00	
Recorder	0.00	6772	Outside	4451.00	
Recorder	0.00	8845	Outside	4451.00	
Perforations	26.00			4477.00	
Change Over Sub	1.00			4478.00	
Drill Pipe	31.00			4509.00	
Change Over Sub	1.00			4510.00	
Bullnose	5.00			4515.00	65.00 Bottom Packers & Anchor

Total Tool Length: 85.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

35-16-45 Cheyenne, CO

Job Ticket: 52811

DST#: 4

ATTN: Phil Askey

Test Start: 2013.07.28 @ 04:27:00

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	GM 30g 70m (Oil Spots)	1.876

Total Length: 250.00 ft

Total Volume: 1.876 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

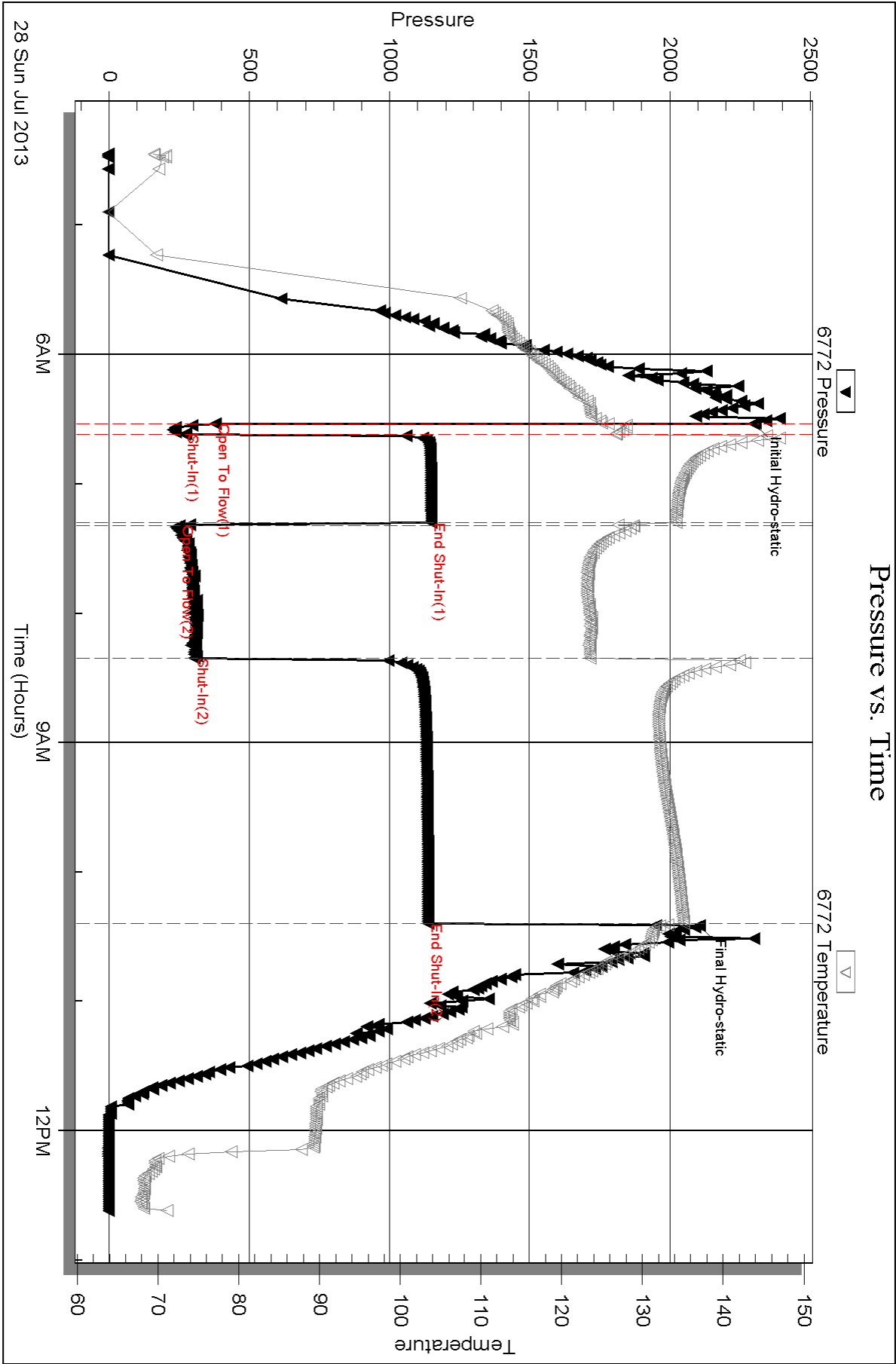
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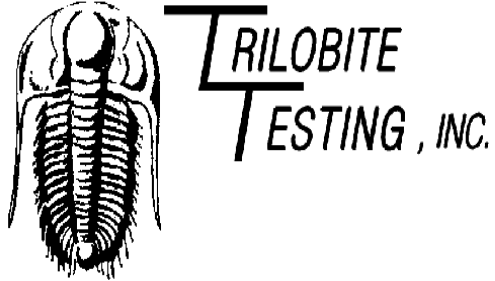
Serial #: 6772

