



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300  
Wichita KS 67202

ATTN: Chuck Schmaltz

**Jones B #1-9**

**9 1s 37w Cheyenne,KS**

Start Date: 2013.12.27 @ 18:40:00

End Date: 2013.12.28 @ 02:15:00

Job Ticket #: 55934                      DST #: 1

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

Printed: 2014.01.03 @ 10:30:12



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co.

**9 1s 37w Cheyenne, KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55934

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2013.12.27 @ 18:40:00

## GENERAL INFORMATION:

Formation: **Foraker**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:22:00

Time Test Ended: 02:15:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Kreuzer Jr.

Unit No: 61

**Interval: 3738.00 ft (KB) To 3790.00 ft (KB) (TVD)**

Total Depth: 3790.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3263.00 ft (KB)

3250.00 ft (CF)

KB to GR/CF: 13.00 ft

**Serial #: 8673 Inside**

Press@RunDepth: 18.65 psig @ 3739.00 ft (KB)

Start Date: 2013.12.27

End Date:

2013.12.28

Start Time: 18:40:01

End Time:

02:15:00

Capacity: 8000.00 psig

Last Calib.: 2013.12.28

Time On Btm: 2013.12.27 @ 21:02:30

Time Off Btm: 2013.12.28 @ 00:39:00

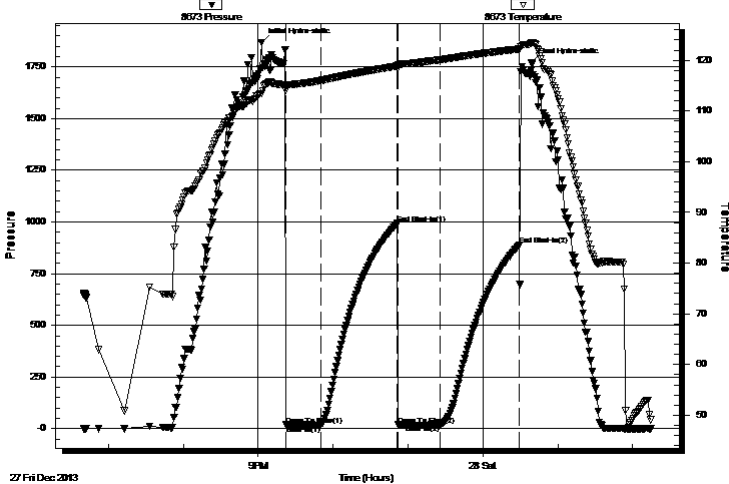
TEST COMMENT: IF: Weak surface blow, Died in 21 mins.

IS: No blow back over 60 mins.

FF: No blow over 30 mins.

FS: No blow back over 60 mins.

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1869.20	113.44	Initial Hydro-static
20	17.90	113.97	Open To Flow (1)
48	18.08	115.98	Shut-In(1)
109	993.08	118.88	End Shut-In(1)
110	18.60	118.39	Open To Flow (2)
144	18.65	120.12	Shut-In(2)
207	887.23	122.23	End Shut-In(2)
217	1771.72	123.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	ocm-30% m70% o	0.07

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55934

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2013.12.27 @ 18:40:00

## Tool Information

Drill Pipe:	Length: 3735.00 ft	Diameter: 3.80 inches	Volume: 52.39 bbl	Tool Weight: 2400.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 52.39 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3738.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3715.00	
Hydraulic tool	5.00			3720.00	
Jars	5.00			3725.00	
Safety Joint	3.00			3728.00	
Packer	5.00			3733.00	28.00 Bottom Of Top Packer
Packer	5.00			3738.00	
Stubb	1.00			3739.00	
Recorder	0.00	8673	Inside	3739.00	
Recorder	0.00	8651	Outside	3739.00	
Perforations	14.00			3753.00	
change Over Sub	1.00			3754.00	
Drill Pipe	32.00			3786.00	
Change Over Sub	1.00			3787.00	
Bullnose	3.00			3790.00	52.00 Bottom Packers & Anchor

**Total Tool Length: 80.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55934

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2013.12.27 @ 18:40:00

### 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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	ocm-30% m70%o	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

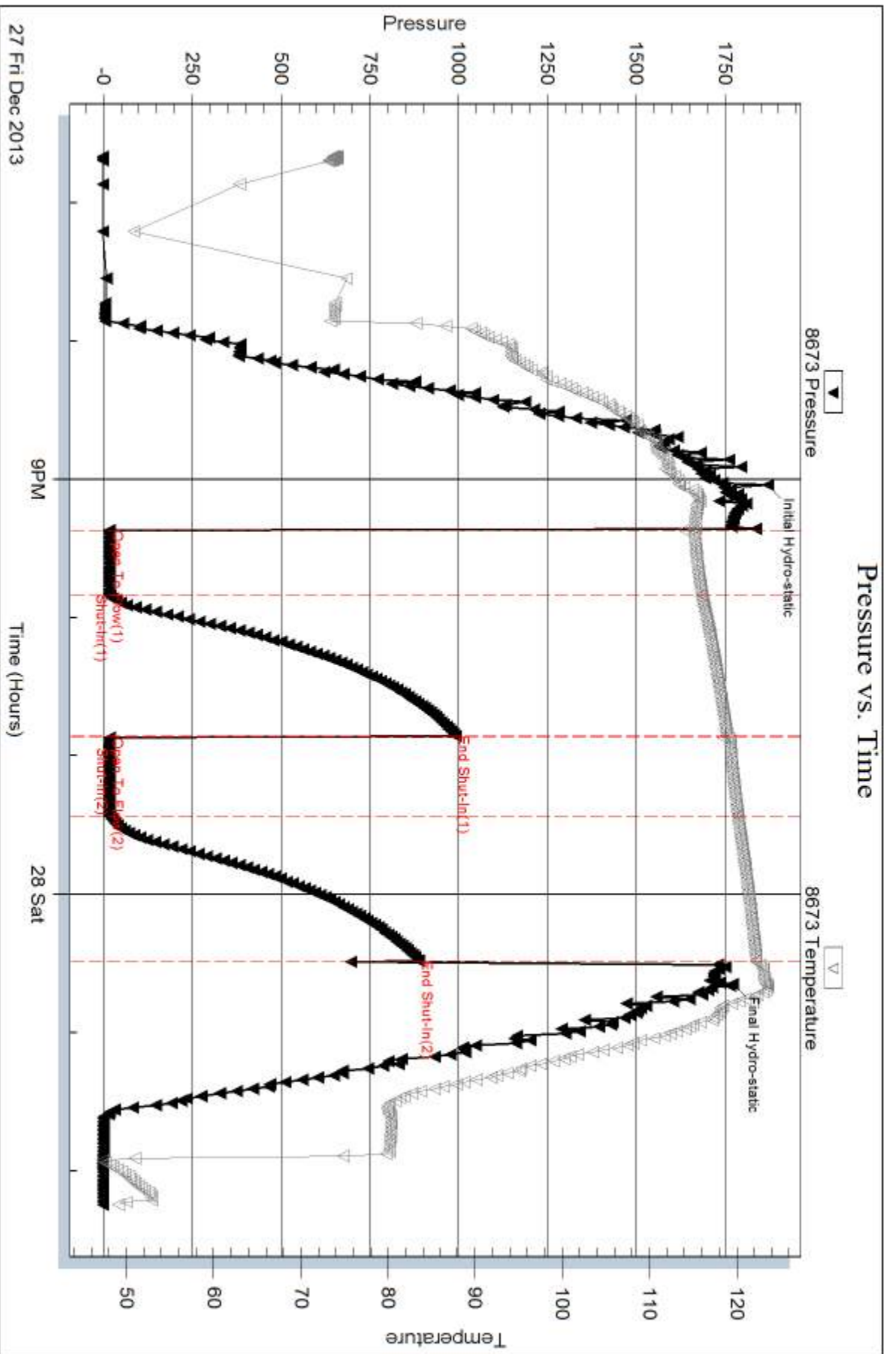
Serial #: 8673

Inside

Murfin Drilling Co.

