



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita, KS 67202-1216

ATTN: Saman Sharifaie

### **Abell Ranch B #1-31**

### **31-12s-30w Gove,KS**

Start Date: 2014.02.26 @ 03:20:30

End Date: 2014.02.26 @ 12:05:00

Job Ticket #: 56285                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.04 @ 14:34:37



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove, KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56285 **DST#: 1**  
Test Start: 2014.02.26 @ 03:20:30

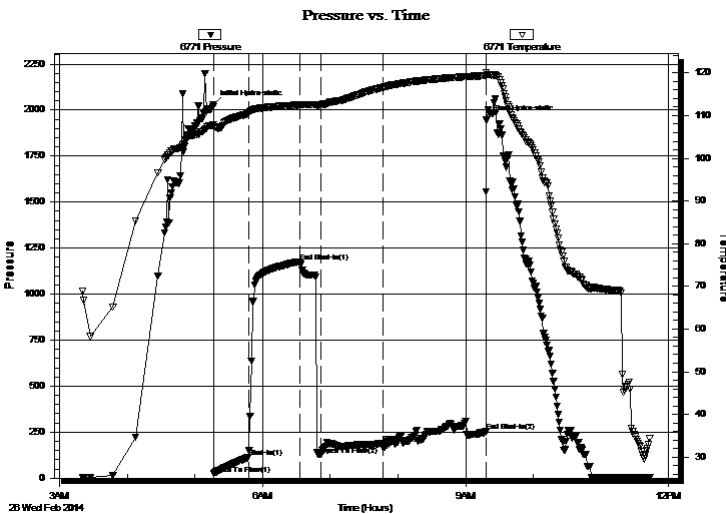
## GENERAL INFORMATION:

Formation: **E-F**  
Deviated: No Whipstock: 0.00 ft (KB)  
Time Tool Opened: 05:16:45  
Time Test Ended: 12:05:00  
Interval: **4018.00 ft (KB) To 4058.00 ft (KB) (TVD)**  
Total Depth: 4058.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Shane McBride  
Unit No: 55  
Reference Elevations: 2907.00 ft (KB)  
2896.00 ft (CF)  
KB to GR/CF: 11.00 ft

**Serial #: 6771 Inside**  
Press@RunDepth: 189.85 psig @ 4019.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.02.26 End Date: 2014.02.26 Last Calib.: 2014.02.26  
Start Time: 03:20:30 End Time: 11:43:00 Time On Btm: 2014.02.26 @ 05:16:15  
Time Off Btm: 2014.02.26 @ 09:18:15

**TEST COMMENT:** B.O.B. in 23 min. Torqued 3 rounds before turning  
2 1/2" return blow  
B.O.B. in 23 min.  
10" return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2028.61	107.99	Initial Hydro-static
1	23.15	107.45	Open To Flow (1)
32	112.10	110.42	Shut-In(1)
77	1176.23	112.50	End Shut-In(1)
95	126.88	112.53	Open To Flow (2)
150	189.85	116.58	Shut-In(2)
242	252.65	119.37	End Shut-In(2)
242	1949.29	120.12	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
372.00	g m & w c o 15g 10m 35w 40o	3.05
155.00	g w & m c o 15g 10w 30m 45o	2.17
31.00	c g o 20g 80o	0.43
0.00	558' gas in pipe	0.00

## Gas Rates

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



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250 N Water Ste 300  
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ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56285 **DST#: 1**  
Test Start: 2014.02.26 @ 03:20:30

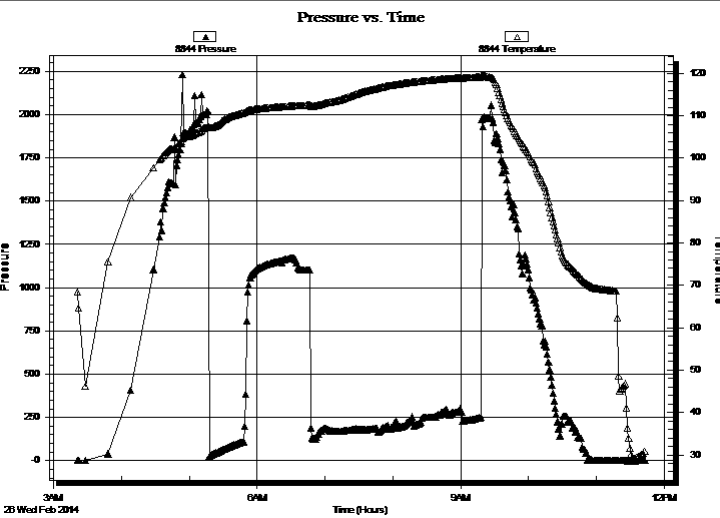
**GENERAL INFORMATION:**

Formation: <b>E-F</b>			Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: 0.00 ft (KB)			Tester: Shane McBride
Time Tool Opened: 05:16:45			Unit No: 55
Time Test Ended: 12:05:00			Reference Elevations: 2907.00 ft (KB)
<b>Interval: 4018.00 ft (KB) To 4058.00 ft (KB) (TVD)</b>			2896.00 ft (CF)
Total Depth: 4058.00 ft (KB) (TVD)			KB to GR/CF: 11.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair		

**Serial #: 8844 Outside**

Press@RunDepth: psig @ 4019.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2014.02.26	End Date: 2014.02.26
Start Time: 03:21:10	End Time: 11:43:25
	Last Calib.: 2014.02.26
	Time On Btm:
	Time Off Btm:

**TEST COMMENT:** B.O.B. in 23 min. Torqued 3 rounds before turning  
2 1/2" return blow  
B.O.B. in 23 min.  
10" return blow



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
372.00	g m & w c o 15g 10m 35w 40o	3.05
155.00	g w & m c o 15g 10w 30m 45o	2.17
31.00	c g o 20g 80o	0.43
0.00	558' gas in pipe	0.00

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56285 **DST#: 1**  
Test Start: 2014.02.26 @ 03:20:30

## Tool Information

Drill Pipe:	Length: 3762.00 ft	Diameter: 3.80 inches	Volume: 52.77 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 53.94 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4018.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	68.00 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			3991.00	
Shut In Tool	5.00			3996.00	
Hydraulic tool	5.00			4001.00	
Jars	5.00			4006.00	
Safety Joint	3.00			4009.00	
Packer	5.00			4014.00	28.00 Bottom Of Top Packer
Packer	4.00			4018.00	
Stubb	1.00			4019.00	
Recorder	0.00	6771	Inside	4019.00	
Recorder	0.00	8844	Outside	4019.00	
Perforations	2.00			4021.00	
Change Over Sub	1.00			4022.00	
Drill Pipe	30.00			4052.00	
Change Over Sub	1.00			4053.00	
Bullnose	5.00			4058.00	40.00 Bottom Packers & Anchor

**Total Tool Length: 68.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56285      **DST#: 1**  
Test Start: 2014.02.26 @ 03:20:30

