



## DRILL STEM TEST REPORT

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

250 N. Water, Ste 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Pancirni #1-SWD**

#### **7-2s-36w Rawlins,KS**

Start Date: 2015.01.13 @ 23:51:00

End Date: 2015.01.14 @ 08:01:30

Job Ticket #: 61080                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.19 @ 15:53:06



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61080

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2015.01.13 @ 23:51:00

## GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:46:30

Time Test Ended: 08:01:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 54

**Interval: 4130.00 ft (KB) To 4201.00 ft (KB) (TVD)**

Reference Elevations: 3322.00 ft (KB)

Total Depth: 4201.00 ft (KB) (TVD)

3311.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6753 Outside**

Press@RunDepth: 66.70 psig @ 4131.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.13

End Date:

2015.01.14

Last Calib.: 2015.01.14

Start Time: 23:51:05

End Time:

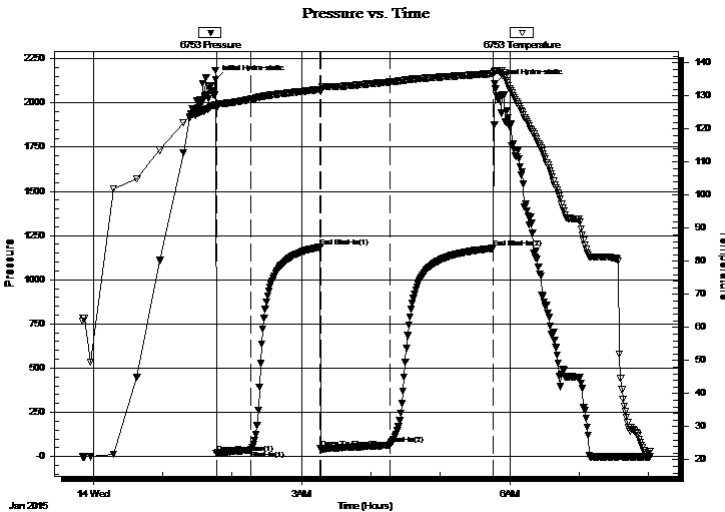
08:01:29

Time On Btm: 2015.01.14 @ 01:46:15

Time Off Btm: 2015.01.14 @ 05:47:00

**TEST COMMENT:** 30 - IF - Surface blow built to 3 1/2"  
60 - ISI - No Return  
60 - FF - Surface blow built to 2 1/2"  
90 - FSI - No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2132.25	127.40	Initial Hydro-static
1	17.79	126.09	Open To Flow (1)
30	37.08	129.02	Shut-In(1)
90	1185.47	132.00	End Shut-In(1)
91	44.25	131.34	Open To Flow (2)
151	66.70	134.22	Shut-In(2)
240	1178.40	136.78	End Shut-In(2)
241	2110.57	137.49	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	OCM - 50M - 50o	0.31
20.00	Free Oil - 100o	0.10

## Gas Rates

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



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Murfin Drilling Co., Inc.

7-2s-36w Rawlins,KS

250 N. Water, Ste 300  
Wichita KS 67202

Pancirni #1-SWD

Job Ticket: 61080

DST#: 1

ATTN: Saman Sharifaie

Test Start: 2015.01.13 @ 23:51:00

## GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:46:30

Time Test Ended: 08:01:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 54

Interval: **4130.00 ft (KB) To 4201.00 ft (KB) (TVD)**

Total Depth: 4201.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3322.00 ft (KB)

3311.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8368** Inside

Press@RunDepth: psig @ 4131.00 ft (KB)

Start Date: 2015.01.13

End Date: 2015.01.14

Capacity: 8000.00 psig

Last Calib.: 2015.01.14

Start Time: 23:51:05

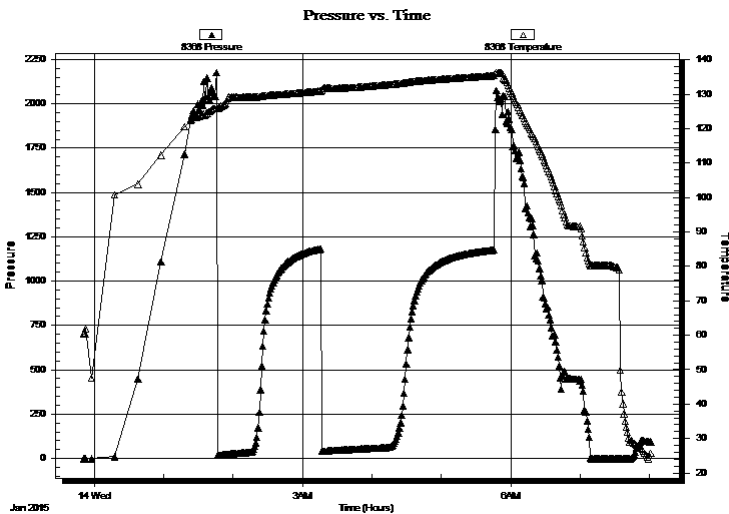
End Time: 08:01:29

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF - Surface blow built to 3 1/2"  
60 - ISI - No Return  
60 - FF - Surface blow built to 2 1/2"  
90 - FSI - No Return

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	OCM - 50M - 50o	0.31
20.00	Free Oil - 100o	0.10