Jones B#1-9

DST Test Number: 1

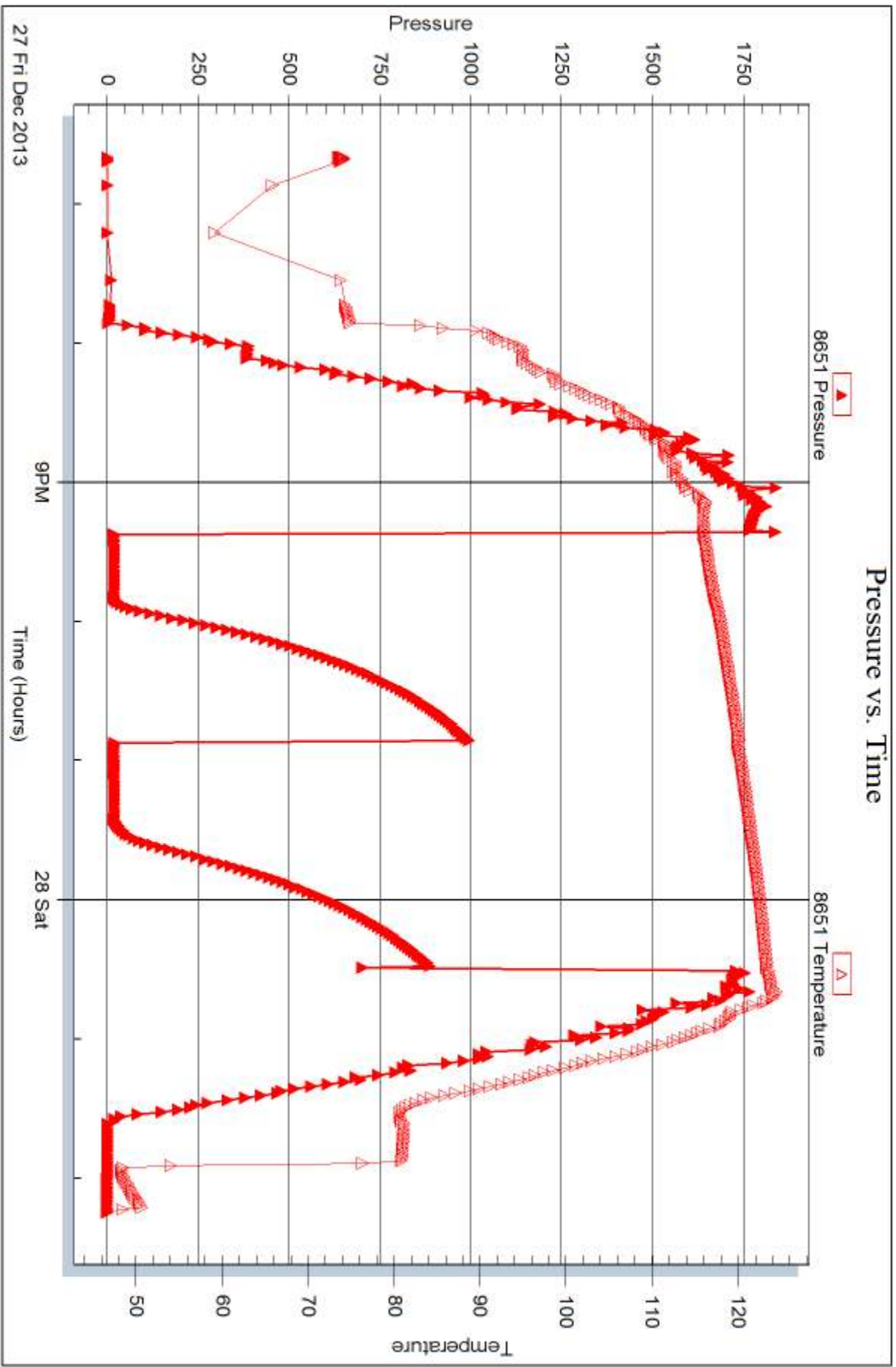


Serial #: 8651

Outside Murfin Drilling Co.

Jones B#1-9

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 55934

Printed: 2014.01.03 @ 10:30:14



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300  
Wichita KS 67202

ATTN: Chuck Schmaltz

**Jones B #1-9**

**9 1s 37w Cheyenne,KS**

Start Date: 2013.12.29 @ 13:20:00

End Date: 2013.12.29 @ 19:58:30

Job Ticket #: 55935                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.03 @ 10:29:49

Murfin Drilling Co. 9 1s 37w Cheyenne,KS Jones B #1-9 DST # 2 LKC A-D 2013.12.29





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co.

**9 1s 37w Cheyenne, KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55935

**DST#: 2**

ATTN: Chuck Schmalz

Test Start: 2013.12.29 @ 13:20:00

## GENERAL INFORMATION:

Formation: **LKC A-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:09:30

Time Test Ended: 19:58:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

**Interval: 4164.00 ft (KB) To 4289.00 ft (KB) (TVD)**

Reference Elevations: 3263.00 ft (KB)

Total Depth: 4289.00 ft (KB) (TVD)

3250.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8673**

**Inside**

Press@RunDepth: 27.49 psig @ 4165.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.29

End Date:

2013.12.29

Last Calib.:

2013.12.29

Start Time: 13:20:01

End Time:

19:58:30

Time On Btm:

2013.12.29 @ 14:55:30

Time Off Btm:

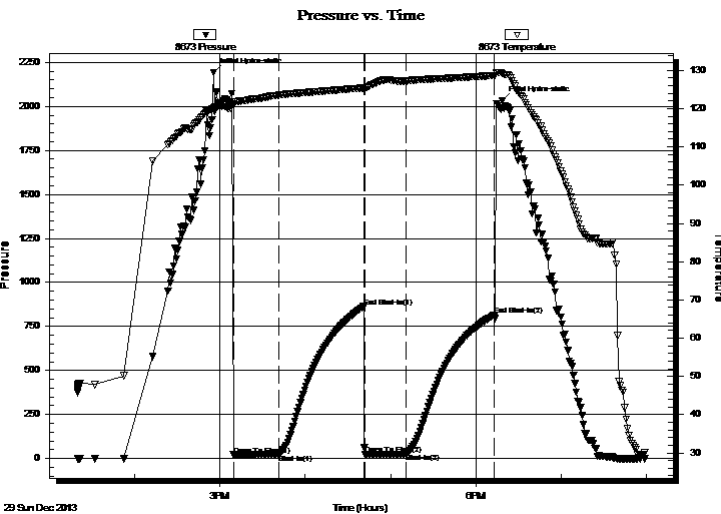
2013.12.29 @ 18:18:30

**TEST COMMENT:** IF: Weak surface blow, Built to 3/4". in 7 mins. Started to die. Dead in 25 mins.

IS: No blow back over 60 mins.

FF: Weak surface blow, Dead in 10 secs.

FS: No blow back over 60 mins.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2192.88	120.29	Initial Hydro-static
14	20.63	121.22	Open To Flow (1)
46	24.73	123.48	Shut-In(1)
106	862.68	125.43	End Shut-In(1)
107	23.75	125.35	Open To Flow (2)
136	27.49	127.19	Shut-In(2)
198	816.33	128.65	End Shut-In(2)
203	2030.97	129.20	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud-100%m	0.14

\* 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.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55935

**DST#: 2**

ATTN: Chuck Schmaltz

Test Start: 2013.12.29 @ 13:20:00

## Tool Information

Drill Pipe:	Length: 4146.00 ft	Diameter: 3.80 inches	Volume: 58.16 bbl	Tool Weight: 2400.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 58.16 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4164.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	125.00 ft			
Tool Length:	153.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4141.00	
Hydraulic tool	5.00			4146.00	
Jars	5.00			4151.00	
Safety Joint	3.00			4154.00	
Packer	5.00			4159.00	28.00 Bottom Of Top Packer
Packer	5.00			4164.00	
Stubb	1.00			4165.00	
Recorder	0.00	8673	Inside	4165.00	
Recorder	0.00	8651	Outside	4165.00	
Perforations	24.00			4189.00	
change Over Sub	1.00			4190.00	
Drill Pipe	95.00			4285.00	
Change Over Sub	1.00			4286.00	
Bullnose	3.00			4289.00	125.00 Bottom Packers & Anchor

**Total Tool Length: 153.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55935

**DST#: 2**

ATTN: Chuck Schmaltz

Test Start: 2013.12.29 @ 13:20:00

### 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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.15 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud-100%m	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

