



## DRILL STEM TEST REPORT

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

1700 N. Waterfront Pkwy  
Bldg. 1200  
Wichita, KS 67202

ATTN: Paul Gerlach

### **Bleumer #1-13**

### **S13-26s-30w Gray,KS**

Start Date: 2012.05.02 @ 21:30:02

End Date: 2012.05.03 @ 07:16:19

Job Ticket #: 46638                      DST #: 1

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

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**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

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**Bleumer #1-13**

Job Ticket: 46638

**DST#: 1**

Test Start: 2012.05.02 @ 21:30:02

## GENERAL INFORMATION:

Formation: **St. Louis**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:13:30  
 Time Test Ended: 07:16:19  
 Interval: **5000.00 ft (KB) To 5050.00 ft (KB) (TVD)**  
 Total Depth: 5050.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Chuck Smith  
 Unit No: 62  
 Reference Elevations: ft (KB)  
 2772.00 ft (CF)  
 KB to GR/CF: ft

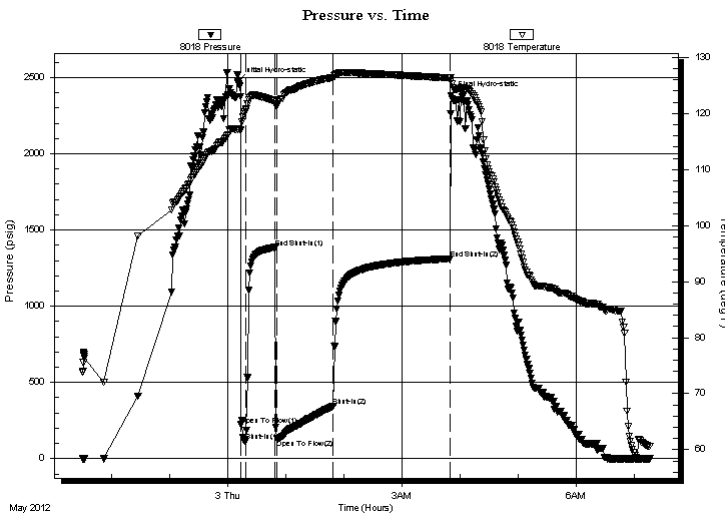
## Serial #: 8018

Inside

Press @ Run Depth: 345.33 psig @ 5004.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.05.02 End Date: 2012.05.03 Last Calib.: 2012.05.03  
 Start Time: 21:30:02 End Time: 07:16:19 Time On Btm: 2012.05.03 @ 00:10:30  
 Time Off Btm: 2012.05.03 @ 03:50:40

TEST COMMENT: B.O.B. @ 1 1/2 min.  
 No return.  
 B.O.B. @ 1/2 min. G.T.S. @ 30 min. Not enough to gauge.  
 B.O.B. @ 11 min.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2475.75	117.12	Initial Hydro-static
3	222.25	117.02	Open To Flow (1)
8	115.22	120.60	Shut-In(1)
39	1385.21	122.28	End Shut-In(1)
41	128.13	121.49	Open To Flow (2)
99	345.33	126.41	Shut-In(2)
219	1311.81	126.36	End Shut-In(2)
221	2381.04	125.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	GOMCW 25g 15o 25m 35w	0.61
61.00	GMCO 25g 10m 65o	0.30
252.00	GO 30g 70o	3.53
660.00	GO 90g 10o	9.26
0.00	3896 feet GIP	0.00

## Gas Rates

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



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ATTN: Paul Gerlach

**S13-26s-30w Gray,KS**

**Bleumer #1-13**

Job Ticket: 46638

**DST#: 1**

Test Start: 2012.05.02 @ 21:30:02

**GENERAL INFORMATION:**

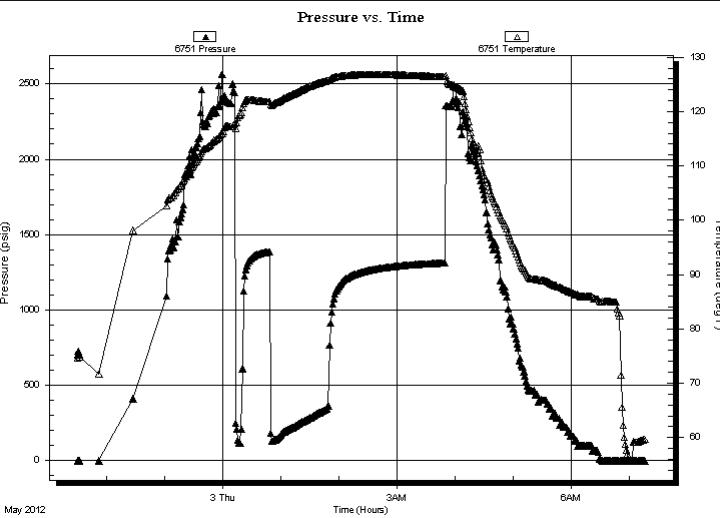
Formation: **St. Louis**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:13:30  
 Time Test Ended: 07:16:19  
 Interval: **5000.00 ft (KB) To 5050.00 ft (KB) (TVD)**  
 Total Depth: 5050.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Chuck Smith  
 Unit No: 62  
 Reference Elevations: ft (KB) 2772.00 ft (CF)  
 KB to GR/CF: ft