## Mud and Cushion Information

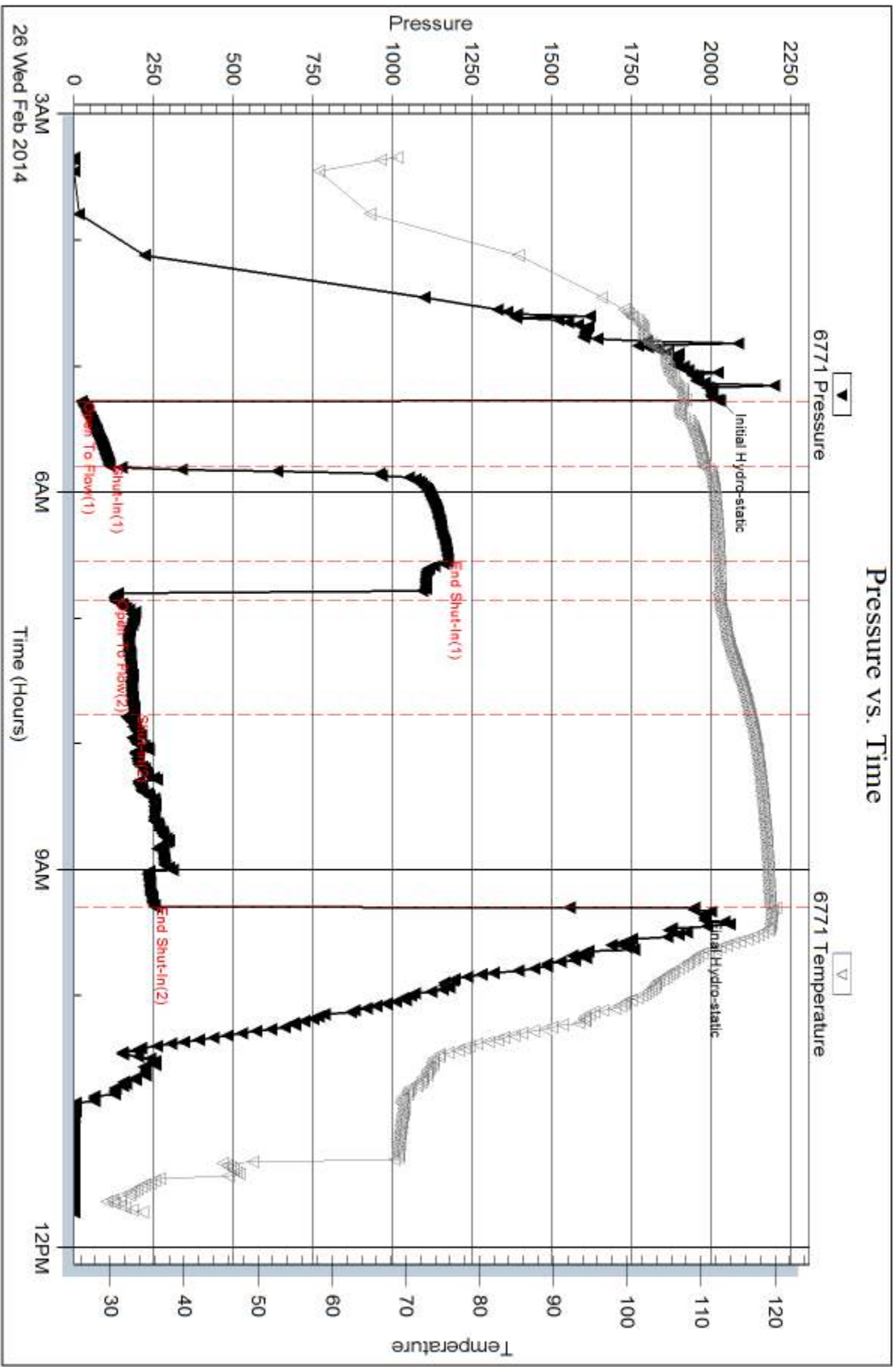
Mud Type: Gel Chem	Cushion Type:	Oil API: 31 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 29000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.17 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 1500.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
372.00	g m & w c o 15g 10m 35w 40o	3.050
155.00	g w & m c o 15g 10w 30m 45o	2.174
31.00	c g o 20g 80o	0.435
0.00	558' gas in pipe	0.000

Total Length: 558.00 ft      Total Volume: 5.659 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: rw .347 @ 50\*f = 29,000 chlor

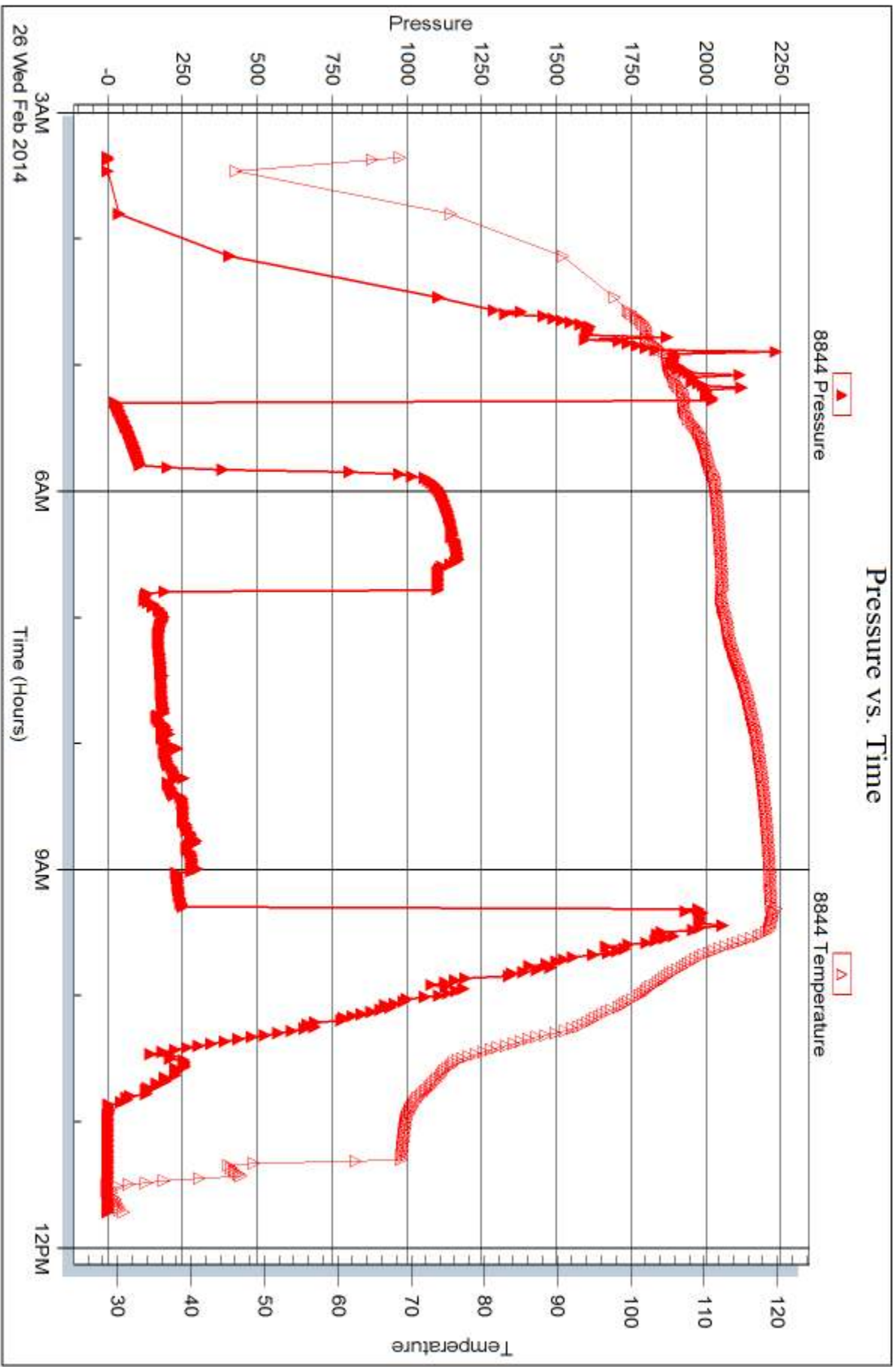


Serial #: 8844

Outside Murfin Drilling Co Inc

Abell Ranch B #1-31

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita, KS 67202-1216

ATTN: Saman Sharifaie

### **Abell Ranch B #1-31**

### **31-12s-30w Gove,KS**

Start Date: 2014.02.27 @ 07:58:10

End Date: 2014.02.27 @ 16:10:25

Job Ticket #: 56286                      DST #: 2

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

Printed: 2014.03.04 @ 14:34:10





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56286 **DST#: 2**  
Test Start: 2014.02.27 @ 07:58:10

## GENERAL INFORMATION:

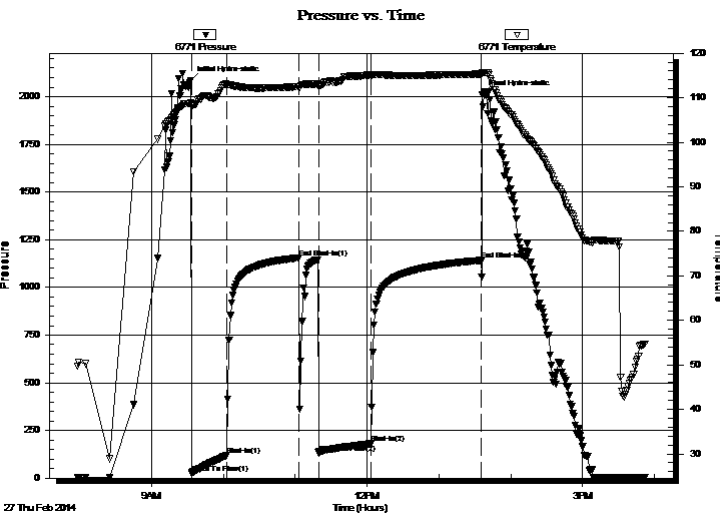
Formation: **H-K**  
Deviated: No Whipstock: 0.00 ft (KB)  
Time Tool Opened: 09:33:10  
Time Test Ended: 16:10:25  
Interval: **4096.00 ft (KB) To 4220.00 ft (KB) (TVD)**  
Total Depth: 4220.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Shane McBride  
Unit No: 55  
Reference Elevations: 2907.00 ft (KB)  
2896.00 ft (CF)  
KB to GR/CF: 11.00 ft