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co, Inc**

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

35-16-45 Cheyenne,CO

APC-Baughman Unit #1-35

Start Date: 2013.08.01 @ 00:45:29

End Date: 2013.08.01 @ 07:44:38

Job Ticket #: 52842 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.08.02 @ 09:16:06



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52842

DST#: 5

Test Start: 2013.08.01 @ 00:45:29

GENERAL INFORMATION:

Formation: **Miss, Spergen**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:03:54

Time Test Ended: 07:44:38

Test Type: Conventional Bottom Hole (Reset)

Tester: Shane McBride

Unit No: 55

Interval: 5235.00 ft (KB) To 5320.00 ft (KB) (TVD)

Reference Elevations: 4229.00 ft (KB)

Total Depth: 5320.00 ft (KB) (TVD)

4218.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8368 Outside

Press @ Run Depth: 41.63 psig @ 5236.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.01

End Date:

2013.08.01

Last Calib.: 2013.08.01

Start Time: 00:45:29

End Time:

07:44:38

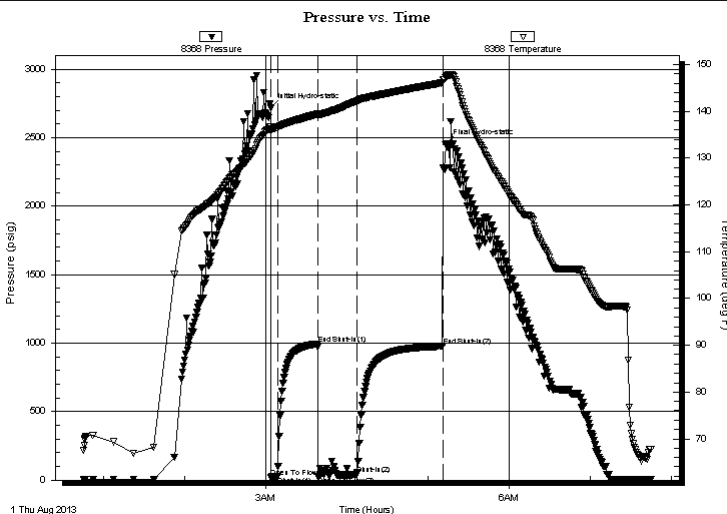
Time On Btm: 2013.08.01 @ 03:03:39

Time Off Btm: 2013.08.01 @ 05:13:09

TEST COMMENT: 3/4" blow
No return
Weak surface blow
No return

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2716.32	136.77	Initial Hydro-static
1	23.13	135.88	Open To Flow (1)
5	25.66	136.59	Shut-In(1)
35	994.09	139.43	End Shut-In(1)
35	27.72	139.11	Open To Flow (2)
64	41.63	142.20	Shut-In(2)
128	977.22	146.12	End Shut-In(2)
130	2454.71	147.41	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100% m	0.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Mull Drilling Co, Inc