**Serial #: 6751**

**Outside**

Press @ Run Depth: psig @ 5004.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.05.02 End Date: 2012.05.03 Last Calib.: 2012.05.03  
 Start Time: 21:30:02 End Time: 07:16:10 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** B.O.B. @ 1 1/2 min.  
 No return.  
 B.O.B. @ 1/2 min. G.T.S. @ 30 min. Not enough to gauge.  
 B.O.B. @ 11 min.



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
124.00	GOMCW 25g 15o 25m 35w	0.61
61.00	GMCO 25g 10m 65o	0.30
252.00	GO 30g 70o	3.53
660.00	GO 90g 10o	9.26
0.00	3896 feet GIP	0.00

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mull Drilling Co., Inc.

**S13-26s-30w Gray,KS**

1700 N. Waterfront Pkwy  
Bldg. 1200  
Wichita, KS 67202  
ATTN: Paul Gerlach

**Bleumer #1-13**

Job Ticket: 46638

**DST#: 1**

Test Start: 2012.05.02 @ 21:30:02

## Tool Information

Drill Pipe:	Length: 4808.00 ft	Diameter: 3.80 inches	Volume: 67.44 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 68.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.50 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	5000.00 ft			Final 83000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	77.50 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			4973.50	
Shut In Tool	5.00			4978.50	
Hydraulic tool	5.00			4983.50	
Jars	5.00			4988.50	
Safety Joint	2.50			4991.00	
Packer	5.00			4996.00	27.50 Bottom Of Top Packer
Packer	4.00			5000.00	
Stubb	1.00			5001.00	
Perforations	3.00			5004.00	
Recorder	0.00	8018	Inside	5004.00	
Recorder	0.00	6751	Outside	5004.00	
Perforations	10.00			5014.00	
Change Over Sub	1.00			5015.00	
Drill Pipe	31.00			5046.00	
Change Over Sub	1.00			5047.00	
Bullnose	3.00			5050.00	50.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>77.50</b>				



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**FLUID SUMMARY**

Mull Drilling Co., Inc.

**S13-26s-30w Gray,KS**

1700 N. Waterfront Pkwy  
Bldg. 1200  
Wichita, KS 67202  
ATTN: Paul Gerlach

**Bleumer #1-13**

Job Ticket: 46638

**DST#: 1**

Test Start: 2012.05.02 @ 21:30:02

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 62.00 sec/qt  
Water Loss: 8.35 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 2300.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: 28 deg API  
Water Salinity: 36000 ppm

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
124.00	GOMCW 25g 15o 25m 35w	0.610
61.00	GMCO 25g 10m 65o	0.300
252.00	GO 30g 70o	3.535
660.00	GO 90g 10o	9.258
0.00	3896 feet GIP	0.000

Total Length: 1097.00 ft      Total Volume: 13.703 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: API:28 @ 60 Degrees F = 28. RW: .276 @ 52 Degrees F = 36000 PPM