## Serial #: 6771

Inside

Press@RunDepth: 180.90 psig @ 4097.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.02.27 End Date: 2014.02.27 Last Calib.: 2014.02.27  
Start Time: 07:58:10 End Time: 15:52:25 Time On Btm: 2014.02.27 @ 09:32:55  
Time Off Btm: 2014.02.27 @ 13:36:10

TEST COMMENT: 7 1/4" blow  
No return  
5" blow  
No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2086.64	108.93	Initial Hydro-static
1	25.08	108.21	Open To Flow (1)
30	118.00	112.97	Shut-In(1)
90	1156.09	112.48	End Shut-In(1)
107	132.03	112.58	Open To Flow (2)
150	180.90	115.01	Shut-In(2)
243	1142.30	115.31	End Shut-In(2)
244	2011.06	115.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
318.00	s w c m w/oil spots 10%w 90%m	2.29

\* Recovery from multiple tests

## Gas Rates

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



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# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita, KS 67202-1216  
 ATTN: Saman Sharifaie

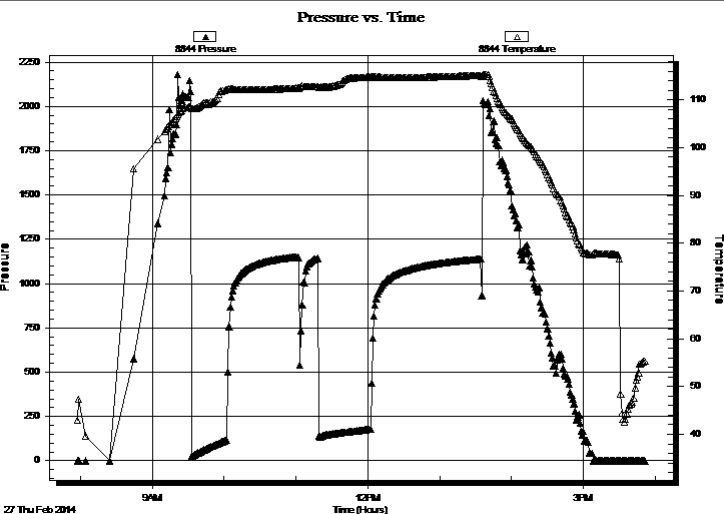
**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
 Job Ticket: 56286 **DST#: 2**  
 Test Start: 2014.02.27 @ 07:58:10

**GENERAL INFORMATION:**

Formation: **H-K**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 09:33:10  
 Time Test Ended: 16:10:25  
**Interval: 4096.00 ft (KB) To 4220.00 ft (KB) (TVD)**  
 Total Depth: 4220.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2907.00 ft (KB)  
 2896.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8844 Outside**  
 Press@RunDepth: psig @ 4097.00 ft (KB)  
 Start Date: 2014.02.27 End Date: 2014.02.27  
 Start Time: 07:57:42 End Time: 15:51:42  
 Capacity: 8000.00 psig  
 Last Calib.: 2014.02.27  
 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 7 1/4" blow  
 No return  
 5" blow  
 No return



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
318.00	s w c m w/oil spots 10%w 90%m	2.29

\* Recovery from multiple tests

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56286 **DST#: 2**  
Test Start: 2014.02.27 @ 07:58:10

## Tool Information

Drill Pipe:	Length: 3854.00 ft	Diameter: 3.80 inches	Volume: 54.06 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 55.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4096.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	124.00 ft			
Tool Length:	152.00 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			4069.00	
Shut In Tool	5.00			4074.00	
Hydraulic tool	5.00			4079.00	
Jars	5.00			4084.00	
Safety Joint	3.00			4087.00	
Packer	5.00			4092.00	28.00 Bottom Of Top Packer
Packer	4.00			4096.00	
Stubb	1.00			4097.00	
Recorder	0.00	6771	Inside	4097.00	
Recorder	0.00	8844	Outside	4097.00	
Perforations	21.00			4118.00	
Change Over Sub	1.00			4119.00	
Drill Pipe	95.00			4214.00	
Change Over Sub	1.00			4215.00	
Bullnose	5.00			4220.00	124.00 Bottom Packers & Anchor

**Total Tool Length: 152.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56286 **DST#: 2**  
Test Start: 2014.02.27 @ 07:58:10

## Mud and Cushion Information

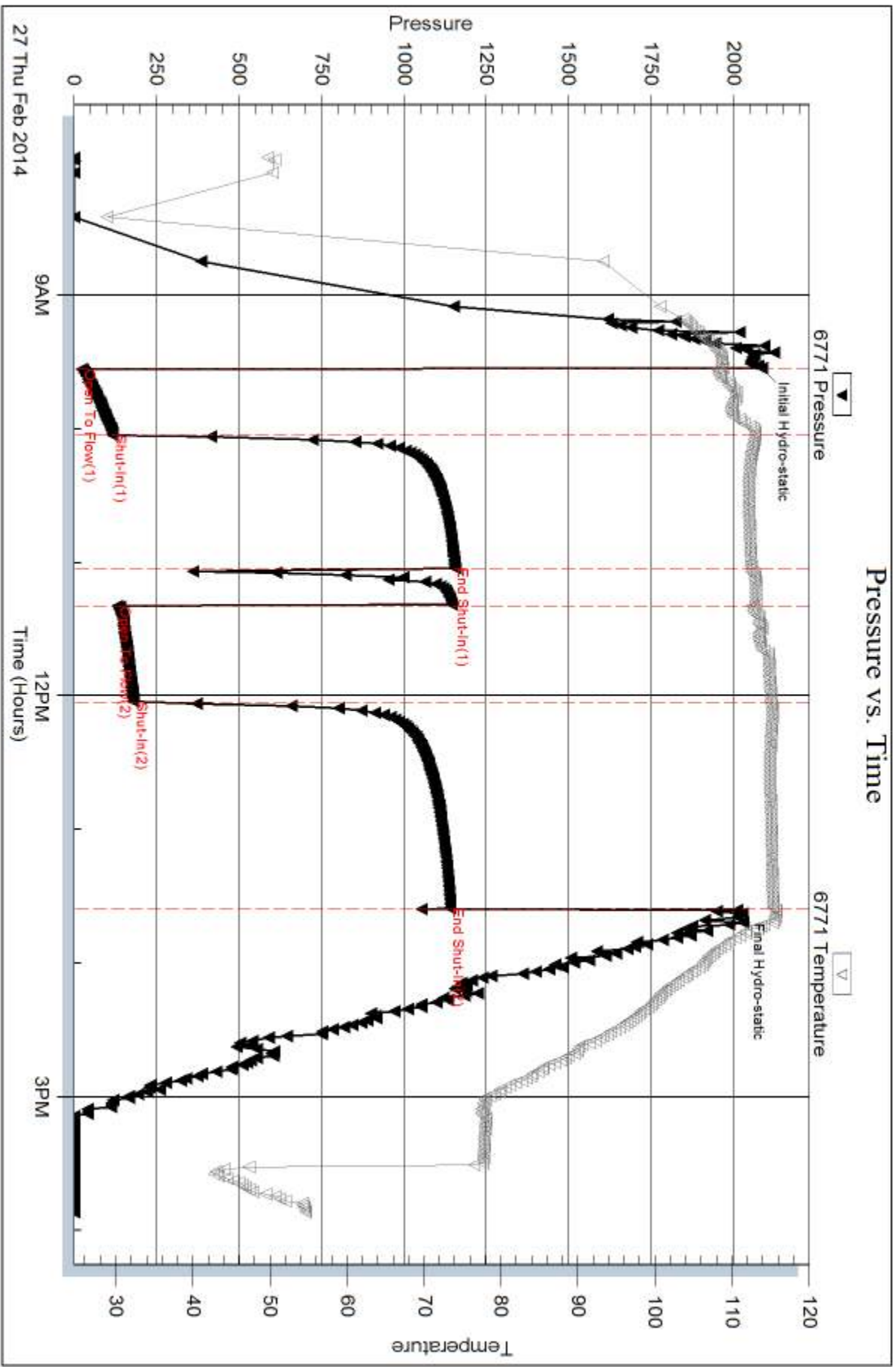
Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 25000 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.17 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 2000.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
318.00	s w c m w/oil spots 10%w 90%m	2.293