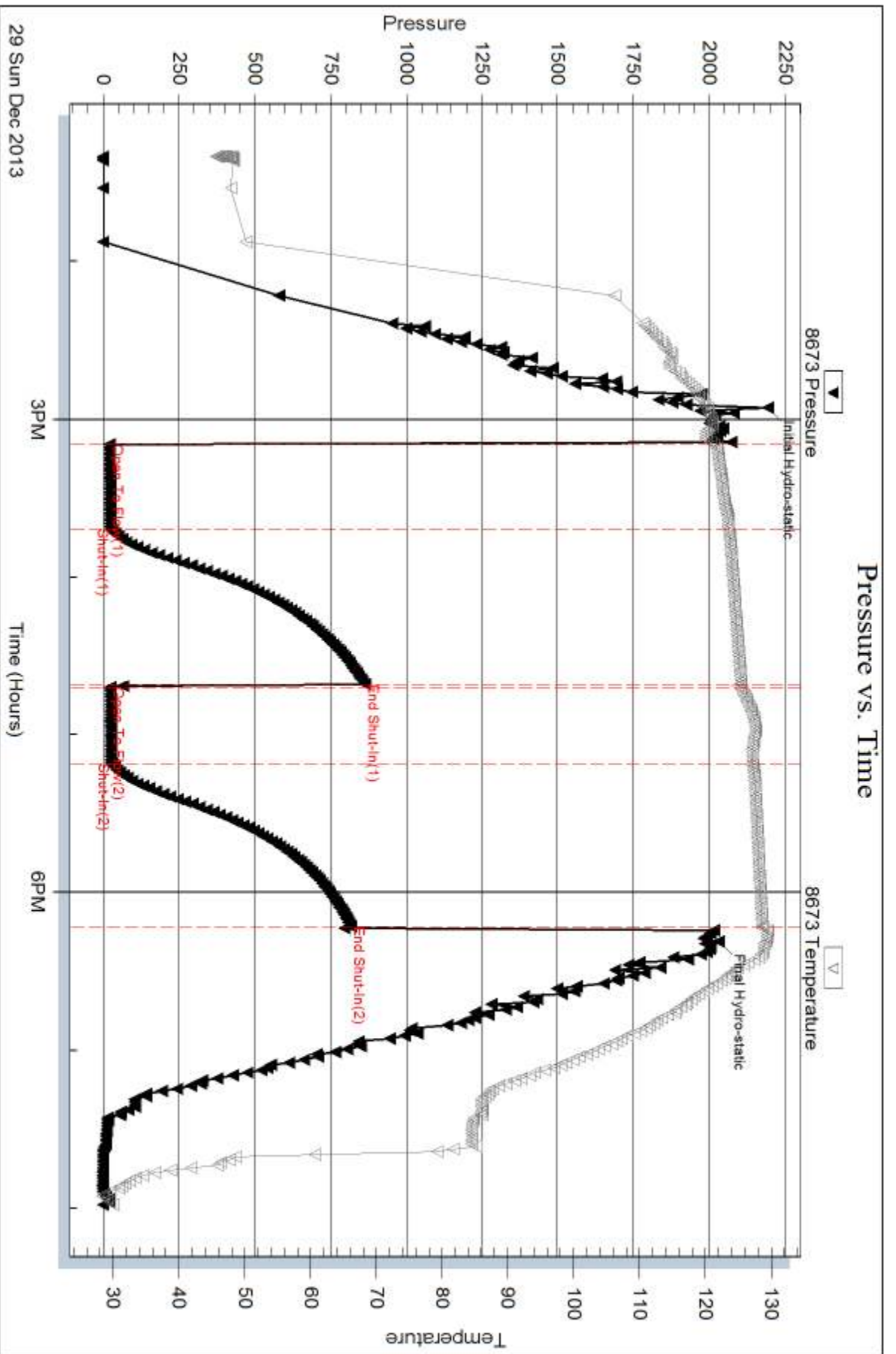
Num Gas Bombs: 0

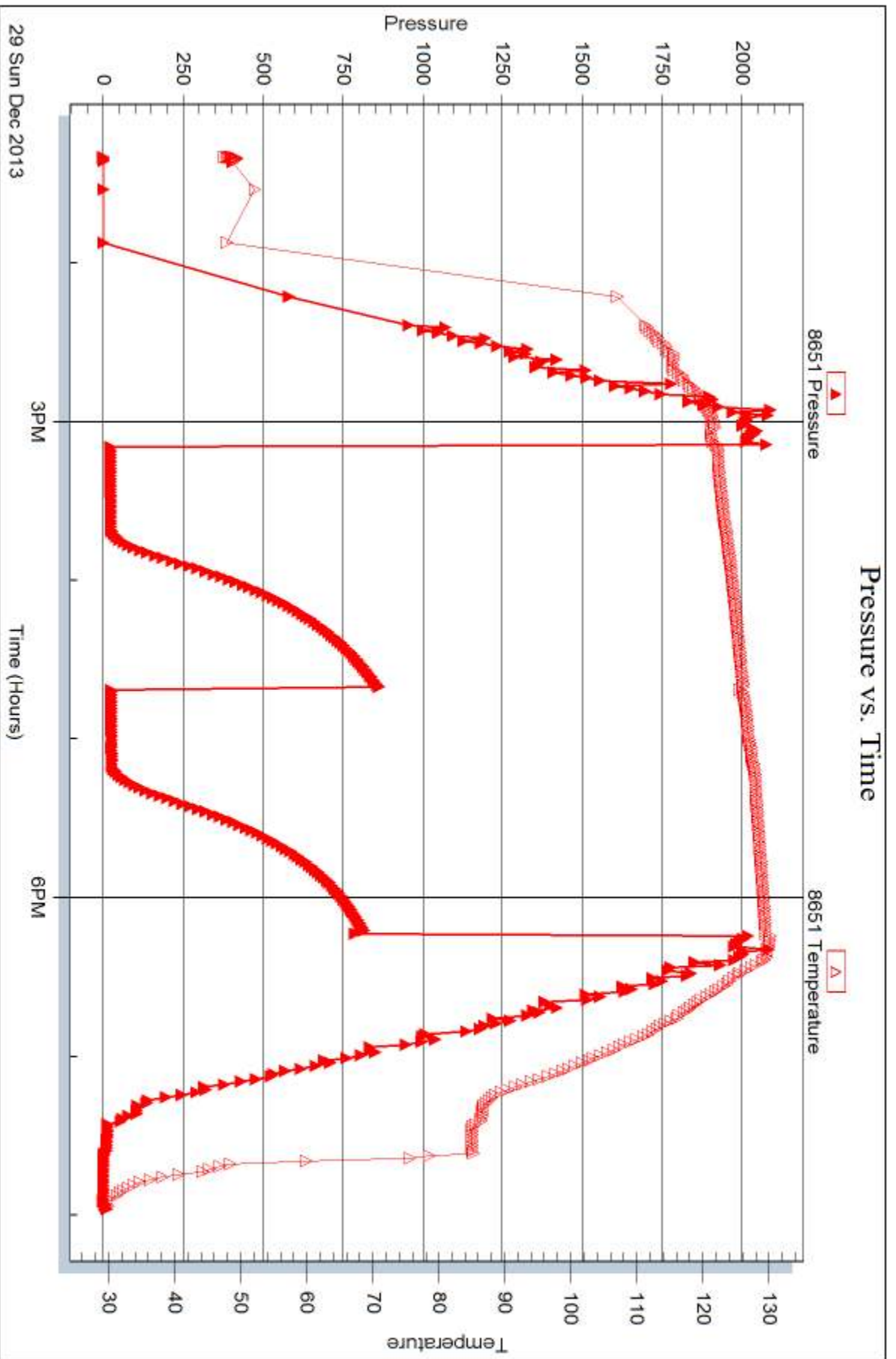
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Jones B #1-9**

### **9 1s 37w Cheyenne,KS**

Start Date: 2013.12.30 @ 10:43:00

End Date: 2013.12.30 @ 17:34:00

Job Ticket #: 55936                      DST #: 3

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

Printed: 2014.01.03 @ 10:29:19



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co.

**9 1s 37w Cheyenne, KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55936

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2013.12.30 @ 10:43:00

## GENERAL INFORMATION:

Formation: **LKC H-I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:36:30

Time Test Ended: 17:34:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

**Interval: 4302.00 ft (KB) To 4400.00 ft (KB) (TVD)**

Reference Elevations: 3263.00 ft (KB)

Total Depth: 4400.00 ft (KB) (TVD)

3250.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8673**

**Inside**

Press@RunDepth: 30.32 psig @ 4303.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.30

End Date:

2013.12.30

Last Calib.:

2013.12.30

Start Time: 10:43:01

End Time:

17:34:00

Time On Btm:

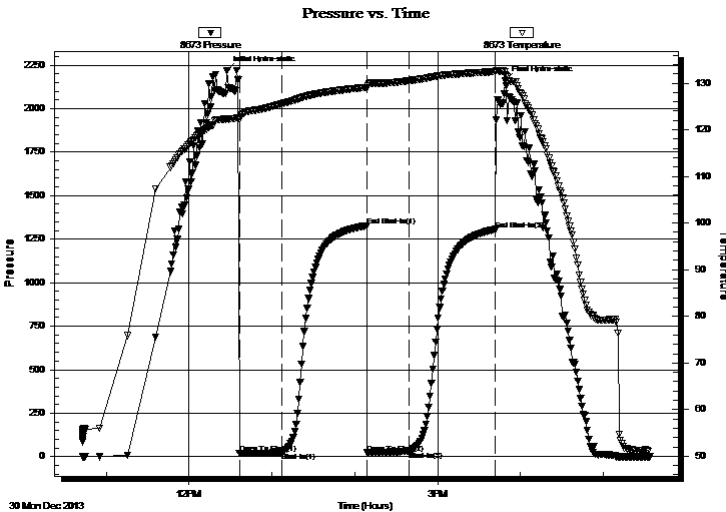
2013.12.30 @ 12:27:30

Time Off Btm:

2013.12.30 @ 15:49:00

**TEST COMMENT:** IF: Weak blow, Built to 1" over 30 mins.  
IS: No blow back over 60 mins.  
FF: No blow over 30 mins.  
FS: No blow back over 60 mins.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2219.92	122.30	Initial Hydro-static
9	18.72	122.26	Open To Flow (1)
40	22.87	125.55	Shut-In(1)
101	1327.25	129.09	End Shut-In(1)
102	21.78	128.86	Open To Flow (2)
132	30.32	130.52	Shut-In(2)
195	1306.05	132.46	End Shut-In(2)
202	2163.45	131.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
25.00	ocm-5% m95% o	0.35

\* 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.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55936

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2013.12.30 @ 10:43:00

## Tool Information

Drill Pipe:	Length: 4299.00 ft	Diameter: 3.80 inches	Volume: 60.30 bbl	Tool Weight: 2400.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 25000.00 lb
			<u>Total Volume: 60.30 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4302.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	98.00 ft			
Tool Length:	126.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4279.00	
Hydraulic tool	5.00			4284.00	
Jars	5.00			4289.00	
Safety Joint	3.00			4292.00	
Packer	5.00			4297.00	28.00 Bottom Of Top Packer
Packer	5.00			4302.00	
Stubb	1.00			4303.00	
Recorder	0.00	8673	Inside	4303.00	
Recorder	0.00	8651	Outside	4303.00	
Perforations	29.00			4332.00	
change Over Sub	1.00			4333.00	
Drill Pipe	63.00			4396.00	
Change Over Sub	1.00			4397.00	
Bullnose	3.00			4400.00	98.00 Bottom Packers & Anchor

**Total Tool Length: 126.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55936

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2013.12.30 @ 10:43:00

### 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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	ocm-5% <del>m</del> 95% <del>o</del>	0.351

Total Length: 25.00 ft      Total Volume: 0.351 bbl

Num Fluid Samples: 0

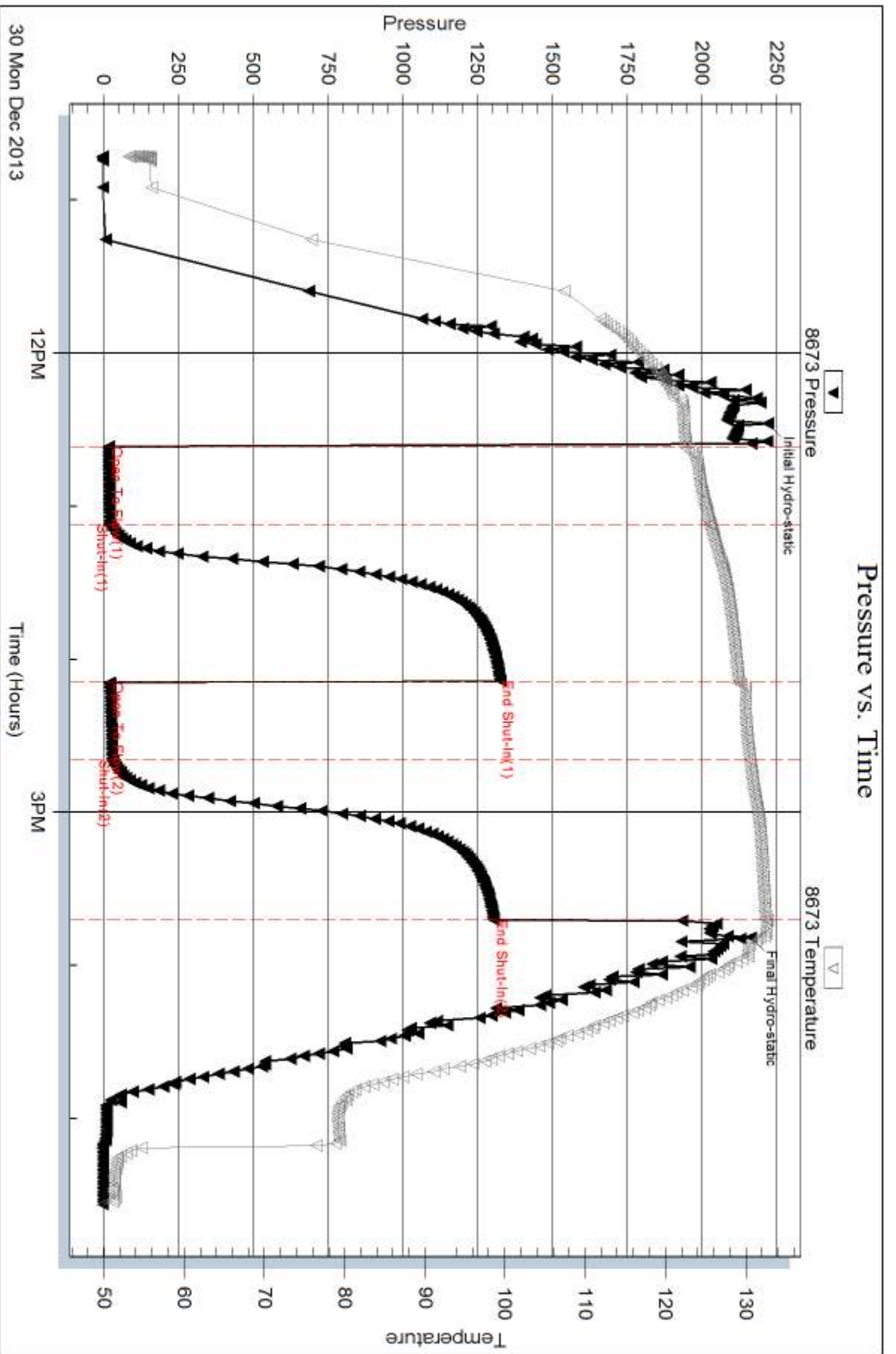
Num Gas Bombs: 0

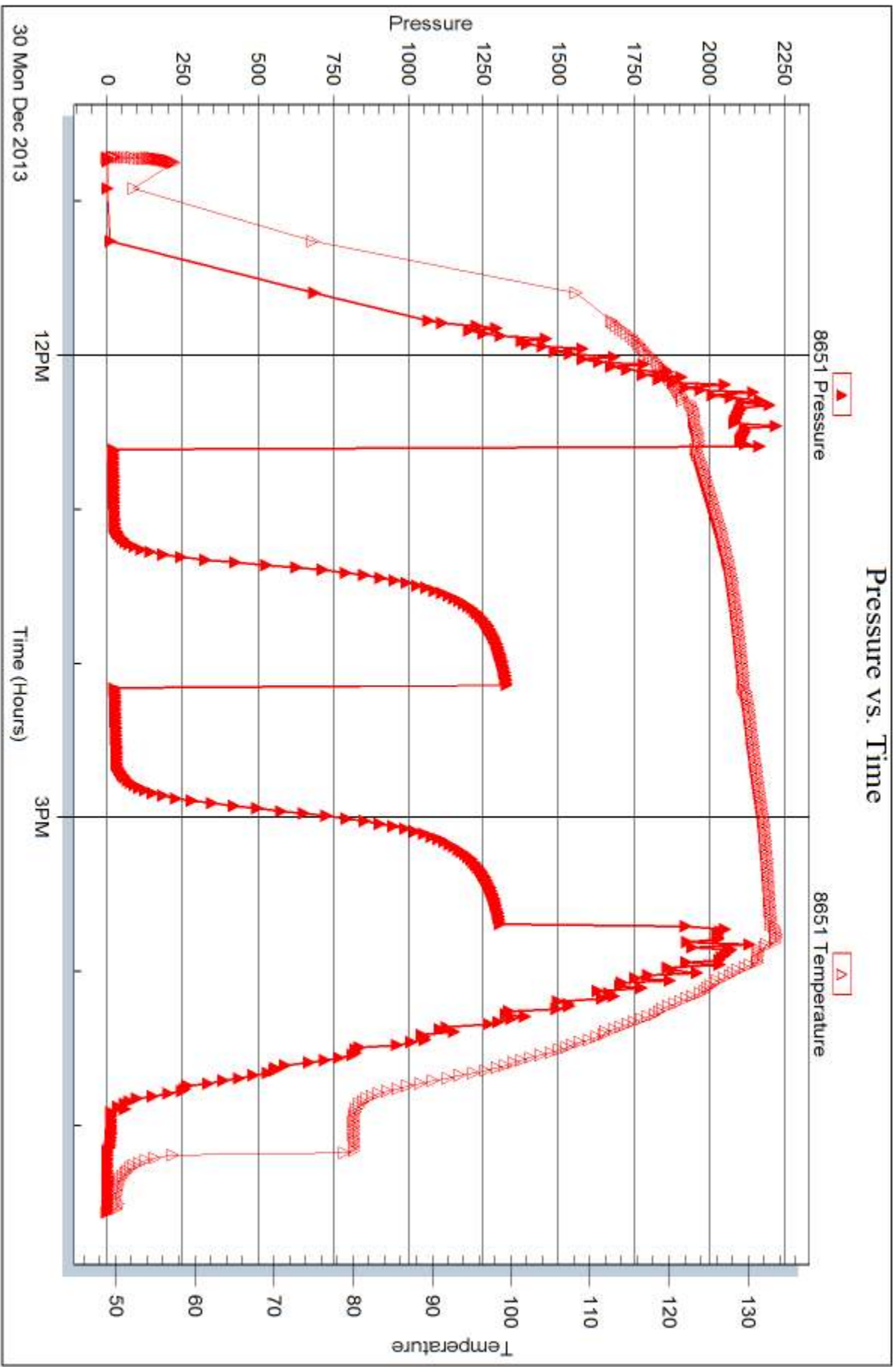
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Jones B #1-9**

### **9 1s 37w Cheyenne,KS**

Start Date: 2013.12.31 @ 02:45:00

End Date: 2013.12.31 @ 10:02:00

Job Ticket #: 55937                      DST #: 4

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

Printed: 2014.01.03 @ 10:27:41



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co.