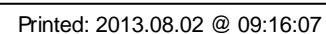
ATTN: Phil Askey

Job Ticket: 52842

Test Start: 2013.08.01 @ 00:45:29

KB to GR/CF: 11.00 ft

No return





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co, Inc

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

ATTN: Phil Askey

APC-Baughman Unit #1-35

35-16-45 Cheyenne, CO

Job Ticket: 52842

DST#: 5

Test Start: 2013.08.01 @ 00:45:29

Tool Information

Drill Pipe:	Length: 5048.00 ft	Diameter: 3.80 inches	Volume: 70.81 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: 25000.00 lb
Drill Collar:	Length: 179.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 90000.00 lb
			Total Volume: 71.69 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	5235.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 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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Change Over Sub	1.00			5216.00	
Shut In Tool	5.00			5221.00	
Hydraulic tool	5.00			5226.00	
Packer	5.00			5231.00	20.00 Bottom Of Top Packer
Packer	4.00			5235.00	
Stubb	1.00			5236.00	
Recorder	0.00	6667	Inside	5236.00	
Recorder	0.00	8368	Outside	5236.00	
Perforations	14.00			5250.00	
Change Over Sub	1.00			5251.00	
Drill Pipe	63.00			5314.00	
Change Over Sub	1.00			5315.00	
Bullnose	5.00			5320.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co, Inc

APC-Baughman Unit #1-35

1700 N Waterfront Pkwy B #1200
Wichita, KS 67206

35-16-45 Cheyenne, CO

Job Ticket: 52842

DST#: 5

ATTN: Phil Askey

Test Start: 2013.08.01 @ 00:45:29

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.55 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%m	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