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61080

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2015.01.13 @ 23:51:00

## Tool Information

Drill Pipe:	Length: 3913.26 ft	Diameter: 3.80 inches	Volume: 54.89 bbl	Tool Weight: 2500.00 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: 205.92 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 55.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.18 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4130.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	98.00 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			4108.00	
Hydraulic tool	5.00			4113.00	
Jars	5.00			4118.00	
Safety Joint	3.00			4121.00	
Packer	4.00			4125.00	27.00 Bottom Of Top Packer
Packer	5.00			4130.00	
Stubb	1.00			4131.00	
Recorder	0.00	8368	Inside	4131.00	
Recorder	0.00	6753	Outside	4131.00	
Perforations	33.00			4164.00	
Change Over Sub	1.00			4165.00	
Drill Pipe	31.00			4196.00	
Change Over Sub	1.00			4197.00	
Bullnose	4.00			4201.00	71.00 Bottom Packers & Anchor

**Total Tool Length: 98.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61080

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2015.01.13 @ 23:51:00

## 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:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	OCM - 50M - 50o	0.310
20.00	Free Oil - 100o	0.098

Total Length: 83.00 ft

Total Volume: 0.408 bbl

Num Fluid Samples: 0

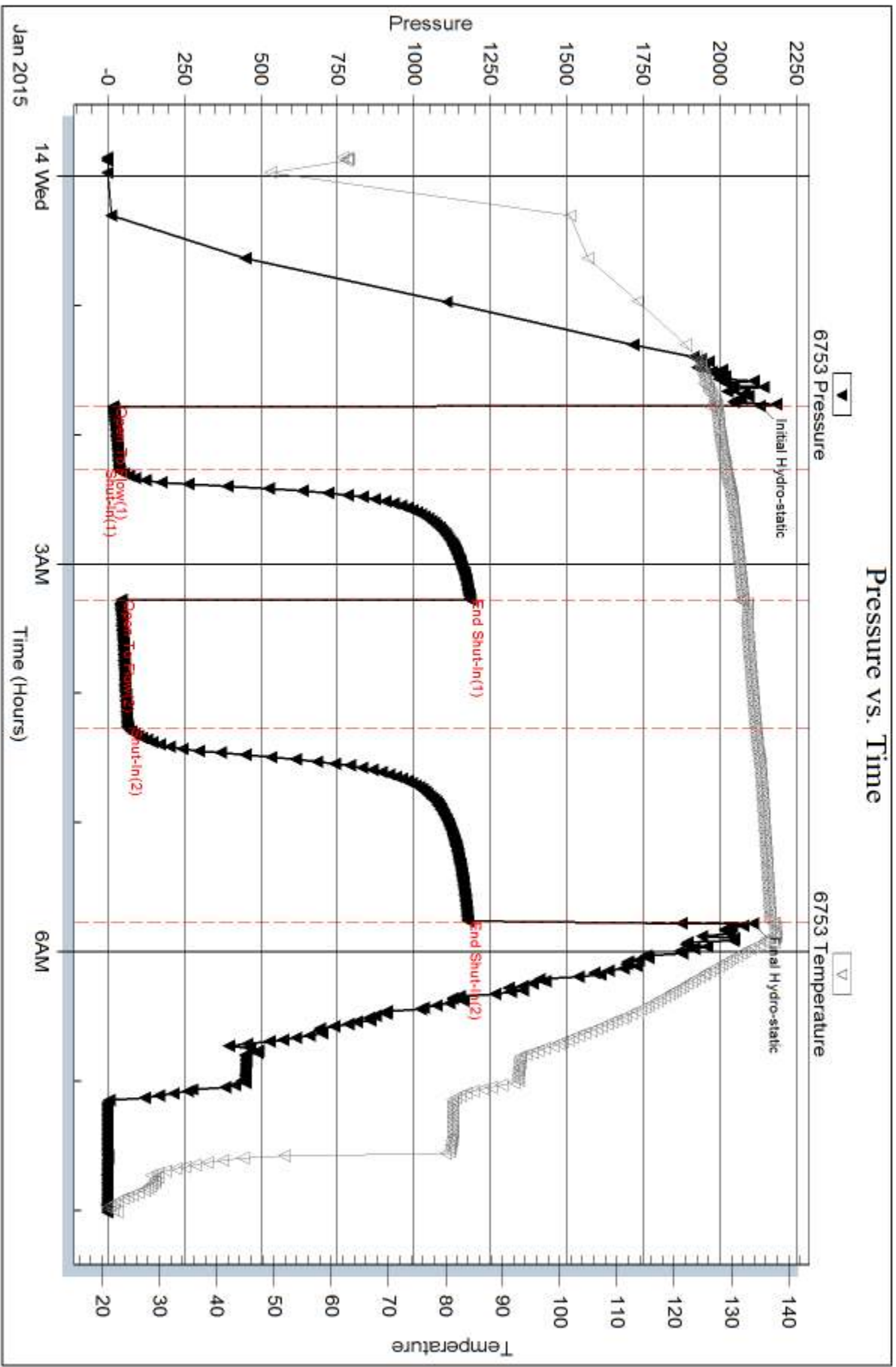
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