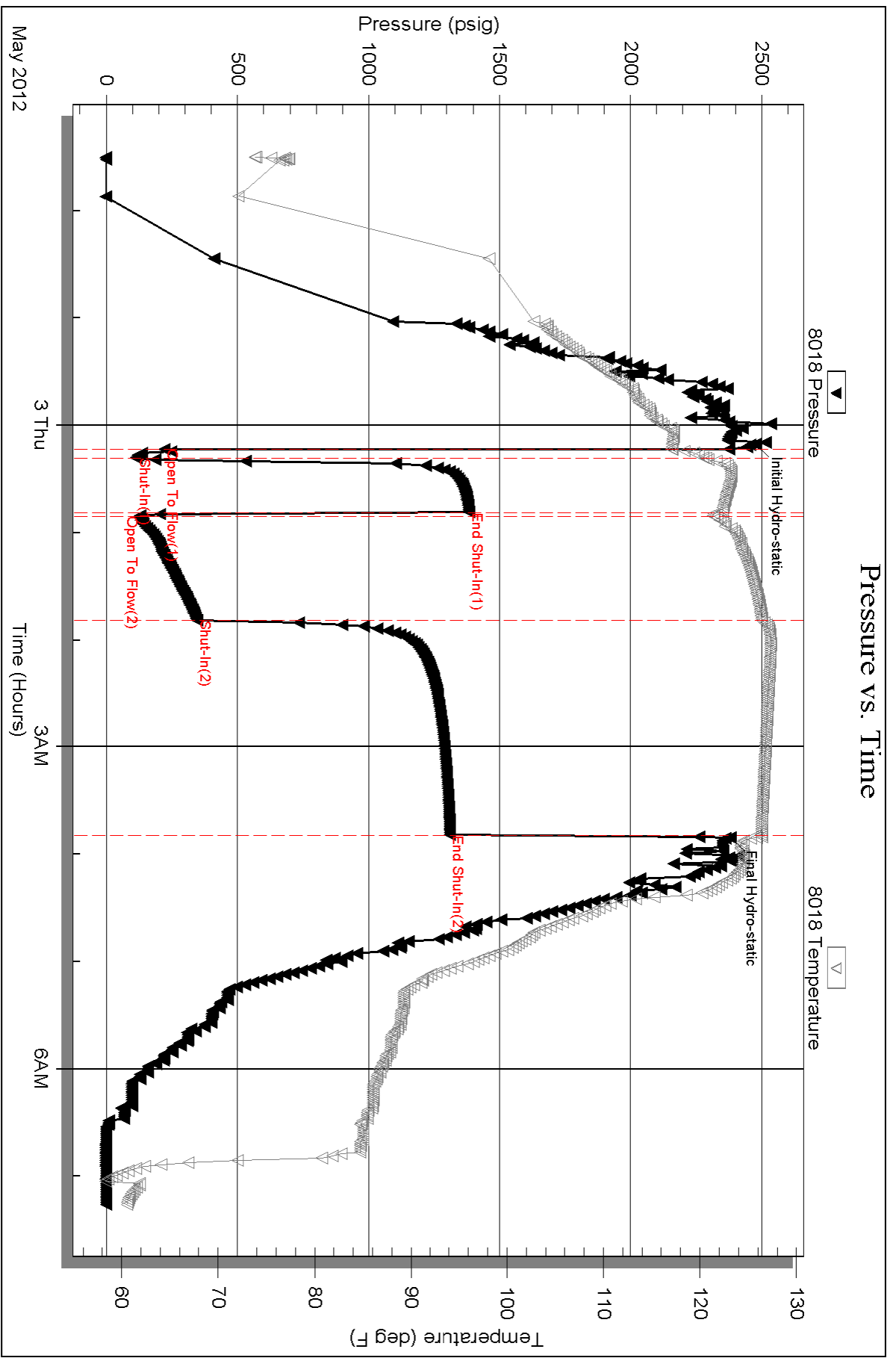
Serial #: 8018

Inside

Mull Drilling Co., Inc.