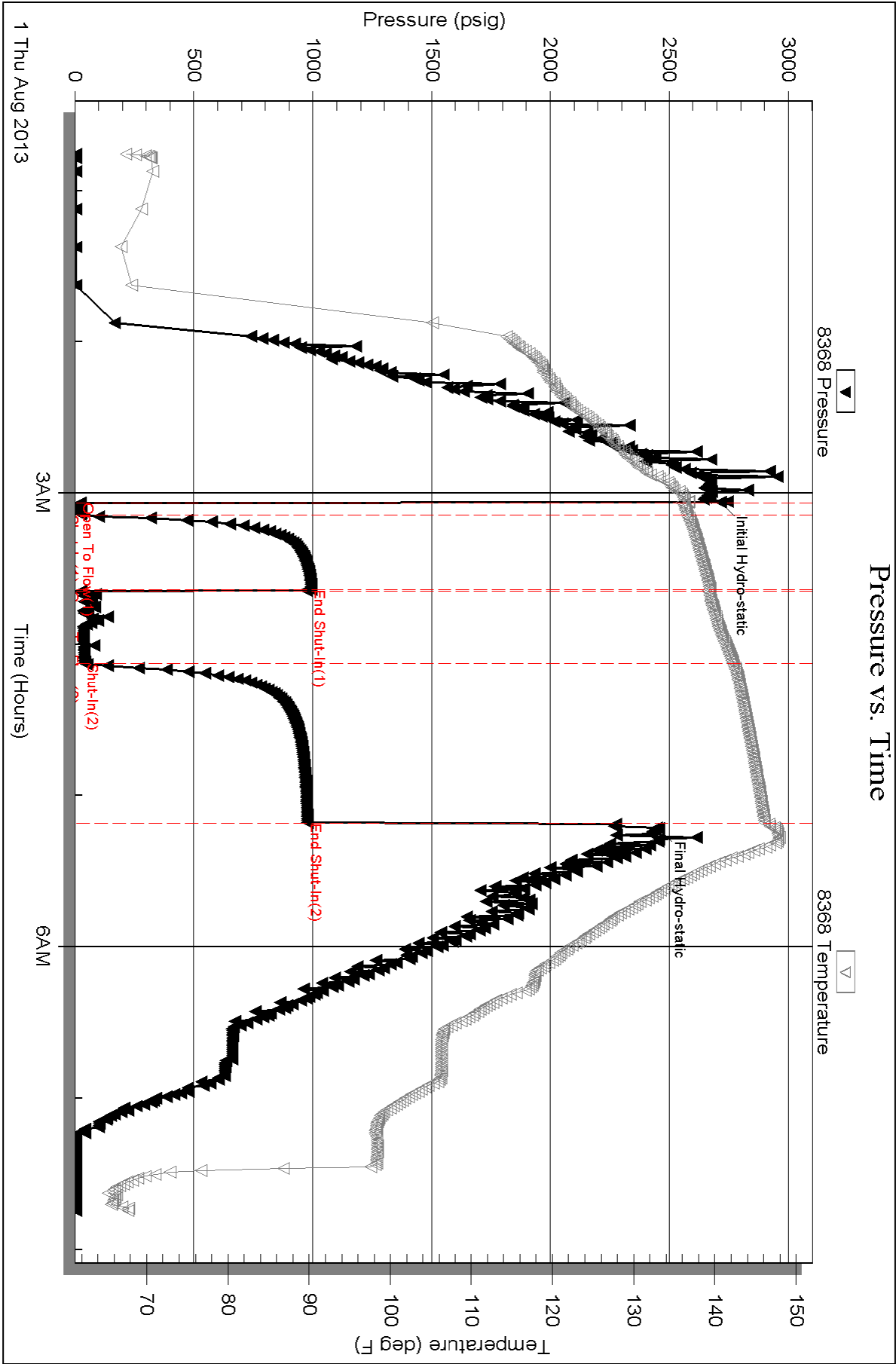
Recovery Comments:

Serial #: 8368

Outside Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 5



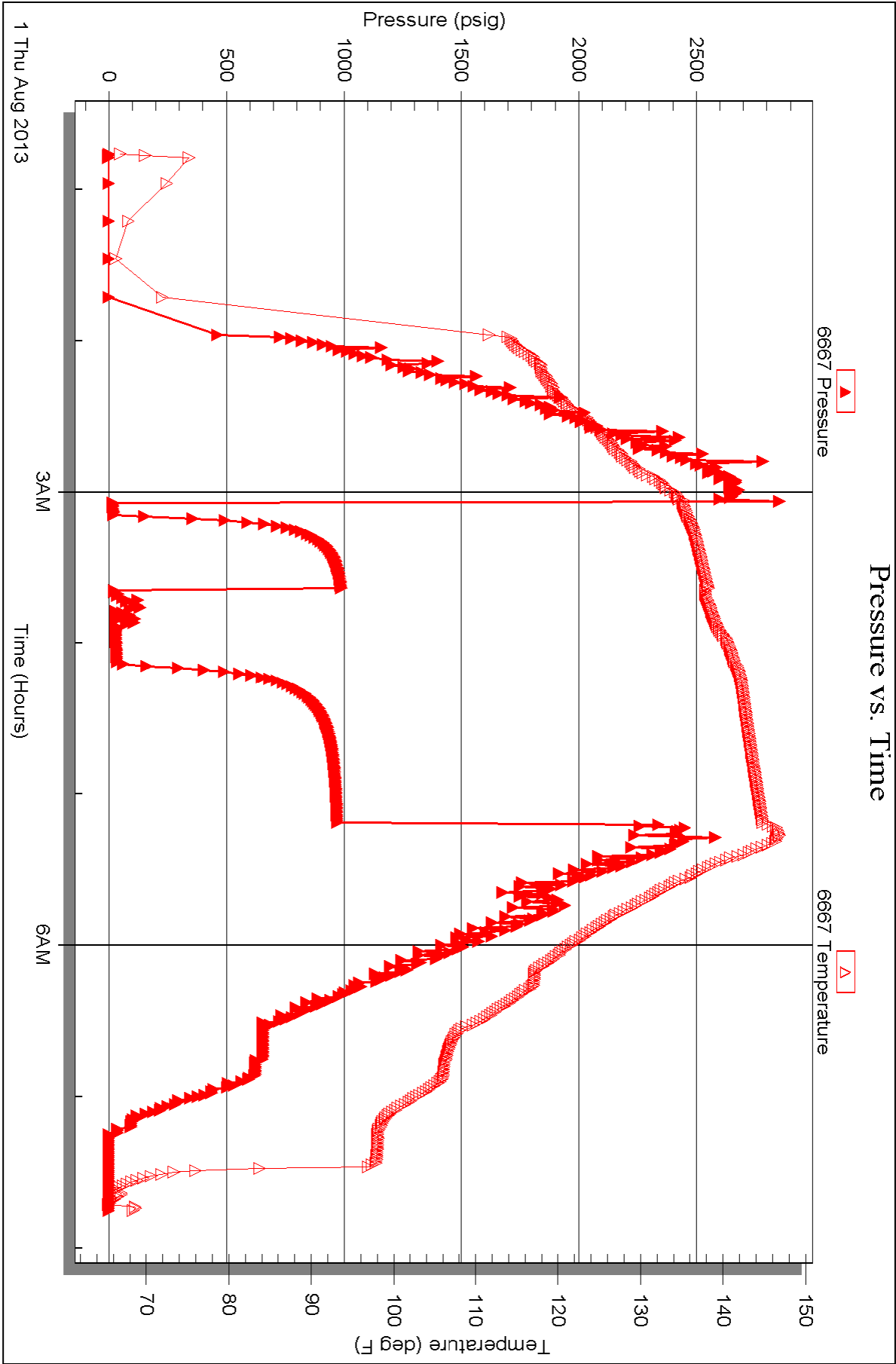
Serial #: 6667

Inside

Mull Drilling Co. Inc

35-16-45 Cheyenne, CO

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53026

Well Name & No. APC-Baughman Unit #1-35 Test No. 1 Date 7-24-13
 Company Mull Drilling Co., Inc Elevation 4229 KB 4218 GL
 Address 1700 N Waterfront PKWY B #1200 - Wichita, KS 67206
 Co. Rep / Geo. Phil Askey Rig Murfin #20
 Location: Sec. 35 Twp. 16S Rge. 4SW Co. Cheyenne State Co

Interval Tested 4216-4227 Zone Tested Lansing "G"
 Anchor Length 11' Drill Pipe Run 4042 Mud Wt. 9.0
 Top Packer Depth 4212 Drill Collars Run 179 Vis 70
 Bottom Packer Depth 4216 Wt. Pipe Run Ø WL 10.4
 Total Depth 4227 Chlorides 2900 ppm System LCM 6

Blow Description IF: Bob in 5 mins.
ISI: Bled off in 2 1/2 mins. - surface blow built to 3/4 in. of Blowback
FF: Bob in 5 mins.
FBI: Bled off in 2 1/2 mins. - surface blow - built to 7' of Blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>Gmw</u>	<u>10</u>	<u>60</u>	<u>30</u>	<u></u>
<u>100 119</u>	<u>GW</u>	<u>10</u>	<u>90</u>	<u></u>	<u></u>
<u>1476</u>	<u>GW</u>	<u>10</u>	<u>90</u>	<u></u>	<u></u>
<u>5</u>	<u>Bo</u>	<u>100</u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Rec Total 660 BHT 142 Gravity — API RW 42 @ 64 °F Chlorides 15000 ppm