Total Length: 318.00 ft      Total Volume: 2.293 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: rw ..346 @ 56\*f =25,000 chlor

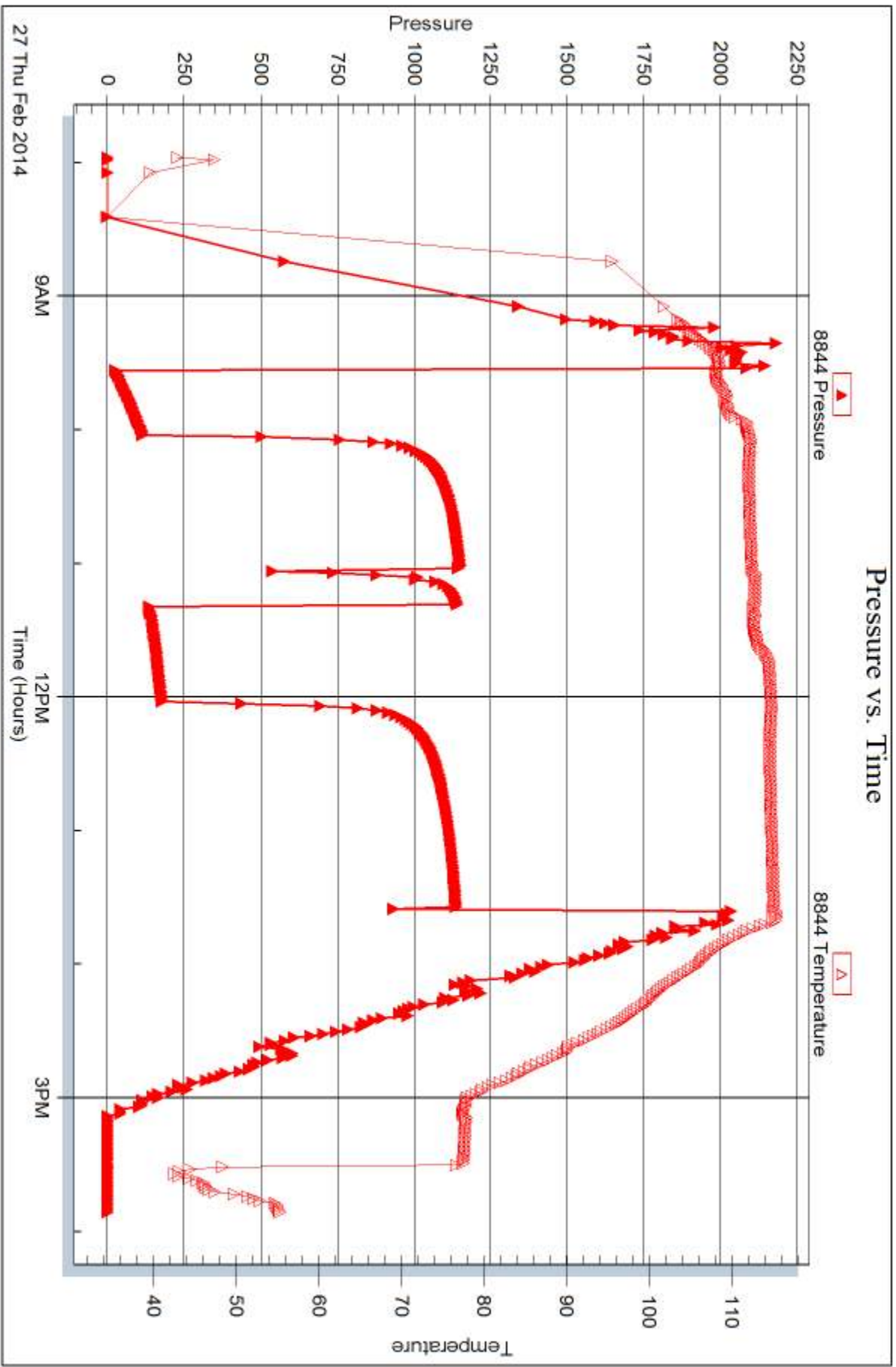


Serial #: 8844

Outside Murfin Drilling Co Inc

Abell Ranch B #1-31

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 56286

Printed: 2014.03.04 @ 14:34:12



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita, KS 67202-1216

ATTN: Saman Sharifaie

### **Abell Ranch B #1-31**

### **31-12s-30w Gove,KS**

Start Date: 2014.03.01 @ 01:00:15

End Date: 2014.03.01 @ 09:10:30

Job Ticket #: 56287                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.04 @ 14:33:45



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita, KS 67202-1216  
 ATTN: Saman Sharifaie

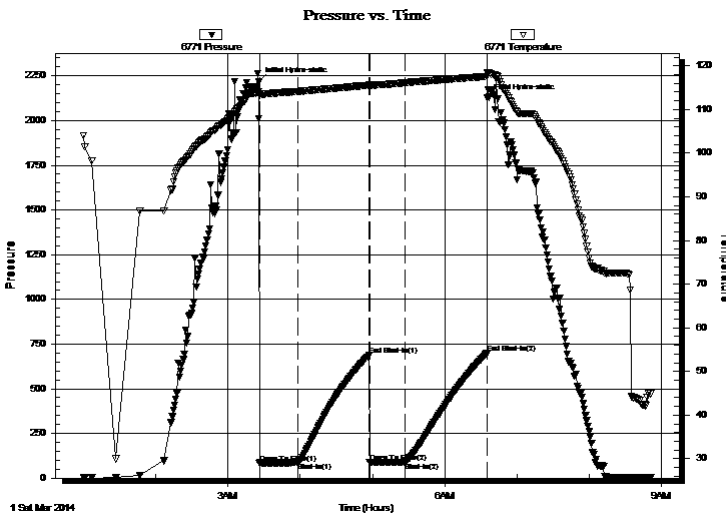
**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
 Job Ticket: 56287 **DST#: 3**  
 Test Start: 2014.03.01 @ 01:00:15

## GENERAL INFORMATION:

Formation: **L Paw, Ft Scott, Ch**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 03:26:00  
 Time Test Ended: 09:10:30  
 Interval: **4396.00 ft (KB) To 4524.00 ft (KB) (TVD)**  
 Total Depth: 4524.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2907.00 ft (KB)  
 2896.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6771 Inside**  
 Press@RunDepth: 89.28 psig @ 4397.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.03.01 End Date: 2014.03.01 Last Calib.: 2014.03.01  
 Start Time: 01:00:15 End Time: 08:51:30 Time On Btm: 2014.03.01 @ 03:25:30  
 Time Off Btm: 2014.03.01 @ 06:35:00

**TEST COMMENT:** Slide tool 11' to bottom 3" blow, bled off mud blow to 1/4" died back to a weak surface blow  
 No return  
 Weak surface blow in 6 min, died in 18 min.  
 No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2215.99	114.05	Initial Hydro-static
1	84.06	113.29	Open To Flow (1)
33	87.13	114.11	Shut-In(1)
92	686.83	115.56	End Shut-In(1)
92	87.60	115.40	Open To Flow (2)
122	89.28	116.14	Shut-In(2)
190	696.96	117.58	End Shut-In(2)
190	2125.61	118.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	mud 100% m show of oil in tool	0.59

\* Recovery from multiple tests

## Gas Rates

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





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TESTING, INC**

**DRILL STEM TEST REPORT**

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250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

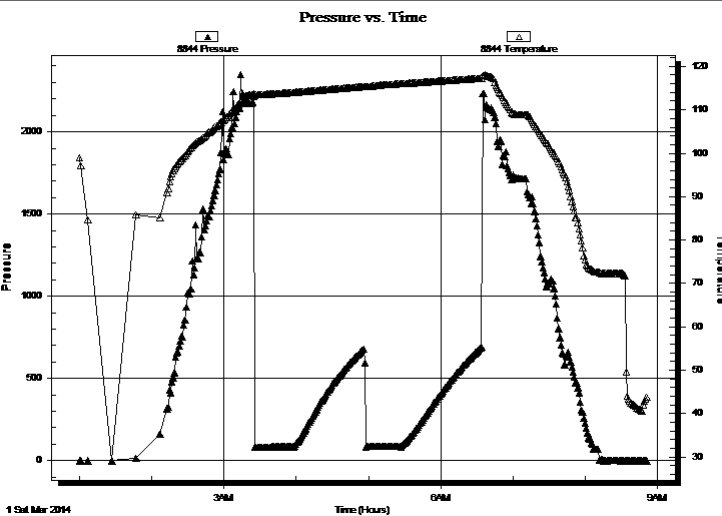
**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56287      **DST#: 3**  
Test Start: 2014.03.01 @ 01:00:15