**9 1s 37w Cheyenne, KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55937

**DST#: 4**

ATTN: Chuck Schmalz

Test Start: 2013.12.31 @ 02:45:00

## GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:56:30

Time Test Ended: 10:02:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

**Interval: 4380.00 ft (KB) To 4440.00 ft (KB) (TVD)**

Reference Elevations: 3263.00 ft (KB)

Total Depth: 4440.00 ft (KB) (TVD)

3250.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8673**

**Inside**

Press@RunDepth: 18.92 psig @ 4341.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.31

End Date:

2013.12.31

Last Calib.: 2013.12.31

Start Time: 02:45:01

End Time:

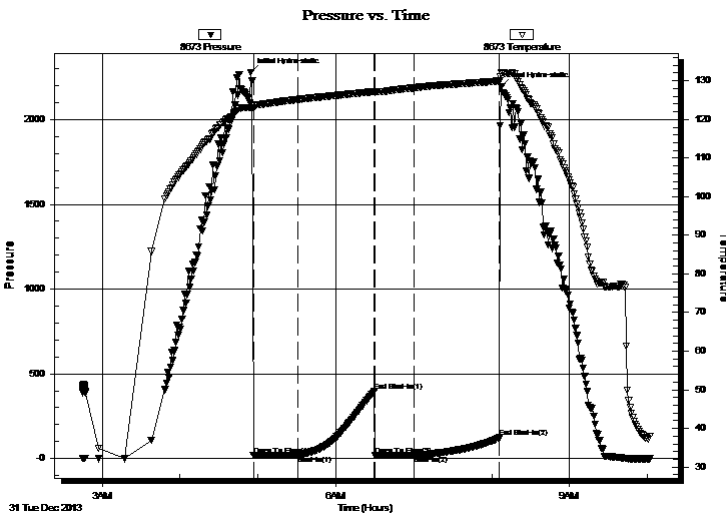
10:02:00

Time On Btm: 2013.12.31 @ 04:54:30

Time Off Btm: 2013.12.31 @ 08:07:30

**TEST COMMENT:** IF: Weak blow , Built to 3/4" over 30 mins.  
IS: No blow back over 60 mins.  
FF: Weak blow , Died in 15 mins.  
FS: No blow back over 60 mins.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2279.38	123.03	Initial Hydro-static
2	18.12	122.89	Open To Flow (1)
36	20.93	125.16	Shut-In(1)
95	396.62	127.20	End Shut-In(1)
96	18.62	126.94	Open To Flow (2)
126	18.92	128.18	Shut-In(2)
192	122.90	129.94	End Shut-In(2)
193	2197.01	132.18	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
7.00	mud-100%m	0.10

## 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.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55937

**DST#: 4**

ATTN: Chuck Schmaltz

Test Start: 2013.12.31 @ 02:45:00

## Tool Information

Drill Pipe:	Length: 4322.00 ft	Diameter: 3.80 inches	Volume: 60.63 bbl	Tool Weight: 2400.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 60.63 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4340.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4317.00	
Hydraulic tool	5.00			4322.00	
Jars	5.00			4327.00	
Safety Joint	3.00			4330.00	
Packer	5.00			4335.00	28.00 Bottom Of Top Packer
Packer	5.00			4340.00	
Stubb	1.00			4341.00	
Recorder	0.00	8673	Inside	4341.00	
Recorder	0.00	8651	Outside	4341.00	
Perforations	22.00			4363.00	
change Over Sub	1.00			4364.00	
Drill Pipe	32.00			4396.00	
Change Over Sub	1.00			4397.00	
Bullnose	3.00			4400.00	60.00 Bottom Packers & Anchor

**Total Tool Length: 88.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55937

**DST#: 4**

ATTN: Chuck Schmaltz

Test Start: 2013.12.31 @ 02:45:00

### 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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
7.00	mud-100%m	0.098