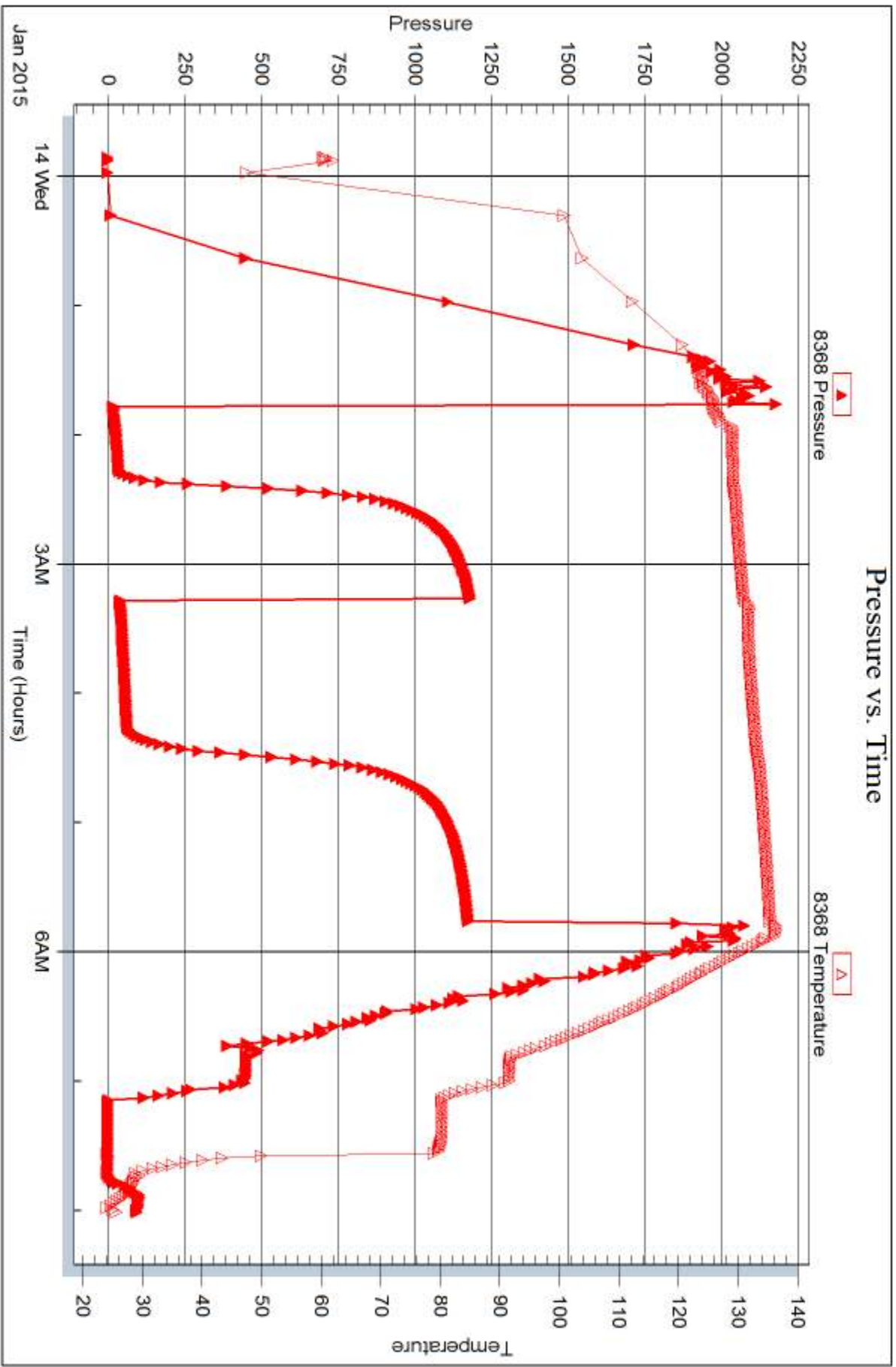
Serial #: 8368

Inside

Murfin Drilling Co., Inc.

Pancini #1-SWD

DST Test Number: 1





## DRILL STEM TEST REPORT

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

250 N. Water, Ste 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Pancirni #1-SWD**

#### **7-2s-36w Rawlins,KS**

Start Date: 2015.01.14 @ 16:47:00

End Date: 2015.01.14 @ 23:43:45

Job Ticket #: 61081                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.19 @ 15:52:41





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61081

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2015.01.14 @ 16:47:00

## GENERAL INFORMATION:

Formation: **LKC 'A'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:49:15

Time Test Ended: 23:43:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: #54

**Interval: 4201.00 ft (KB) To 4280.00 ft (KB) (TVD)**

Reference Elevations: 3322.00 ft (KB)

Total Depth: 4280.00 ft (KB) (TVD)

3311.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6753 Outside**

Press@RunDepth: 22.32 psig @ 4202.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.14

End Date:

2015.01.14

Last Calib.:

2015.01.14

Start Time: 16:47:05

End Time:

23:43:44

Time On Btm:

2015.01.14 @ 18:48:45

Time Off Btm:

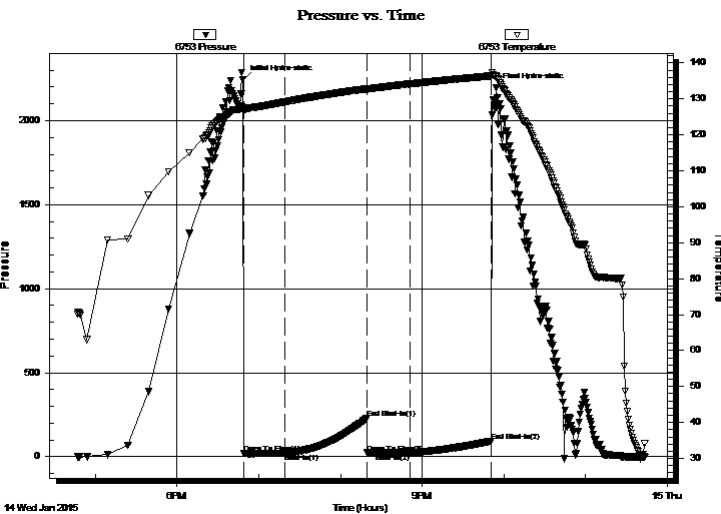
2015.01.14 @ 21:54:30

**TEST COMMENT:** 30 - IF - Surface blow built to 3/4"

60 - ISI - No Return

30 - FF - No Surface blow

60 - FSI - No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2246.99	127.32	Initial Hydro-static
1	18.85	126.39	Open To Flow (1)
31	20.23	129.16	Shut-In(1)
91	227.54	132.78	End Shut-In(1)
91	22.77	132.63	Open To Flow (2)
122	22.32	134.15	Shut-In(2)
182	93.27	136.38	End Shut-In(2)
186	2198.85	136.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM - 100M - Oil Spots	0.02