**GENERAL INFORMATION:**

Formation:      **L Paw, Ft Scott , Ch**  
Deviated:      No      Whipstock:      0.00 ft (KB)      Test Type:      Conventional Bottom Hole (Reset)  
Time Tool Opened: 03:26:00      Tester:      Shane McBride  
Time Test Ended: 09:10:30      Unit No:      55  
**Interval:      4396.00 ft (KB) To      4524.00 ft (KB) (TVD)**      Reference Elevations:      2907.00 ft (KB)  
Total Depth:      4524.00 ft (KB) (TVD)      2896.00 ft (CF)  
Hole Diameter:      7.88 inches      Hole Condition:      Fair      KB to GR/CF:      11.00 ft

**Serial #: 8844      Outside**  
Press@RunDepth:      psig @      4397.00 ft (KB)      Capacity:      8000.00 psig  
Start Date:      2014.03.01      End Date:      2014.03.01      Last Calib.:      2014.03.01  
Start Time:      01:00:15      End Time:      08:51:00      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** Slide tool 11' to bottom 3" blow , bled off mud blow to 1/4" died back to a weak surface blow  
No return  
Weak surface blow in 6 min, died in 18 min.  
No return



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
120.00	mud 100% m show of oil in tool	0.59

**Gas Rates**

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56287 **DST#: 3**  
Test Start: 2014.03.01 @ 01:00:15

## Tool Information

Drill Pipe:	Length: 4135.00 ft	Diameter: 3.80 inches	Volume: 58.00 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 98000.00 lb
			<u>Total Volume: 59.17 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4396.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	128.00 ft			
Tool Length:	156.00 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			4369.00	
Shut In Tool	5.00			4374.00	
Hydraulic tool	5.00			4379.00	
Jars	5.00			4384.00	
Safety Joint	3.00			4387.00	
Packer	5.00			4392.00	28.00 Bottom Of Top Packer
Packer	4.00			4396.00	
Stubb	1.00			4397.00	
Recorder	0.00	6771	Inside	4397.00	
Recorder	0.00	8844	Outside	4397.00	
Perforations	25.00			4422.00	
Change Over Sub	1.00			4423.00	
Drill Pipe	95.00			4518.00	
Change Over Sub	1.00			4519.00	
Bullnose	5.00			4524.00	128.00 Bottom Packers & Anchor

**Total Tool Length: 156.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56287      **DST#: 3**  
Test Start: 2014.03.01 @ 01:00:15

## Mud and Cushion Information

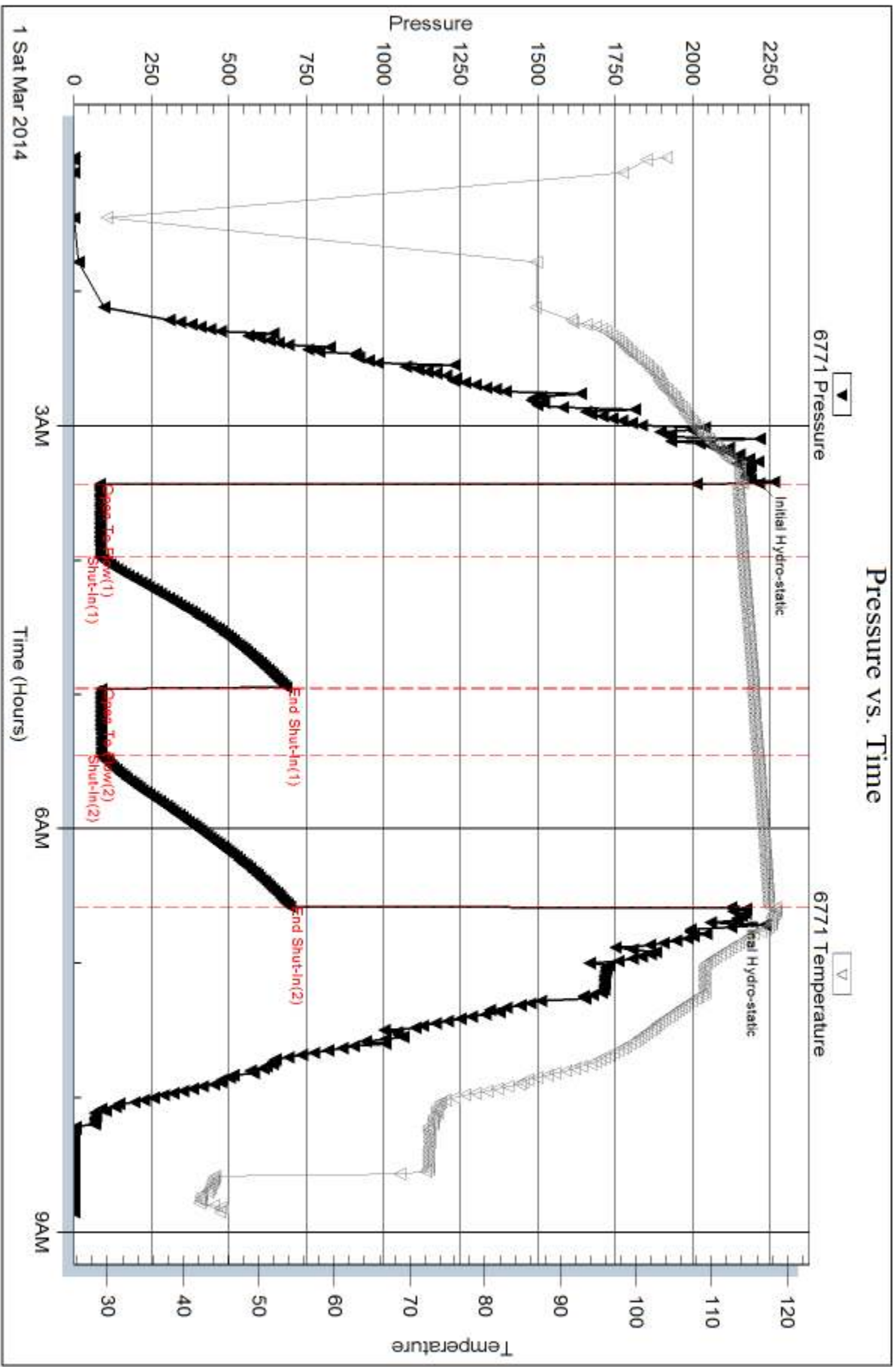
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	mud 100% m show of oil in tool	0.590

Total Length: 120.00 ft      Total Volume: 0.590 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