Total Length: 7.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

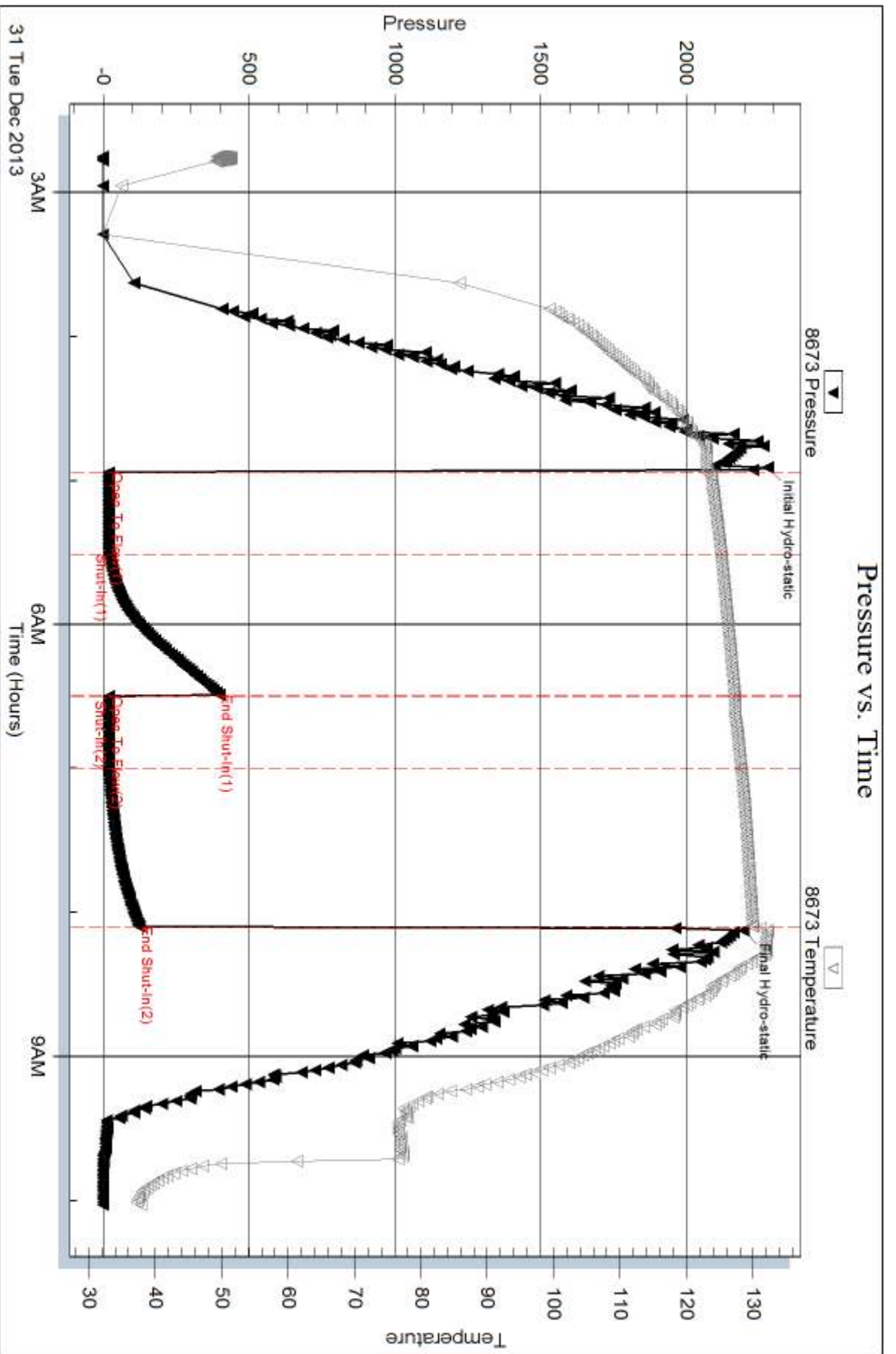
Num Gas Bombs: 0

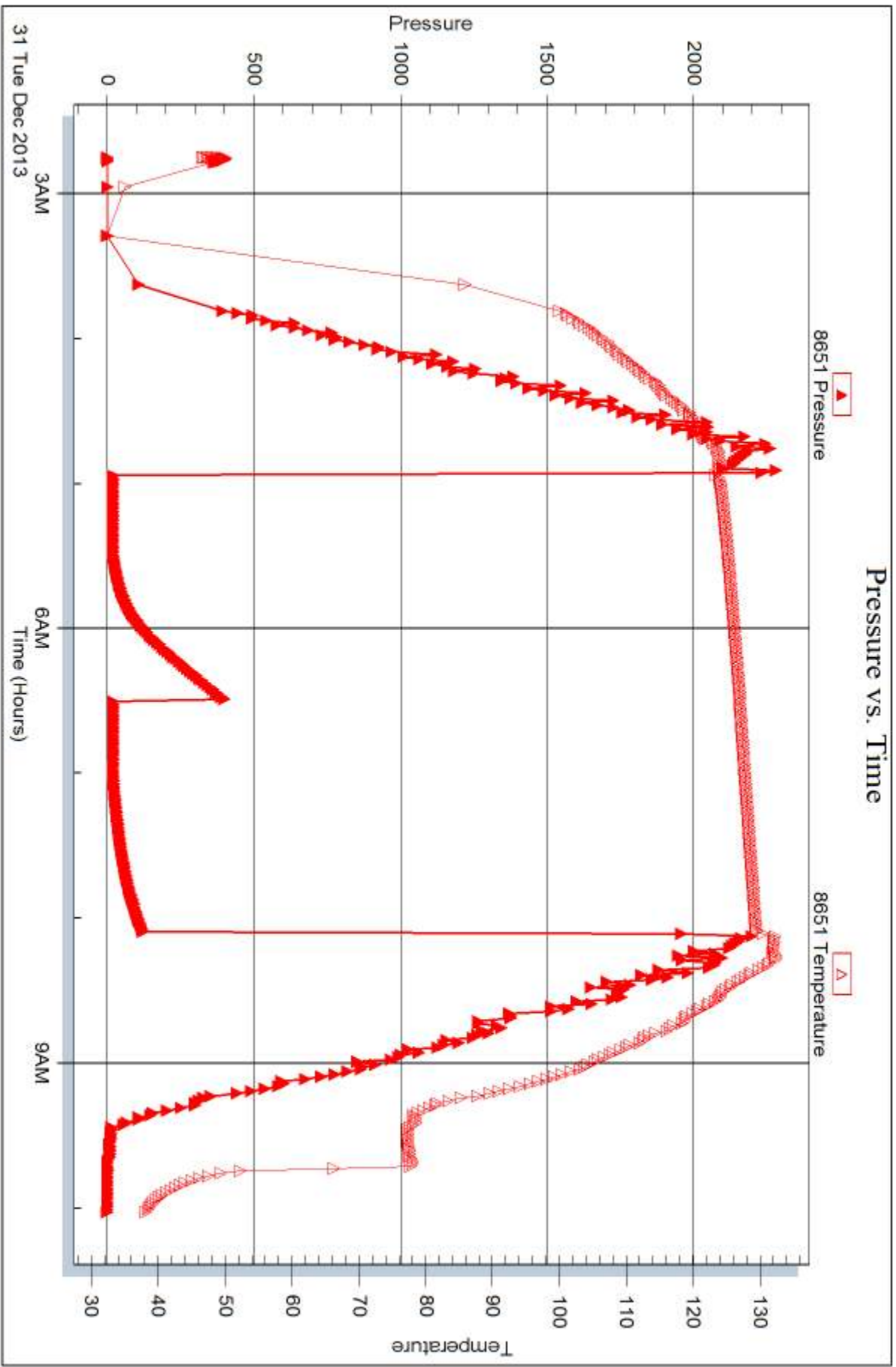
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300  
Wichita KS 67202

ATTN: Chuck Schmaltz

**Jones B #1-9**

**9 1s 37w Cheyenne,KS**

Start Date: 2014.01.01 @ 04:05:00

End Date: 2014.01.01 @ 12:43:00

Job Ticket #: 55938                      DST #: 5

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

Printed: 2014.01.03 @ 10:26:57



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co.

**9 1s 37w Cheyenne, KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55938

**DST#: 5**

ATTN: Chuck Schmalz

Test Start: 2014.01.01 @ 04:05:00

## GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:09:00

Time Test Ended: 12:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

**Interval: 4590.00 ft (KB) To 4633.00 ft (KB) (TVD)**

Reference Elevations: 3263.00 ft (KB)

Total Depth: 4633.00 ft (KB) (TVD)

3250.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8673**

**Inside**

Press@RunDepth: 168.42 psig @ 4591.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.01

End Date:

2014.01.01

Last Calib.:

2014.01.01

Start Time: 04:05:01

End Time:

12:43:00

Time On Btm:

2014.01.01 @ 05:58:00

Time Off Btm:

2014.01.01 @ 10:20:00

## TEST COMMENT:

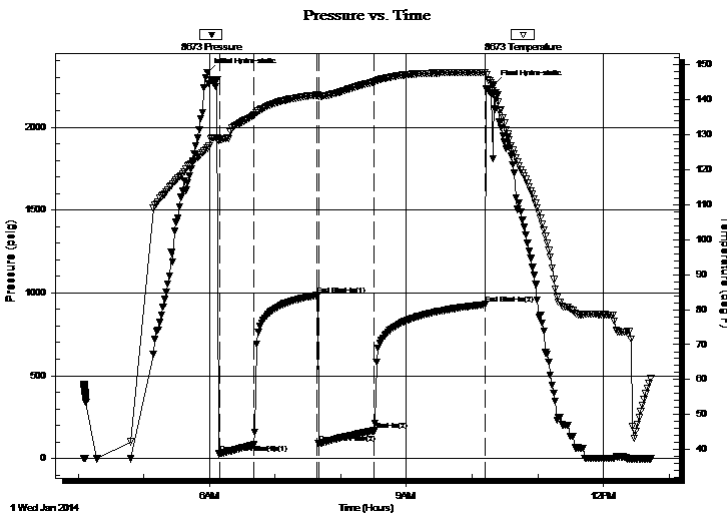
IF: Strong blow , Built to B.O.B in 6 mins.

IS: Bled off, Blow back after 1 min. Built to 2 1/2" over 30 mins. started to die. Dead in 50 mins.

FF: Strong blow , Built to B.O.B in 10 mins.

FS: Bled off, Blow back after 1 min. Built to B.O.B in 28 mins.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2331.02	126.20	Initial Hydro-static
11	32.58	128.68	Open To Flow (1)
43	83.03	135.56	Shut-In(1)
100	985.97	141.34	End Shut-In(1)
102	89.51	141.04	Open To Flow (2)
153	168.42	145.10	Shut-In(2)
254	930.24	147.81	End Shut-In(2)
262	2257.57	141.04	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
94.00	gocm-15%g25%o60%m	1.32
282.00	go-25%g75%o	3.96
30.00	go-15%g 85%o	0.42
0.00	1034' GIP	0.00

\* 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.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55938

**DST#: 5**

ATTN: Chuck Schmaltz

Test Start: 2014.01.01 @ 04:05:00

## Tool Information

Drill Pipe:	Length: 4582.00 ft	Diameter: 3.80 inches	Volume: 64.27 bbl	Tool Weight: 2400.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 64.27 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4590.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4567.00	
Hydraulic tool	5.00			4572.00	
Jars	5.00			4577.00	
Safety Joint	3.00			4580.00	
Packer	5.00			4585.00	28.00 Bottom Of Top Packer
Packer	5.00			4590.00	
Stubb	1.00			4591.00	
Recorder	0.00	8673	Inside	4591.00	
Recorder	0.00	8651	Outside	4591.00	
Perforations	6.00			4597.00	
change Over Sub	1.00			4598.00	
Drill Pipe	31.00			4629.00	
Change Over Sub	1.00			4630.00	
Bullnose	3.00			4633.00	43.00 Bottom Packers & Anchor

**Total Tool Length: 71.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co.

**9 1s 37w Cheyenne,KS**

250 N. Water Ste. 300  
Wichita KS 67202

**Jones B #1-9**

Job Ticket: 55938

**DST#: 5**

ATTN: Chuck Schmaltz

Test Start: 2014.01.01 @ 04:05:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
94.00	gocm-15%g25%o60%m	1.319
282.00	go-25%g75%o	3.956
30.00	go-15%g 85%o	0.421
0.00	1034' GIP	0.000