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61081

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2015.01.14 @ 16:47:00

## Tool Information

Drill Pipe:	Length: 3975.53 ft	Diameter: 3.80 inches	Volume: 55.77 bbl	Tool Weight: 2500.00 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: 205.92 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.45 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4201.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.00 ft			
Tool Length:	106.00 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			4179.00	
Hydraulic tool	5.00			4184.00	
Jars	5.00			4189.00	
Safety Joint	3.00			4192.00	
Packer	4.00			4196.00	27.00 Bottom Of Top Packer
Packer	5.00			4201.00	
Stubb	1.00			4202.00	
Recorder	0.00	8368	Inside	4202.00	
Recorder	0.00	6753	Outside	4202.00	
Perforations	9.00			4211.00	
Change Over Sub	1.00			4212.00	
Drill Pipe	63.00			4275.00	
Change Over Sub	1.00			4276.00	
Bullnose	4.00			4280.00	79.00 Bottom Packers & Anchor

**Total Tool Length: 106.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61081

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2015.01.14 @ 16:47:00

## 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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM - 100M - Oil Spots	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

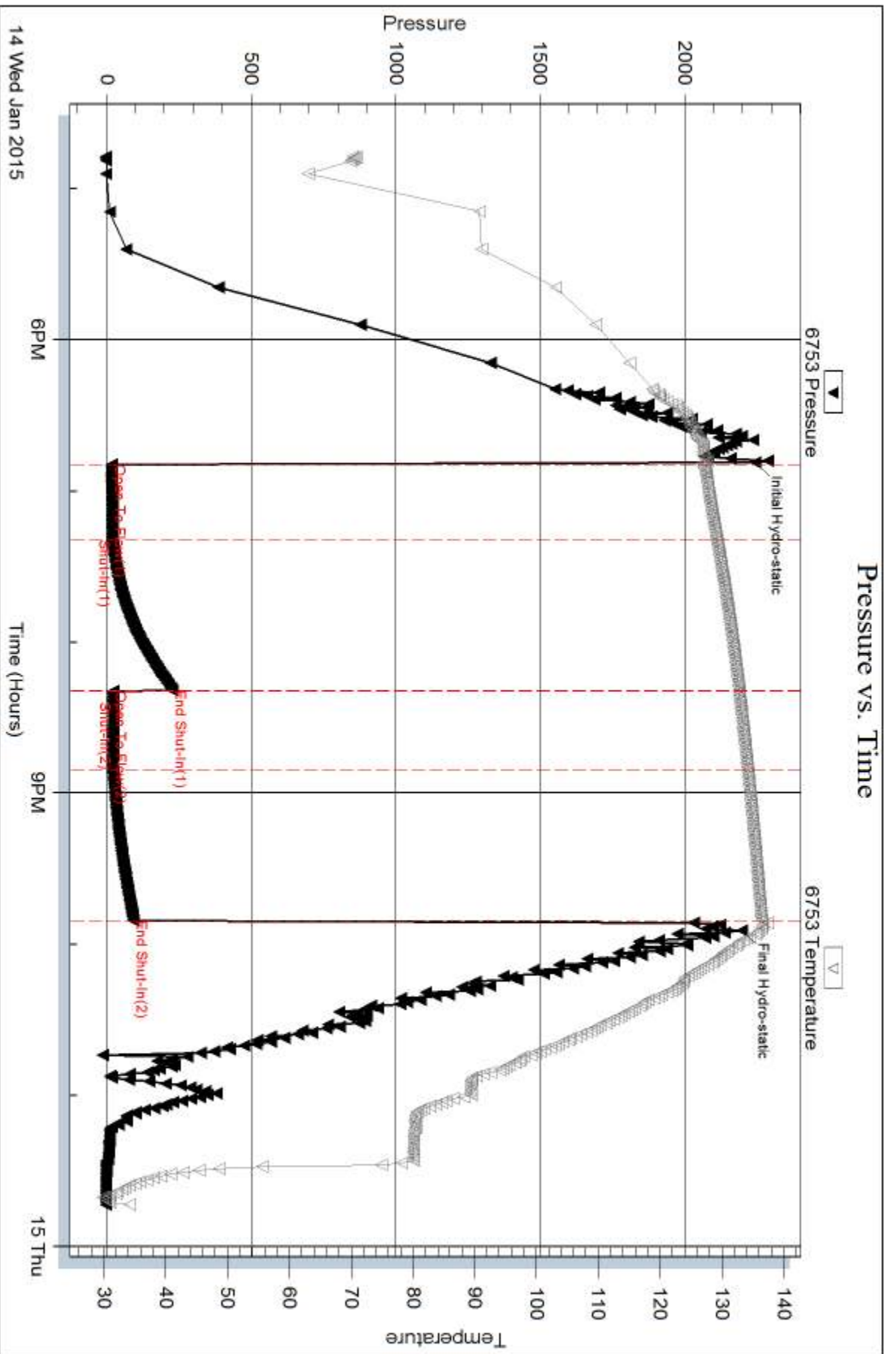
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