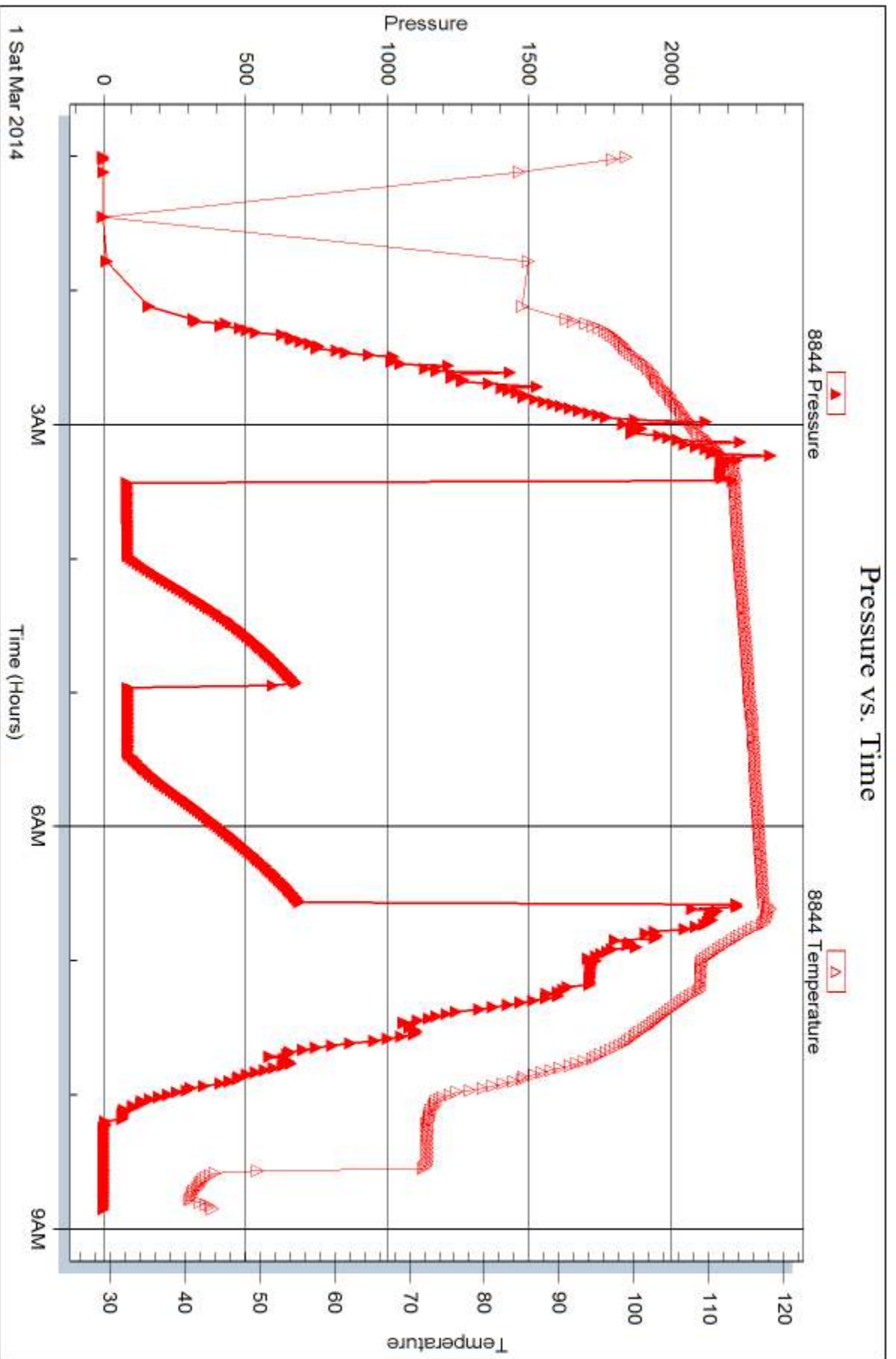


Serial #: 8844

Outside Murfin Drilling Co Inc

Abell Ranch B #1-31

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita, KS 67202-1216

ATTN: Saman Sharifaie

### **Abell Ranch B #1-31**

### **31-12s-30w Gove,KS**

Start Date: 2014.03.01 @ 21:12:06

End Date: 2014.03.02 @ 08:40:21

Job Ticket #: 56288                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.04 @ 14:33:02



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita, KS 67202-1216  
 ATTN: Saman Sharifaie

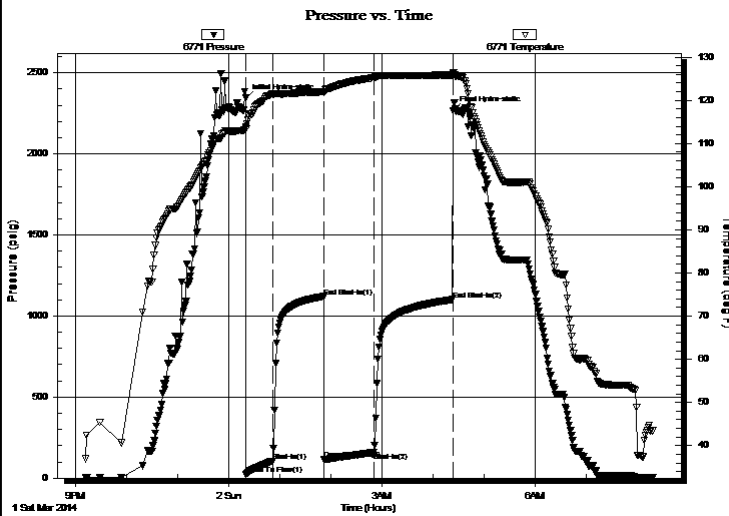
**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
 Job Ticket: 56288 **DST#: 4**  
 Test Start: 2014.03.01 @ 21:12:06

## GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 00:20:21  
 Time Test Ended: 08:40:21  
 Interval: **4533.00 ft (KB) To 4555.00 ft (KB) (TVD)**  
 Total Depth: 4555.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2907.00 ft (KB)  
 2896.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6771 Inside**  
 Press@RunDepth: 158.68 psig @ 4534.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.03.01 End Date: 2014.03.02 Last Calib.: 2014.03.02  
 Start Time: 21:12:06 End Time: 08:17:21 Time On Btm: 2014.03.02 @ 00:20:06  
 Time Off Btm: 2014.03.02 @ 04:23:21

TEST COMMENT: B.O.B. in 30 min.  
 No return  
 B.O.B. in 27 min.  
 1/2" return blow, died in 42 min.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2342.62	113.78	Initial Hydro-static
1	24.93	113.37	Open To Flow (1)
32	105.95	121.49	Shut-In(1)
92	1120.93	121.99	End Shut-In(1)
92	113.97	121.79	Open To Flow (2)
151	158.68	125.26	Shut-In(2)
243	1101.41	125.85	End Shut-In(2)
244	2266.21	126.22	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	g o & w c m 10g 5o 35w 50m	0.59
120.00	g w & m c o 10g 5w 25m 60o	0.61
70.00	g m c o 10g 20m 70o	0.98
0.00	290' G I P	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita, KS 67202-1216  
 ATTN: Saman Sharifaie

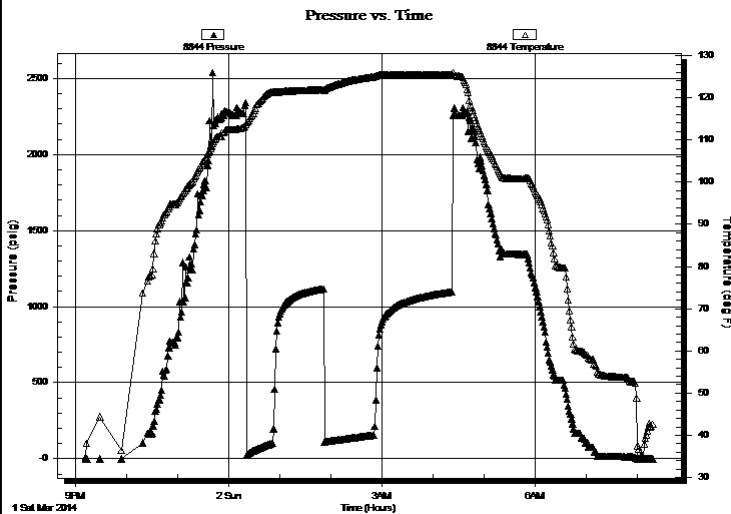
**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
 Job Ticket: 56288 **DST#: 4**  
 Test Start: 2014.03.01 @ 21:12:06

## GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: No Whipstock: 0.00 ft (KB)  
 Time Tool Opened: 00:20:21  
 Time Test Ended: 08:40:21  
 Interval: **4533.00 ft (KB) To 4555.00 ft (KB) (TVD)**  
 Total Depth: 4555.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shane McBride  
 Unit No: 55  
 Reference Elevations: 2907.00 ft (KB)  
 2896.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8844 Outside**  
 Press@RunDepth: psig @ 4534.00 ft (KB)  
 Start Date: 2014.03.01 End Date: 2014.03.02  
 Start Time: 21:12:08 End Time: 08:17:23  
 Capacity: 8000.00 psig  
 Last Calib.: 2014.03.02  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: B.O.B. in 30 min.  
 No return  
 B.O.B. in 27 min.  
 1/2" return blow , died in 42 min.