Bleumer #1-13

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 46638

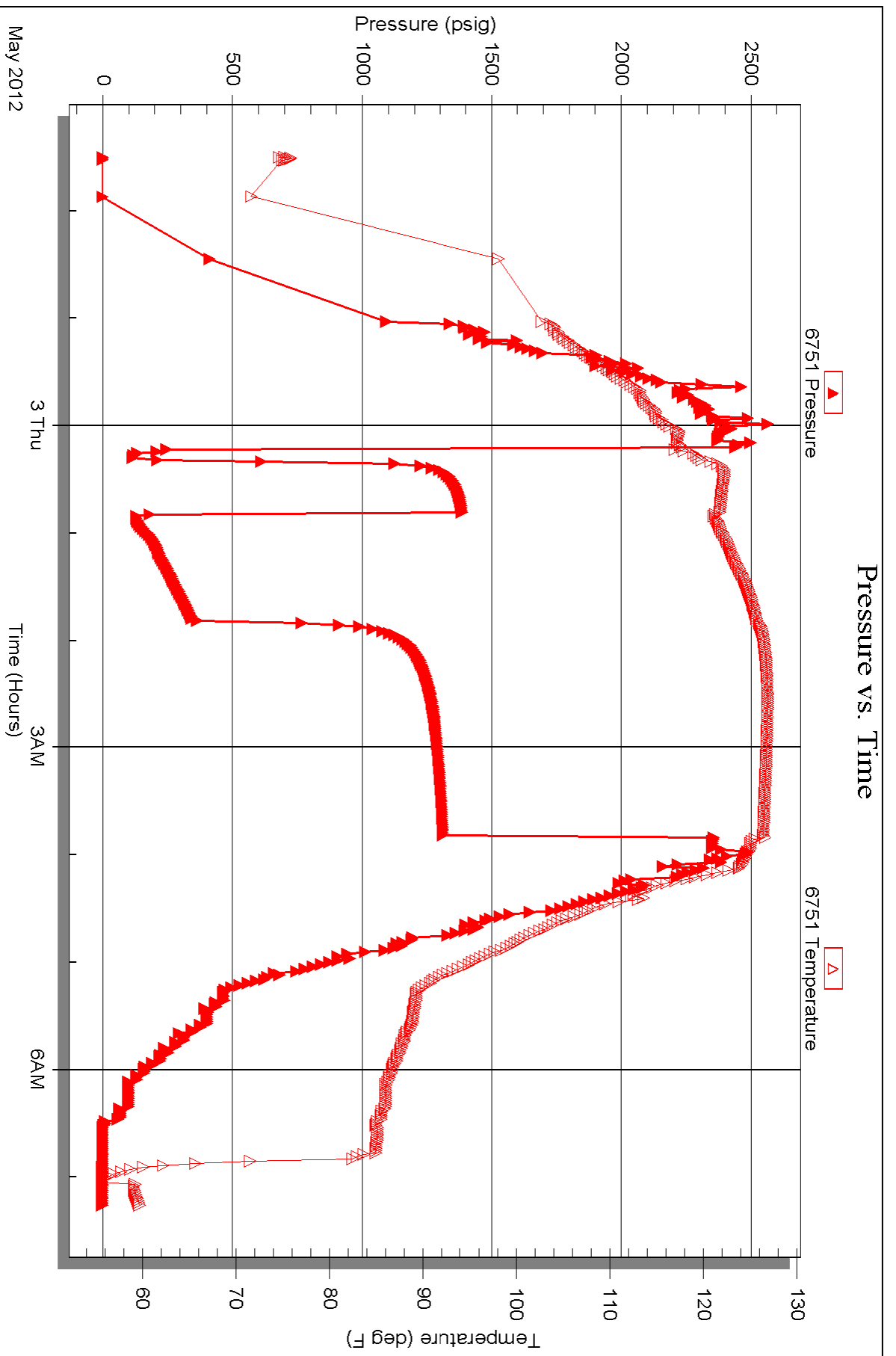
Printed: 2012.05.11 @ 14:29:33

Serial #: 6751

Outside Mull Drilling Co., Inc.

Bleumer #1-13

DST Test Number: 1





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 46638

Well Name & No. Bleumer # 1-13 Test No. 1 Date 5-2-12  
 Company Mull Drilling Co., Inc. Elevation \_\_\_\_\_ KB 2772 GL \_\_\_\_\_  
 Address 1700 N. Waterfront Pkwy. Bldg. 1200 Wichita, KS 67202  
 Co. Rep / Geo. Paul Rig Duke # 9  
 Location: Sec. 13 Twp. 26s Rge. 30w Co. Gray State KS

Interval Tested 5000-5050 Zone Tested St. Louis  
 Anchor Length 50 Drill Pipe Run 4808 Mud Wt. 9.0  
 Top Packer Depth 4096 4996 Drill Collars Run 185 Vis 62  
 Bottom Packer Depth 5000 Wt. Pipe Run 0 WL 8.4  
 Total Depth 5050 Chlorides 2300 ppm System LCM 4  
 Blow Description B.O.B. @ 1 1/2 min.  
No return.  
B.O.B. @ 1/2 min. GTS @ 30 min. Not enough to gage.  
B.O.B. @ 11 min.

Rec	Feet of	%gas	%oil	%water	%mud
—	<u>GOMCW 3896' GIP</u>	<u>25</u>	<u>15</u>	<u>35</u>	<u>25</u>
<u>660</u>	<u>GO</u>	<u>90</u>	<u>10</u>		
<u>252</u>	<u>GO</u>	<u>30</u>	<u>70</u>		
<u>61</u>	<u>Gmco</u>	<u>25</u>	<u>65</u>		<u>10</u>
<u>124</u>	<u>GOMCW</u>	<u>25</u>	<u>15</u>	<u>35</u>	<u>25</u>

Rec Total 1097 BHT 126 Gravity 28 API RW .276 @ 52° F Chlorides 36,000 ppm

(A) Initial Hydrostatic 2476  Test 1350 T-On Location 20:45  
 (B) First Initial Flow 222  Jars 250 T-Started 21:30  
 (C) First Final Flow 115  Safety Joint 75 T-Open 00:14  
 (D) Initial Shut-In 1385  Circ Sub \_\_\_\_\_ T-Pulled 03:50  
 (E) Second Initial Flow 128  Hourly Standby \_\_\_\_\_ T-Out 07:16  
 (F) Second Final Flow 345  Mileage 127RT 196.85 Comments \_\_\_\_\_  
 (G) Final Shut-In 1312  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2381  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 5  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1871.85  
 Final Flow 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 120 Sub Total 1871.85

Approved By Paul Seibel Our Representative Chuck Smith

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