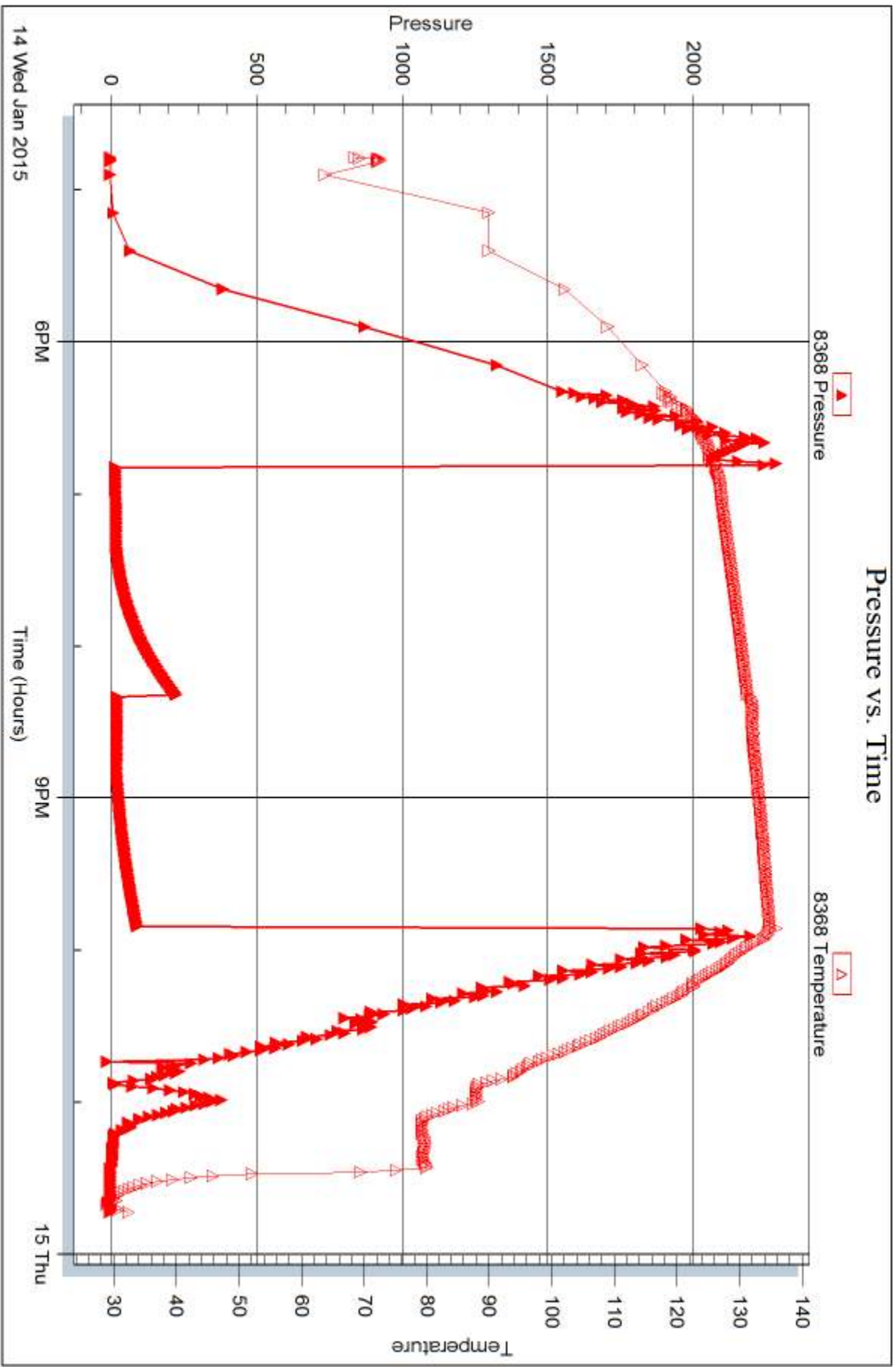
Serial #: 8368

Inside

Murfin Drilling Co., Inc.

Pancini #1-SWD

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 61081

Printed: 2015.01.19 @ 15:52:42



## DRILL STEM TEST REPORT

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

250 N. Water, Ste 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Pancirni #1-SWD**

### **7-2s-36w Rawlins,KS**

Start Date: 2015.01.15 @ 08:25:00

End Date: 2015.01.15 @ 16:52:30

Job Ticket #: 61082                      DST #: 3

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.19 @ 15:52:07



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61082

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2015.01.15 @ 08:25:00

## GENERAL INFORMATION:

Formation: **LKC 'B & D'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:03:45

Time Test Ended: 16:52:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 54

**Interval: 4278.00 ft (KB) To 4330.00 ft (KB) (TVD)**

Reference Elevations: 3322.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

3311.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6753 Outside**

Press@RunDepth: 888.88 psig @ 4279.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.15

End Date:

2015.01.15

Last Calib.:

2015.01.15

Start Time: 08:25:05

End Time:

16:52:29

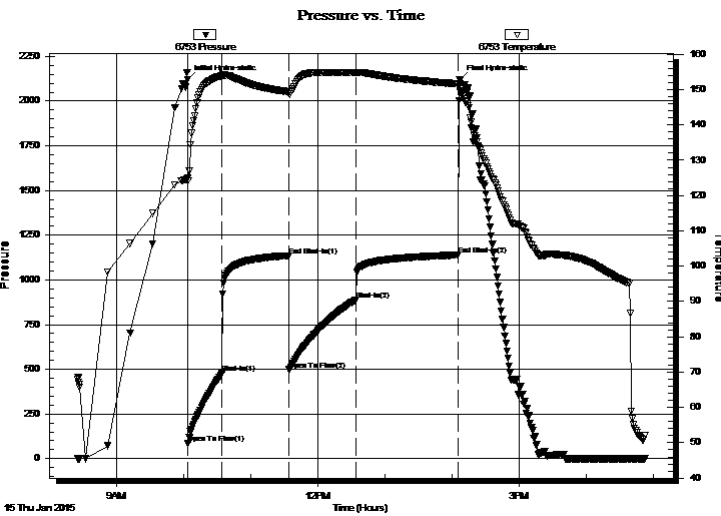
Time On Btm:

2015.01.15 @ 10:03:30

Time Off Btm:

2015.01.15 @ 14:06:30

**TEST COMMENT:** 30 - IF - Bottom of the bucket in 2 mins.  
60 - ISI - No Return  
60 - FF - Bottom of the bucket in 3 mins.  
90 - FSI - No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2121.91	124.91	Initial Hydro-static
1	86.23	124.12	Open To Flow (1)
31	478.29	153.85	Shut-In(1)
91	1133.12	149.34	End Shut-In(1)
91	496.90	148.92	Open To Flow (2)
151	888.88	154.76	Shut-In(2)
242	1139.33	151.63	End Shut-In(2)
243	2118.25	150.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
630.00	OSMW - 95W - 5M - Oil Spots	6.96
630.00	OSMW - 90W - 10M - Oil Spots	8.84
630.00	OSWM - 80M - 20W - Oil Spots	8.84

## Gas Rates

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





**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61082

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2015.01.15 @ 08:25:00

### GENERAL INFORMATION:

Formation: **LKC 'B & D'**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:03:45  
 Time Test Ended: 16:52:30  
 Interval: **4278.00 ft (KB) To 4330.00 ft (KB) (TVD)**  
 Total Depth: 4330.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Royal Fisher  
 Unit No: 54  
 Reference Elevations: 3322.00 ft (KB)  
 3311.00 ft (CF)  
 KB to GR/CF: 11.00 ft

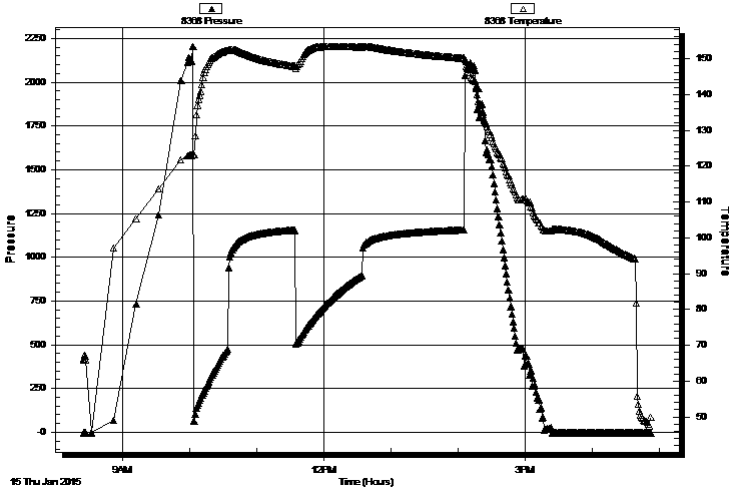
### Serial #: 8368

Inside

Press@RunDepth: psig @ 4279.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.15 End Date: 2015.01.15 Last Calib.: 2015.01.15  
 Start Time: 08:25:05 End Time: 16:52:29 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 30 - IF - Bottom of the bucket in 2 mins.  
 60 - ISI - No Return  
 60 - FF - Bottom of the bucket in 3 mins.  
 90 - FSI - No Return

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
630.00	OSMW - 95W - 5M - Oil Spots	6.96
630.00	OSMW - 90W - 10M - Oil Spots	8.84
630.00	OSWM - 80M - 20W - Oil Spots	8.84

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61082

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2015.01.15 @ 08:25:00

## Tool Information

Drill Pipe:	Length: 4071.08 ft	Diameter: 3.80 inches	Volume: 57.11 bbl	Tool Weight: 2500.00 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: 205.92 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 58.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4278.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	79.00 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			4256.00	
Hydraulic tool	5.00			4261.00	
Jars	5.00			4266.00	
Safety Joint	3.00			4269.00	
Packer	4.00			4273.00	27.00 Bottom Of Top Packer
Packer	5.00			4278.00	
Stubb	1.00			4279.00	
Recorder	0.00	8368	Inside	4279.00	
Recorder	0.00	6753	Outside	4279.00	
Perforations	14.00			4293.00	
Change Over Sub	1.00			4294.00	
Drill Pipe	31.00			4325.00	
Change Over Sub	1.00			4326.00	
Bullnose	4.00			4330.00	52.00 Bottom Packers & Anchor

**Total Tool Length: 79.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61082

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2015.01.15 @ 08:25:00

## 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:

36000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
630.00	OSMW - 95W - 5M - Oil Spots	6.961
630.00	OSMW - 90W - 10M - Oil Spots	8.837
630.00	OSWM - 80M - 20W - Oil Spots	8.837