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	g o & w c m 10g 5o 35w 50m	0.59
120.00	g w & m c o 10g 5w 25m 60o	0.61
70.00	g m c o 10g 20m 70o	0.98
0.00	290' G I P	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56288 **DST#: 4**  
Test Start: 2014.03.01 @ 21:12:06

## Tool Information

Drill Pipe:	Length: 4292.00 ft	Diameter: 3.80 inches	Volume: 60.21 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 96000.00 lb
			<u>Total Volume: 61.38 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4533.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	50.00 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			4506.00	
Shut In Tool	5.00			4511.00	
Hydraulic tool	5.00			4516.00	
Jars	5.00			4521.00	
Safety Joint	3.00			4524.00	
Packer	5.00			4529.00	28.00 Bottom Of Top Packer
Packer	4.00			4533.00	
Stubb	1.00			4534.00	
Recorder	0.00	6771	Inside	4534.00	
Recorder	0.00	8844	Outside	4534.00	
Perforations	16.00			4550.00	
Bullnose	5.00			4555.00	22.00 Bottom Packers & Anchor

**Total Tool Length: 50.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita, KS 67202-1216  
ATTN: Saman Sharifaie

**31-12s-30w Gove,KS**  
**Abell Ranch B #1-31**  
Job Ticket: 56288      **DST#: 4**  
Test Start: 2014.03.01 @ 21:12:06

## Mud and Cushion Information

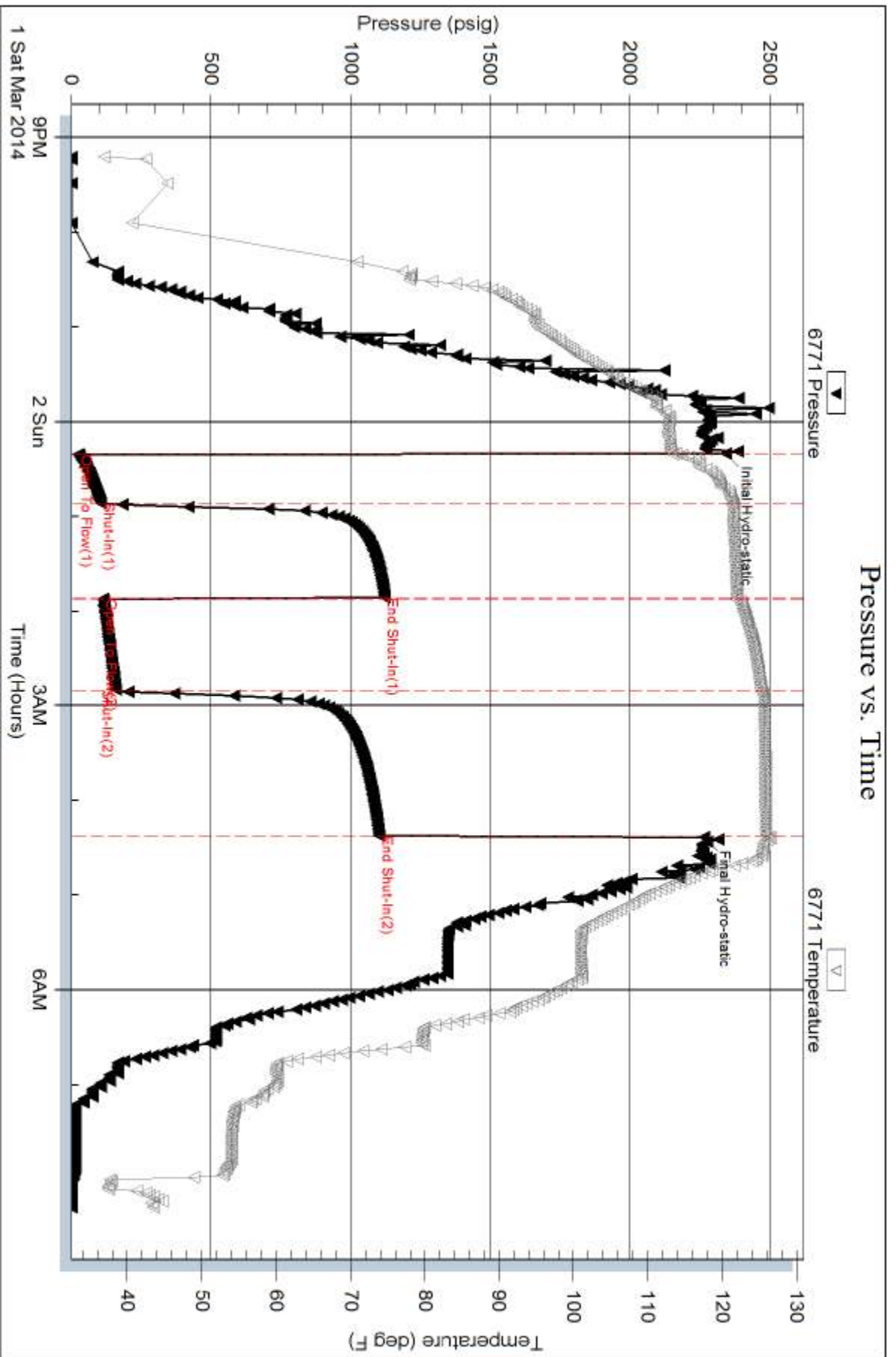
Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 24500 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.18 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 2000.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	g o & w c m 10g 5o 35w 50m	0.590
120.00	g w & m c o 10g 5w 25m 60o	0.608
70.00	g m c o 10g 20m 70o	0.982
0.00	290' G I P	0.000

Total Length: 310.00 ft      Total Volume: 2.180 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: rw .283 @ 72\*f = 24,500 chlor

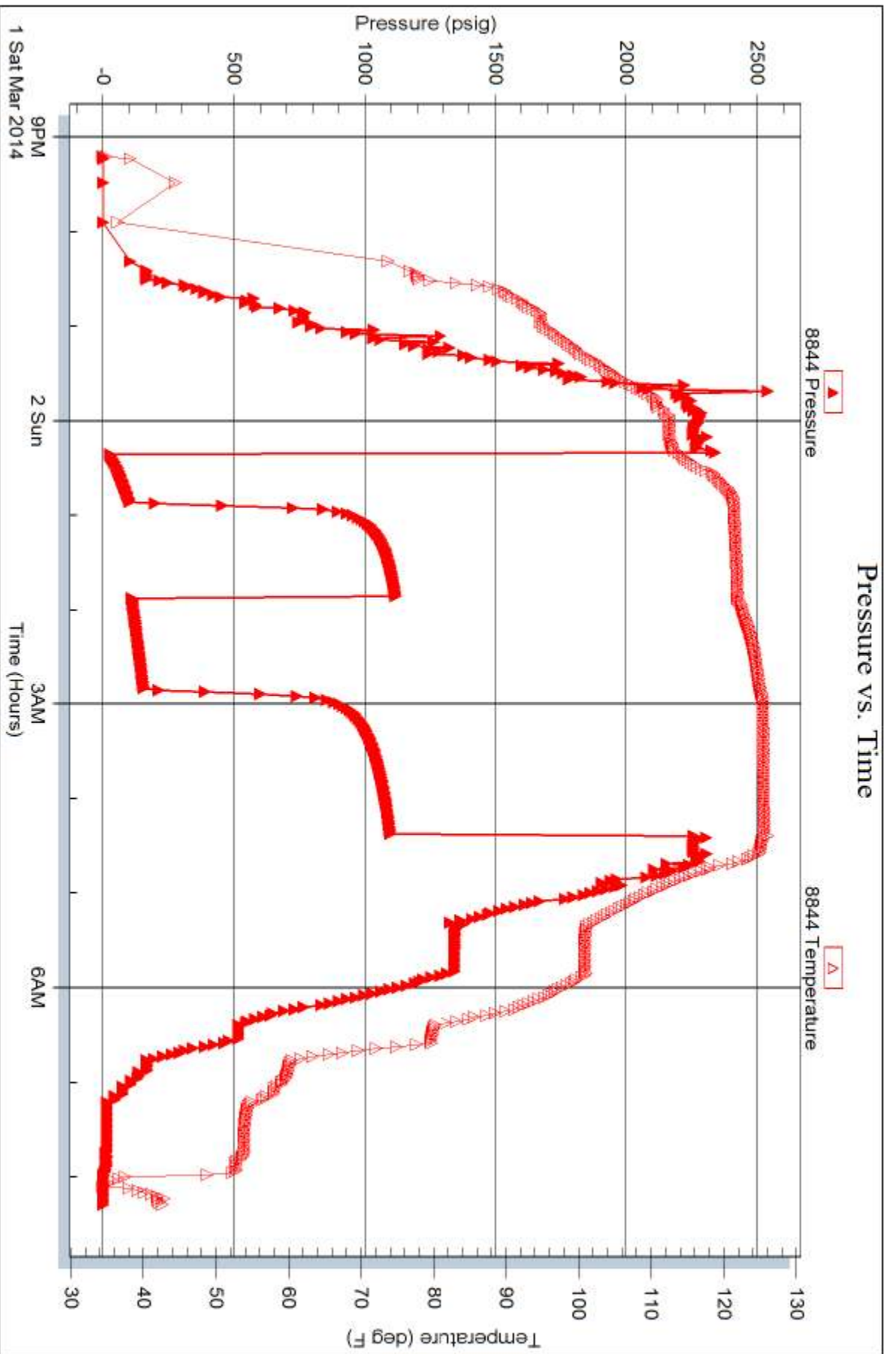


Serial #: 8844

Outside Murfin Drilling Co Inc

Abell Ranch B #1-31

DST Test Number: 4





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 56285

Well Name & No. Abell Ranch "B" # 1-31 Test No. #1 Date 2/26/14  
 Company Martin Drilling Co. Inc Elevation 2907 KB 2896 GL  
 Address 200 N. Water St. 300 Wichita, KS  
 Co. Rep / Geo. Saman Sharifare Rig Martin #22  
 Location: Sec. 31 Twp. 12S Rge. 30W Co. Gove State Ks