Total Length: 406.00 ft

Total Volume: 5.696 bbl

Num Fluid Samples: 0

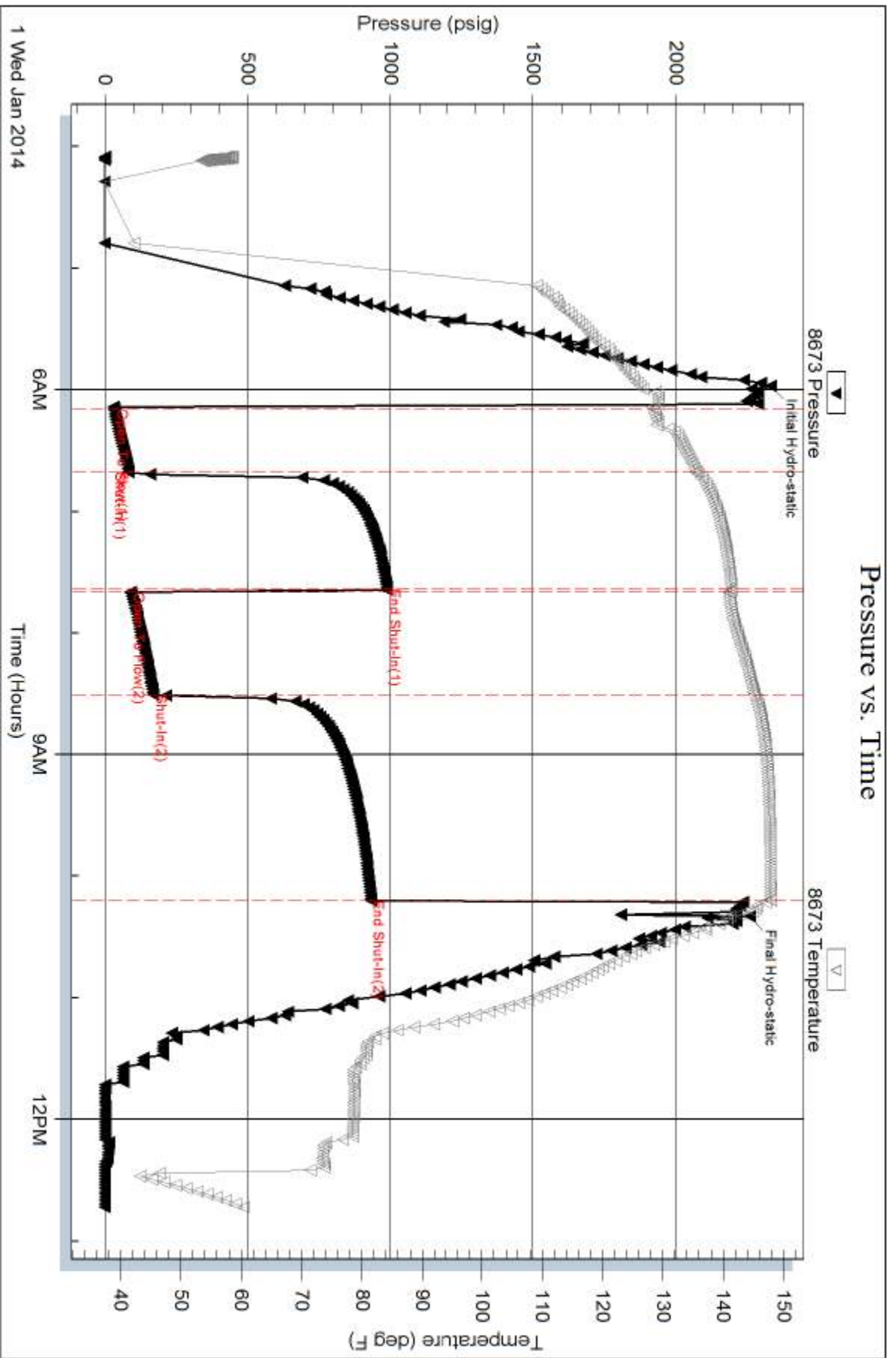
Num Gas Bombs: 0

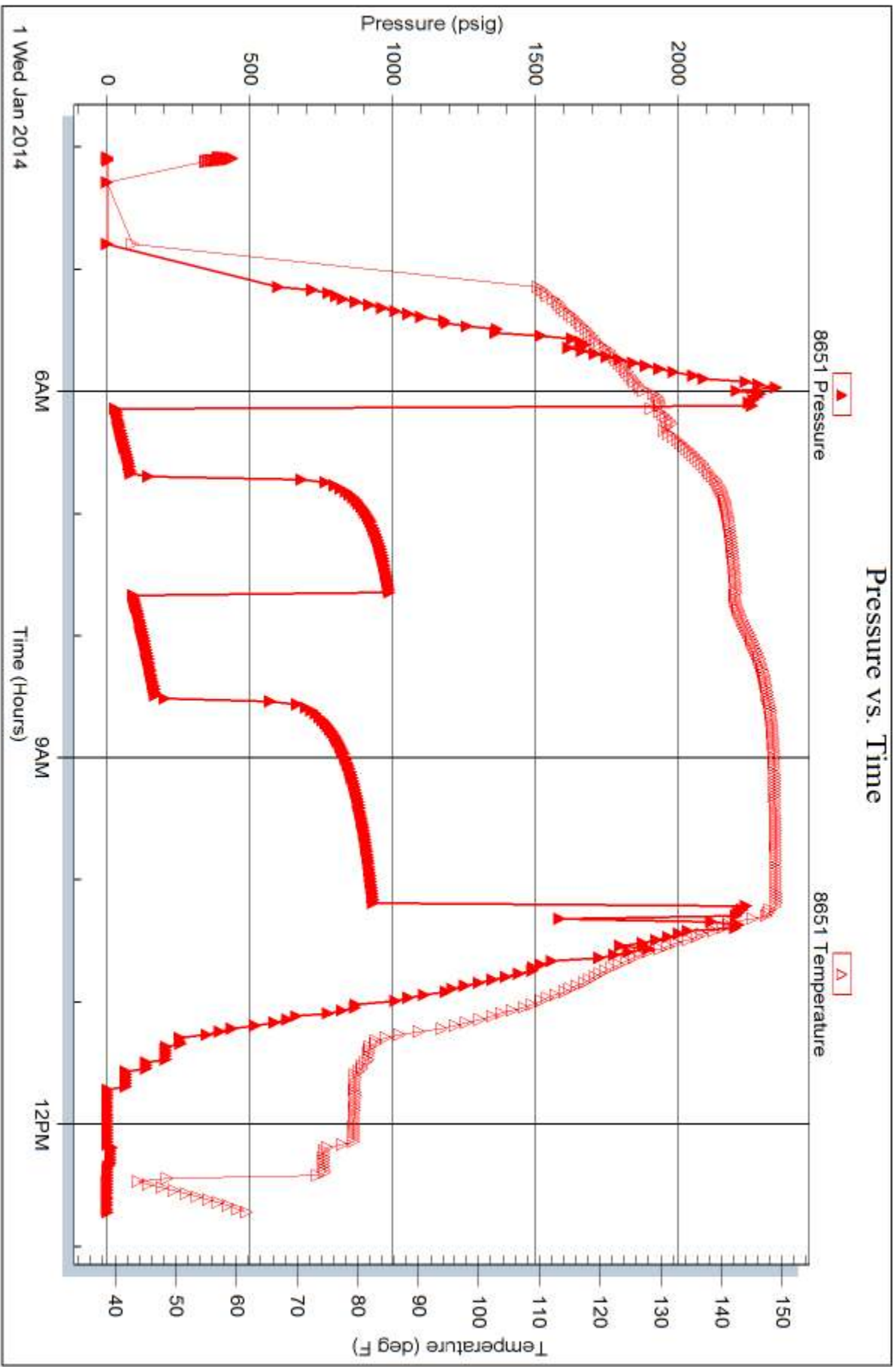
Serial #:

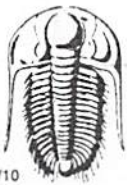
Laboratory Name:

Laboratory Location:

Recovery Comments: API 38@60\*







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 55934

Well Name & No. Jones' B' #1-a Test No. 1 Date 12-27-13  
 Company Murfin Drilling Co. Elevation 3263 KB 3250 GL  
 Address 250 N. water Ste. 300 Wichita Ks. 67202  
 Co. Rep / Geo. Chuck Schmitz Rig Murfin #25  
 Location: Sec. 9 Twp. 1s Rge. 37W Co. Cheyenne State Ks

Interval Tested 3738 3790 Zone Tested Foratler  
 Anchor Length 52 Drill Pipe Run 3735 Mud Wt. 8.9  
 Top Packer Depth 3735 Drill Collars Run -0- Vis 6.2  
 Bottom Packer Depth 3798 Wt. Pipe Run -0- WL 6.0  
 Total Depth 3790 Chlorides 800 ppm System LCM 72#

Blow Description IF: Weak blow, Surface Dead in 21 mins.  
ISI: No blow back  
FF: No blow  
FST: No blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>scm</u>	<u>70</u>			<u>30</u>

Rec Total 5 BHT 102 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1869</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>18:00</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>18:40</u>
(C) First Final Flow <u>18</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:22</u>
(D) Initial Shut-In <u>993</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>00:22</u>
(E) Second Initial Flow <u>19</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>2:15</u>
(F) Second Final Flow <u>19</u>	<input checked="" type="checkbox"/> Mileage <u>76x2 = 152 x 1.55 = 235.60</u>	Comments _____
(G) Final Shut-In <u>887</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1772</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>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1710.60</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1710.60</u>	

Approved By \_\_\_\_\_ Our Representative Chuck Schmitz

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.