(A) Initial Hydrostatic <u>2132</u>	<input checked="" type="checkbox"/> Test <u>1450</u>	T-On Location <u>123:40</u>
(B) First Initial Flow <u>32</u>	<input type="checkbox"/> Jars <u></u>	T-Started <u>00:06</u>
(C) First Final Flow <u>92</u>	<input type="checkbox"/> Safety Joint <u></u>	T-Open <u>02:40</u>
(D) Initial Shut-In <u>1030</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>05:30</u>
(E) Second Initial Flow <u>118</u>	<input type="checkbox"/> Hourly Standby <u></u>	T-Out <u>08:42</u>
(F) Second Final Flow <u>302</u>	<input checked="" type="checkbox"/> Mileage <u>194 RIT</u>	Comments <u>Put on H2S Gas</u>
(G) Final Shut-In <u>1030</u>	<input type="checkbox"/> Sampler <u></u>	<u>meter read 110 PPM</u>
(H) Final Hydrostatic <u>1874</u>	<input type="checkbox"/> Straddle <u></u>	<input type="checkbox"/> Ruined Shale Packer <u></u>
	<input type="checkbox"/> Shale Packer <u></u>	<input type="checkbox"/> Ruined Packer <u></u>
	<input type="checkbox"/> Extra Packer <u></u>	<input type="checkbox"/> Extra Copies <u></u>
	<input type="checkbox"/> Extra Recorder <u></u>	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby <u></u>	Total <u>1741.40</u>
	<input type="checkbox"/> Accessibility <u></u>	MP/DST Disc't <u></u>
	Sub Total <u>1741.40</u>	

Initial Open 5
 Initial Shut-In 30
 Final Flow 45
 Final Shut-In 90

Approved By

Phil Askey

Our Representative

Askey

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53027

Well Name & No. APC-Baughman Unit #1-35 Test No. 2 Date 7-25-13
 Company Mull Drilling Co, Inc Elevation 4229 KB 4218 GL
 Address 1700 N Waterfront PKWY B#1200 - Wichita KS 67206
 Co. Rep / Geo. Phil Askey Rig Murfin #20
 Location: Sec. 35 Twp. 16S Rge. 4SW Co. Cheyenne State Co

Interval Tested 4301-4325 Zone Tested Lansing "J"
 Anchor Length 24' Drill Pipe Run 4106 Mud Wt. 9.1+
 Top Packer Depth 4297 Drill Collars Run 179 Vis 58
 Bottom Packer Depth 4301 Wt. Pipe Run 10 WL 8.0
 Total Depth 4325 Chlorides 3700 ppm System LCM 5

Blow Description IF: B.O.b. in 45 seconds
ISI: Bled off in 11 mins - 2 in. Immediately - built to 6 in soft Blow back
FF: B.O.b. in 45 seconds - H2S gas to surface 33 mins. into open H2S meter
FSI: Bled off in 5 mins. - surface blow - built to 5 in Blow back

Rec	Feet of	%gas	%oil	%water	%mud
179	60	30	70		
1894	60	30	70		
	Gas to Surface				

Rec Total 2073 BHT 142 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2192</u>	<input checked="" type="checkbox"/> Test <u>1450</u>	T-On Location <u>23:45</u>
(B) First Initial Flow <u>151</u>	<input type="checkbox"/> Jars <u>—</u>	T-Started <u>00:04</u>
(C) First Final Flow <u>294</u>	<input type="checkbox"/> Safety Joint <u>—</u>	T-Open <u>02:37</u>
(D) Initial Shut-In <u>1064</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>07:17</u>
(E) Second Initial Flow <u>300</u>	<input type="checkbox"/> Hourly Standby <u>1.5h 150</u>	T-Out <u>11:21</u>
(F) Second Final Flow <u>797</u>	<input checked="" type="checkbox"/> Mileage <u>291.40</u>	Comments <u>Dropped Bar +</u>
(G) Final Shut-In <u>1068</u>	<input type="checkbox"/> Sampler <u>—</u>	<u>Circulated fluid out.</u>
(H) Final Hydrostatic <u>1964</u>	<input type="checkbox"/> Straddle <u>—</u>	<u>meter read 100 ppm</u>

Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer <u>—</u>	<input type="checkbox"/> Ruined Shale Packer <u>—</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer <u>—</u>	<input type="checkbox"/> Ruined Packer <u>—</u>
Final Flow <u>33</u>	<input type="checkbox"/> Extra Recorder <u>—</u>	<input type="checkbox"/> Extra Copies <u>—</u>
Final Shut-In <u>215</u>	<input type="checkbox"/> Day Standby <u>—</u>	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility <u>—</u>	Total <u>1891.40</u>
	Sub Total <u>1891.40</u>	MP/DST Disc't <u>—</u>

Approved By Phil Askey Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52810

Well Name & No. APC Baughman Unit #1-35 Test No. 3 Date 7/27/13
 Company Mull Drilling Co., Inc. Elevation 4229 KB 4218 GL
 Address 1700 N Waterfront Pkwy B #1200 Wichita, KS 67206
 Co. Rep / Geo. Phil Askey Rig Murfin #20
 Location: Sec. 35 Twp. 16S Rge. 45W Co. Cheyenne State CO

Interval Tested 4400 - 4432 Zone Tested Pleasanton
 Anchor Length 32' Drill Pipe Run 4231 Mud Wt. 9.3
 Top Packer Depth 4396 Drill Collars Run 179 Vis 56
 Bottom Packer Depth 4460 Wt. Pipe Run 0 WL 8.8
 Total Depth 4432 Chlorides 3500 ppm System LCM 6

Blow Description IF: 5 1/2 Blow.
ISI: 1/4" Return.
FF: BoB @ 12 min. CTS 47 min.
FSI: 1" Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>9.5</u>	<u>Feet of GWCN</u>	<u>26</u>	<u>20</u>	<u>60</u>	
<u>125</u>	<u>Feet of</u>				
<u>250</u>	<u>Feet of GNCW</u>	<u>10</u>	<u>85</u>	<u>5</u>	
<u>500</u>	<u>Feet of</u>				
	<u>Feet of</u>				

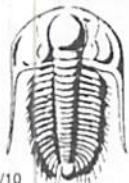
Rec Total 470 BHT 141 Gravity — API RW .65 @ 96 °F Chlorides 29,000 ppm
 (A) Initial Hydrostatic 2253 ☒ Test 1450 T-On Location 4:40
 (B) First Initial Flow 24 ☐ Jars — T-Started 5:26
 (C) First Final Flow 55 ☐ Safety Joint — T-Open 7:40
 (D) Initial Shut-In 1096 ☒ Circ Sub N/C T-Pulled 11:19
 (E) Second Initial Flow 70 ☐ Hourly Standby — T-Out 13:56
 (F) Second Final Flow 201 ☒ Mileage 188 R/T 291.40
 (G) Final Shut-In 1078 ☐ Sampler —
 (H) Final Hydrostatic 2137 ☐ Straddle — ☐ Ruined Shale Packer —
☐ Shale Packer — ☐ Ruined Packer —
☐ Extra Packer — ☐ Extra Copies —
☐ Extra Recorder — Sub Total 0
☐ Day Standby — Total 1741.40
☐ Accessibility — MP/OST Disc't —

Initial Open 5
 Initial Shut-In 30
 Final Flow 60
 Final Shut-In 120
 Sub Total 1741.40

Approved By

Our Representative

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52811

Well Name & No. APC Baughman Unit #1-35 Test No. 4 Date 7/28/13
 Company Mull Drilling Co., Inc. Elevation 4229 KB 4218 GL
 Address 1700 N Waterfront Pkwy B #1200 Wichita KS 67206
 Co. Rep / Geo. Phil Askey Rig Martin #20
 Location: Sec. 35 Twp. 16S Rge. 4SW Co. Cheyenne State CO