Total Length: 1890.00 ft      Total Volume: 24.635 bbl

Num Fluid Samples: 0

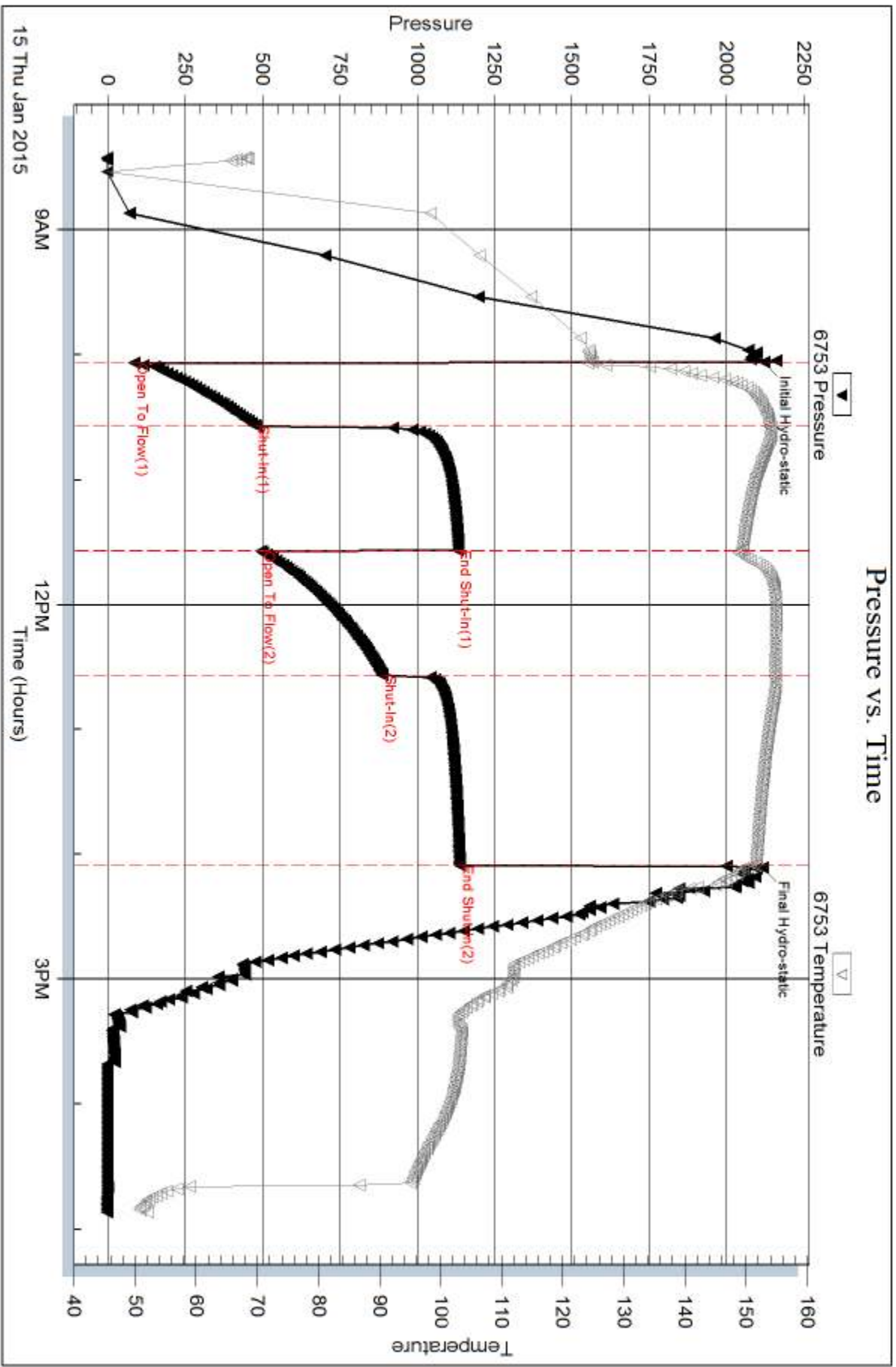
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