Well Name & No. Jones 'B' #1-9 Test No. 2 Date 12-29-2013  
 Company Murfin Drilling Co. Elevation 3263 KB 3260 GL  
 Address 250 N. Water Ste. 300 Wichita Ks. 67202  
 Co. Rep / Geo. Chuck Schmitz Rig Murfin #25  
 Location: Sec. 9 Twp. 15 Rge. 37W Co. Cheyenne State Ks

Interval Tested 4164 4289 Zone Tested LKC-A-D  
 Anchor Length 125 Drill Pipe Run 4164 Mud Wt. 8.3  
 Top Packer Depth 4159 Drill Collars Run -0- Vis 65  
 Bottom Packer Depth 4164 Wt. Pipe Run -0- WL 11.2  
 Total Depth 4289 Chlorides 600 ppm System LCM 8#

Blow Description IF: Weak surface blow, Built to 3/4 in. over 7 mins. started to die. Dead in 25 mins.  
FSI: No blow back over 60 mins.

FF: Weak blow, surface Dead in 10 secs.

FSI: No blow back over 60 mins.

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 127 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm  
 (A) Initial Hydrostatic 2193  Test 1250 T-On Location 12:30  
 (B) First Initial Flow 21  Jars 250 T-Started 13:20  
 (C) First Final Flow 25  Safety Joint 75 T-Open 15:09  
 (D) Initial Shut-In 863  Circ Sub \_\_\_\_\_ T-Pulled 18:13  
 (E) Second Initial Flow 24  Hourly Standby \_\_\_\_\_ T-Out 19:58  
 (F) Second Final Flow 27  Mileage 76x2=152x1.55=235.60 Comments stayed in Benktman Apt.  
 (G) Final Shut-In 816  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2031  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 366.67  
 Final Flow 30  Day Standby 1 day 11 hrs. Total 2177.27  
 Final Shut-In 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.60

Approved By \_\_\_\_\_ Our Representative Chuck Schmitz  
 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.  
785-259-3186



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **55936**

Well Name & No. Jones 'B' #1-9 Test No. 3 Date 12-30-2013  
 Company Murfin Drilling Co. Elevation 3263 KB 3250 GL  
 Address 250 N. Water Ste. 300 Wichita KS 67202  
 Co. Rep / Geo. Chuck Schmitz Rig Murfin #25  
 Location: Sec. 9 Twp. 1S Rge. 37W Co. Cheyenne State Ks.

Interval Tested 4302 4400 Zone Tested None  
 Anchor Length 98 Drill Pipe Run 4299 Mud Wt. 9.3  
 Top Packer Depth 4297 Drill Collars Run -0- Vis 67  
 Bottom Packer Depth 4302 Wt. Pipe Run -0- WL 6.6  
 Total Depth 4400 Chlorides 700 ppm System LCM 6#

Blow Description IF: Weak blow, Built to 1 in. over 30 mins.  
IS: No blow back over 60 mins.  
FF: Weak blow surface dead in 3 mins.  
FSS: No blow back over 60 mins.

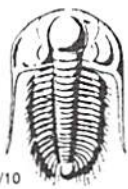
Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>ocm</u>		<u>95</u>		<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 25 BHT 130.5 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2220</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>9:30</u>
(B) First Initial Flow <u>19</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:43</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>12:36</u>
(D) Initial Shut-In <u>1327</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>15:35</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>17:34</u>
(F) Second Final Flow <u>30</u>	<input checked="" type="checkbox"/> Mileage <u>76 x 2 = 152 x 1.15 = \$235.60</u>	Comments <u>Stayed in Bartles Apt.</u>
(G) Final Shut-In <u>1306</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2163</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input checked="" type="checkbox"/> Ruined Packer <u>320</u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>2130.60</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1810.60</u>	

Approved By \_\_\_\_\_ Our Representative Chuck Schmitz

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **55937**

Well Name & No. Jones 'B' #1-a Test No. 4 Date 12-31-2013  
 Company Murfin Drilling Co. Elevation 3263 KB 3250 GL  
 Address 250 N. Water Ste 300 Wichita KS 67202  
 Co. Rep / Geo. Chuck Schmitz Rig Murfin #25  
 Location: Sec. 9 Twp. 1S Rge. 37W Co. Cheyenne State Ks

Interval Tested 4380 4480 Zone Tested LKC-0  
 Anchor Length 60 Drill Pipe Run 4322 Mud Wt. 9.3  
 Top Packer Depth 4335 Drill Collars Run -0- Vis 67  
 Bottom Packer Depth 4340 Wt. Pipe Run -0- WL 6.6  
 Total Depth 4400 Chlorides 700 ppm System LCM 6#

Blow Description IF: weak blow built to 3/4 in. over 30 mins.

ISF: No blow back

FF: Weak blow died in 15 mins.

FSF: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>7</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 7 BHT 128.2 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2279  Test 1250 T-On Location 1:55  
 (B) First Initial Flow 18  Jars 250 T-Started 2:45  
 (C) First Final Flow 21  Safety Joint 75 T-Open 4:56  
 (D) Initial Shut-In 397  Circ Sub \_\_\_\_\_ T-Pulled 8:30  
 (E) Second Initial Flow 19  Hourly Standby \_\_\_\_\_ T-Out 10:02  
 (F) Second Final Flow 19  Mileage 76 x 2 = 152 x 1.55 = 235.00 Comments \_\_\_\_\_  
 (G) Final Shut-In 123  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2197  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 30  Day Standby \_\_\_\_\_ Total 1810.60  
 Final Shut-In 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.60

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

Our Representative Chuck Schmitz

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **55938**

4/10

Well Name & No. Jones 'B' #1-a Test No. 5 Date 1-1-14  
 Company Murfin Drilling Co. Elevation 3263 KB 3250 GL  
 Address 250 N. Water Ste. 300 Wichita Ks. 67202  
 Co. Rep / Geo. Chuck Schmitz Rig Murfin #25  
 Location: Sec. a Twp. 1S Rge. 37W Co. Cherokee State KS

Interval Tested 4590 4633 Zone Tested Cherok  
 Anchor Length 43 Drill Pipe Run 4582 Mud Wt. 9.4  
 Top Packer Depth 4585 Drill Collars Run -0- Vis 56  
 Bottom Packer Depth 4590 Wt. Pipe Run -0- WL 6.8  
 Total Depth 4633 Chlorides 700 ppm System LCM 6#

Blow Description IF: Strong blow, Built to B.O.B in 6mins.  
ISI: Bled off, Blow back after 1min. Built to 2 1/2 in 30. Started to die. Dead in 50mins.  
FF Strong blow, Built to B.O.B in 10mins.  
FSI: Bled off, Blow back after 1min. Built to B.O.B in 28mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>1034 ft gas in pipe</u>				
<u>30</u>	<u>go #</u>	<u>15</u>	<u>85</u>		
<u>282</u>	<u>go</u>	<u>25</u>	<u>75</u>		
<u>94</u>	<u>go cm</u>	<u>15</u>	<u>25</u>		<u>60</u>

Rec Total 406 BHT 145.1 Gravity 38 API RW @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2331  Test 1250 T-On Location 2:55  
 (B) First Initial Flow 33  Jars 250 T-Started 4:05  
 (C) First Final Flow 83  Safety Joint 75 T-Open 6:04  
 (D) Initial Shut-In 986  Circ Sub \_\_\_\_\_ T-Pulled 10:10  
 (E) Second Initial Flow 90  Hourly Standby \_\_\_\_\_ T-Out 12:43  
 (F) Second Final Flow 168  Mileage 76x2 = 152x1.55 = 235 Comments Loaded tools at 2:00pm  
 (G) Final Shut-In 930  Sampler \_\_\_\_\_ on Jan. 1 not released till 12:00  
 (H) Final Hydrostatic 2258  Straddle \_\_\_\_\_ pm on Jan 2

Ruined Shale Packer \_\_\_\_\_  Ruined Packer 320

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_

Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0

Final Flow 60  Day Standby \_\_\_\_\_ Total 2130.60

Final Shut-In 90  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Sub Total 1810.60

Approved By \_\_\_\_\_ Our Representative Chuck Schmitz

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.