Interval Tested 4450 - 4515 Zone Tested Marmaton
 Anchor Length 65' Drill Pipe Run 4262 Mud Wt. 9.2
 Top Packer Depth 4446 Drill Collars Run 179 Vis 54
 Bottom Packer Depth 4450 Wt. Pipe Run 0 WL 8.8
 Total Depth 4515 Chlorides 3600 ppm System LCM 5

Blow Description IF: BoB @ 30 sec. GTS @ 4 min
IST: No Return.
RF: BoB Immediately
PSL: 2" Return.
See gas volume report

Rec <u>250</u>	Feet of <u>GM (oil spurs)</u>	<u>30</u> %gas	%oil	%water	<u>70</u> %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 250 BHT 135 Gravity — API RW — @ — °F Chlorides — ppm
 (A) Initial Hydrostatic 2301 ☒ Test 1450 T-On Location 4:00
 (B) First Initial Flow 379 ☐ Jars T-Started 4:27
 (C) First Final Flow 269 ☐ Safety Joint T-Open 6:32
 (D) Initial Shut-In 1148 ☒ Circ Sub N/C T-Pulled 10:26
 (E) Second Initial Flow 251 ☐ Hourly Standby T-Out 12:36
 (F) Second Final Flow 304 ☒ Mileage 48 RT X 2 582.80 Comments Loaded Tool
 (G) Final Shut-In 1137 ☐ Sampler @ 20:00 7/28/13
 (H) Final Hydrostatic 2106 ☐ Straddle ☐ Ruined Shale Packer

☐ Shale Packer ☐ Ruined Packer
☐ Extra Packer ☐ Extra Copies
 Initial Open 5 ☐ Extra Recorder
 Initial Shut-In 40 ☐ Day Standby
 Final Flow 60 ☐ Accessibility
 Final Shut-In 120 Sub Total 2032.80 MP/DST Disc't

Approved By Phil Askey Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



P.O. Box 1733 • Hays, Kansas 67601

Mull Drilling Co., Inc.

Operator

APL-Baverman Unit[#] 17-35

Well Name and No.

4

DST No.

Second Flow Period

Remarks:



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52842

Well Name & No. APC Baughman #1-35 Test No. #5 Date 8/1/13
 Company Mull Drilling Co Inc Elevation 4229 KB 4218 GL
 Address 1700 N. Waterfront Pkwy B. #1200 Wichita, KS 67206
 Co. Rep / Geo. Phil Askey Rig Mull #20
 Location: Sec. 35 Twp. 16 Rge. 45 Co. Cheyenne State Colo

Interval Tested 5235 5320 Zone Tested Miss, Spurgeon
 Anchor Length 85 Drill Pipe Run 5048 Mud Wt. 9.2
 Top Packer Depth 5230 Drill Collars Run 179' Vis 42
 Bottom Packer Depth 5235 Wt. Pipe Run WL 9.4
 Total Depth 5320 Chlorides 4500 ppm System LCM #10

Blow Description 3/4" in blow
No return
Weak Surface blow
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10' BHT 147° Gravity API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 2714
 (B) First Initial Flow 23
 (C) First Final Flow 25
 (D) Initial Shut-In 994
 (E) Second Initial Flow 27
 (F) Second Final Flow 41
 (G) Final Shut-In 977
 (H) Final Hydrostatic 2454

☒ Test 1550
☐ Jars
☐ Safety Joint
☒ Circ Sub N/C
☐ Hourly Standby
☒ Mileage 190 RT 291.40
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
 Sub Total 1841.40

T-On Location 23:50
 T-Started 00:45
 T-Open 03:03
 T-Pulled 05:08
 T-Out 07:55
 Comments

Initial Open 5
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 60

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1841.40
 MP/DST Disc't

Approved By Phil Askey

Our Representative

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