Interval Tested 4018 4058 Zone Tested E-F  
 Anchor Length 40 Drill Pipe Run 3762' Mud Wt. 9.2  
 Top Packer Depth 4013 Drill Collars Run 238' Vis 52  
 Bottom Packer Depth 4018 Wt. Pipe Run --- WL 5.2  
 Total Depth 4058 Chlorides 1500 ppm System LCM #2

Blow Description B.O.B. in 23 min (Tight turning tool Target 3 rounds)  
2 1/2" in Return blow  
B.O.B. in 23 min  
10" in Return blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>31</u>	<u>Cgo</u>	<u>20</u>	<u>80</u>		
<u>155</u>	<u>gmswco</u>	<u>15</u>	<u>45</u>	<u>10</u>	<u>30</u>
<u>372</u>	<u>gmswco</u>	<u>15</u>	<u>40</u>	<u>35</u>	<u>10</u>
	<u>558' GAS IN Pipe</u>				

Rec Total 558' BHT 120° Gravity 31 API RW .347 @ 50° F Chlorides 29,000 ppm

(A) Initial Hydrostatic <u>2028</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>02:45</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>03:20</u>
(C) First Final Flow <u>112</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>05:20</u>
(D) Initial Shut-In <u>1176</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>09:20</u>
(E) Second Initial Flow <u>124</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>189</u>	<input checked="" type="checkbox"/> Mileage <u>142.60</u>	Comments
(G) Final Shut-In <u>252</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1949</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1717.60</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1717.60</u>	

Approved By [Signature] 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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **56286**

4/10

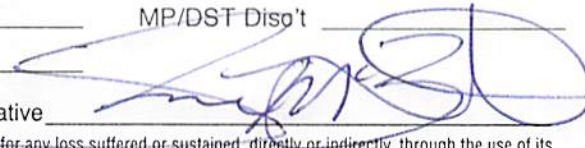
Well Name & No. Abell Ranch "B" #1-31 Test No. #2 Date 2/27/14  
 Company Marlow Drilling Co Inc. Elevation 2907 KB 2896 GL  
 Address 250 N. Water St. 300 Wichita, Ks 67202  
 Co. Rep / Geo. Saman Charifate Rig Marlow #22  
 Location: Sec. 31 Twp. 125 Rge. 30W Co. Gove State Ks

Interval Tested 4096 4220 Zone Tested H-K  
 Anchor Length 124 Drill Pipe Run 3854 Mud Wt. 9.3  
 Top Packer Depth 4091 Drill Collars Run 238' Vis 60  
 Bottom Packer Depth 4096 Wt. Pipe Run --- WL 5.2  
 Total Depth 4220 Chlorides 2000 ppm System LCM #4  
 Blow Description 7 1/4" in blow  
No return  
5" in blow  
No return

Rec	Feet of	%gas	Spots	%oil	%water	%mud
<u>318'</u>	<u>swcm w/o spots</u>				<u>10</u>	<u>90</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

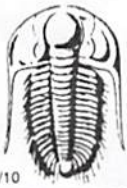
Rec Total 318' BHT 116° Gravity --- API RW .346 @ 56° F Chlorides 25,000 ppm

(A) Initial Hydrostatic <u>2086</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>07:33</u>
(B) First Initial Flow <u>25</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>07:57</u>
(C) First Final Flow <u>118</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>09:33</u>
(D) Initial Shut-In <u>1156</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>13:33</u>
(E) Second Initial Flow <u>132</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>180</u>	<input checked="" type="checkbox"/> Mileage <u>92 RT</u> 142.60	Comments
(G) Final Shut-In <u>1142</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2011</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1717.60</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Diso't
	Sub Total <u>1717.60</u>	

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. 56287

Well Name & No. Abell Ranch "B" #1-31 Test No. #3 Date 3/1/14  
 Company Murphy Drilling Co Inc Elevation 2907 KB 2896 GL  
 Address 250 N. Water St, 300, Wichita, KS 67202  
 Co. Rep / Geo Samantha Sharifaire Rig Mur Fin #22  
 Location: Sec. 31 Twp. 125 Rge. 30W Co. Gove State Ks

Interval Tested 4396 4524 Zone Tested Lane, Lawrence, Ft. Scott, Cherokee, Johnson  
 Anchor Length 128 Drill Pipe Run 4135 Mud Wt. 9.1  
 Top Packer Depth 4391 Drill Collars Run 238' Vis 53  
 Bottom Packer Depth 4396 Wt. Pipe Run --- WL 6.4  
 Total Depth 4524 Chlorides 2000 ppm System LCM #5

Blow Description (Slide tool 11' to bottom 3" in blow, bleed off mud blow to 1/4" SW, closed back to gun week surface blow.) IST: No return  
F.F.: Weak surface blow on cement, closed in 18 min.  
F.S.I.: No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>120'</u>	<u>Mud (Shows of 0.1 in the tool)</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 120' BHT 118° Gravity --- API RW --- @ --- °F Chlorides --- ppm

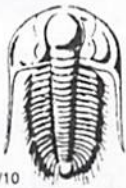
(A) Initial Hydrostatic <u>2215</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>00:22</u>
(B) First Initial Flow <u>84</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>01:00</u>
(C) First Final Flow <u>87</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>03:27</u>
(D) Initial Shut-In <u>6860</u>	<input checked="" type="checkbox"/> Circ Sub <u>W/C</u>	T-Pulled <u>06:27</u>
(E) Second Initial Flow <u>87</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>89</u>	<input checked="" type="checkbox"/> Mileage <u>92 RT</u> <u>142.60</u>	Comments
(G) Final Shut-In <u>696</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2125</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

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

Ruined Packer 320  
 Extra Copies  
 Sub Total 0  
 Total 2037.60  
 MP/DST Disc't

Approved By \_\_\_\_\_ 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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 56288

Well Name & No. Abell Ranch "B" #1-31 Test No. 3124 Date 3/2/14  
 Company Mudwin Drilling Co Inc Elevation 2907 KB 2896 GL  
 Address 250 N Water Ave 390 Wichita, KS 67202  
 Co. Rep / Geo. Samuel Shurtz Rig Mudwin #22  
 Location: Sec. 31 Twp. 125 Rge. 30W Co. Gove State KS

Interval Tested 4533 4555 Zone Tested Mississippi  
 Anchor Length 22 Drill Pipe Run 3/292 Mud Wt. 9.3  
 Top Packer Depth 4528 Drill Collars Run 238' Vis 53  
 Bottom Packer Depth 4533 Wt. Pipe Run \_\_\_\_\_ WL 5.2  
 Total Depth 4555 Chlorides 2000 ppm System LCM #5

Blow Description B.O.B. in 30 min  
No return  
B.O.B. in 27 min.  
1/2" in Return blow, died in 4/2 min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>gmco</u>	<u>10</u>	<u>70</u>	<u>20</u>	<u>0</u>
<u>120</u>	<u>gmco</u>	<u>10</u>	<u>60</u>	<u>5</u>	<u>25</u>
<u>170</u>	<u>g<del>o</del>3wcm</u>	<u>10</u>	<u>5</u>	<u>35</u>	<u>50</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>(290' Gas in Pipe)</u>	%gas	%oil	%water	%mud

Rec Total 310 BHT 126° Gravity \_\_\_\_\_ API RW .283 @ 72° F Chlorides 24500 ppm

(A) Initial Hydrostatic 2342  Test 1250 T-On Location 21:09  
 (B) First Initial Flow 24  Jars 250 T-Started 21:11  
 (C) First Final Flow 105  Safety Joint 75 T-Open 00:20  
 (D) Initial Shut-In 1120  Circ Sub N/C T-Pulled 04:20  
 (E) Second Initial Flow 113  Hourly Standby \_\_\_\_\_ T-Out \_\_\_\_\_  
 (F) Second Final Flow 158  Mileage 92 RT 142.60 Comments \_\_\_\_\_  
 (G) Final Shut-In 1101  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2266  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1717.60  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90  
 Sub Total 1717.60

Approved By \_\_\_\_\_ 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.