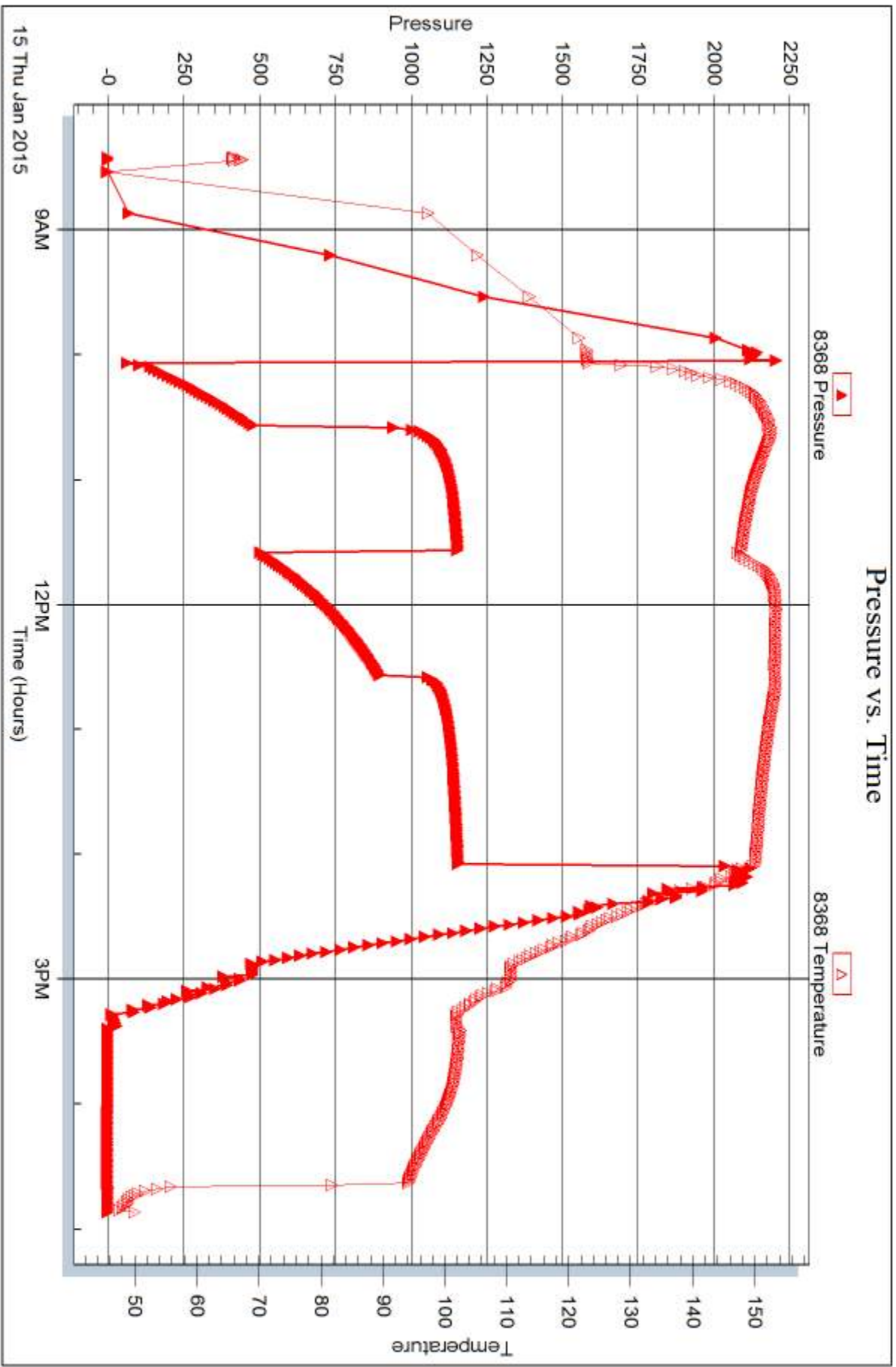
Serial #: 8368

Inside

Murfin Drilling Co., Inc.

Pancini #1-SWD

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 61082

Printed: 2015.01.19 @ 15:52:08



## DRILL STEM TEST REPORT

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

250 N. Water, Ste 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Pancirni #1-SWD**

#### **7-2s-36w Rawlins,KS**

Start Date: 2015.01.16 @ 08:58:00

End Date: 2015.01.16 @ 17:09:30

Job Ticket #: 61083                      DST #: 4

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.19 @ 15:51:26



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61083

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2015.01.16 @ 08:58:00

## GENERAL INFORMATION:

Formation: **LKC 'G-J'**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:55:45  
 Time Test Ended: 17:09:30  
 Interval: **4345.00 ft (KB) To 4480.00 ft (KB) (TVD)**  
 Total Depth: 4480.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Royal Fisher  
 Unit No: #54  
 Reference Elevations: 3322.00 ft (KB)  
 3311.00 ft (CF)  
 KB to GR/CF: 11.00 ft

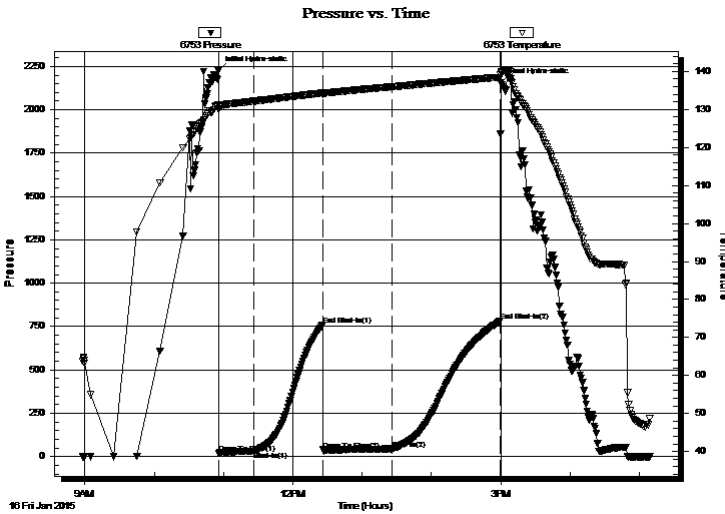
## Serial #: 6753

**Outside**

Press@RunDepth: 45.01 psig @ 4346.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.16 End Date: 2015.01.16 Last Calib.: 2015.01.16  
 Start Time: 08:58:05 End Time: 17:09:29 Time On Btm: 2015.01.16 @ 10:55:30  
 Time Off Btm: 2015.01.16 @ 15:00:00

TEST COMMENT: 30 - IF - Surface blow built to 2"  
 60 - ISI - No Return  
 60 - FF - Surface blow built to 2"  
 90 - FSI - No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2227.31	131.27	Initial Hydro-static
1	20.35	129.92	Open To Flow (1)
31	31.10	132.14	Shut-In(1)
91	758.44	134.30	End Shut-In(1)
91	38.50	134.00	Open To Flow (2)
151	45.01	135.95	Shut-In(2)
244	780.36	138.44	End Shut-In(2)
245	2158.73	139.57	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	MCO - 50M - 50o	0.31
5.00	Free Oil - 100o	0.02

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61083

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2015.01.16 @ 08:58:00

## Tool Information

Drill Pipe:	Length: 4134.08 ft	Diameter: 3.80 inches	Volume: 57.99 bbl	Tool Weight: 2500.00 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: 205.92 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 59.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4345.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	135.00 ft			
Tool Length:	162.00 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			4323.00	
Hydraulic tool	5.00			4328.00	
Jars	5.00			4333.00	
Safety Joint	3.00			4336.00	
Packer	4.00			4340.00	27.00 Bottom Of Top Packer
Packer	5.00			4345.00	
Stubb	1.00			4346.00	
Recorder	0.00	8368	Inside	4346.00	
Recorder	0.00	6753	Outside	4346.00	
Perforations	34.00			4380.00	
Change Over Sub	1.00			4381.00	
Drill Pipe	94.00			4475.00	
Change Over Sub	1.00			4476.00	
Bullnose	4.00			4480.00	135.00 Bottom Packers & Anchor

**Total Tool Length: 162.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61083

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2015.01.16 @ 08:58:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	MCO - 50M - 50o	0.310
5.00	Free Oil - 100o	0.025

Total Length: 68.00 ft      Total Volume: 0.335 bbl

Num Fluid Samples: 0

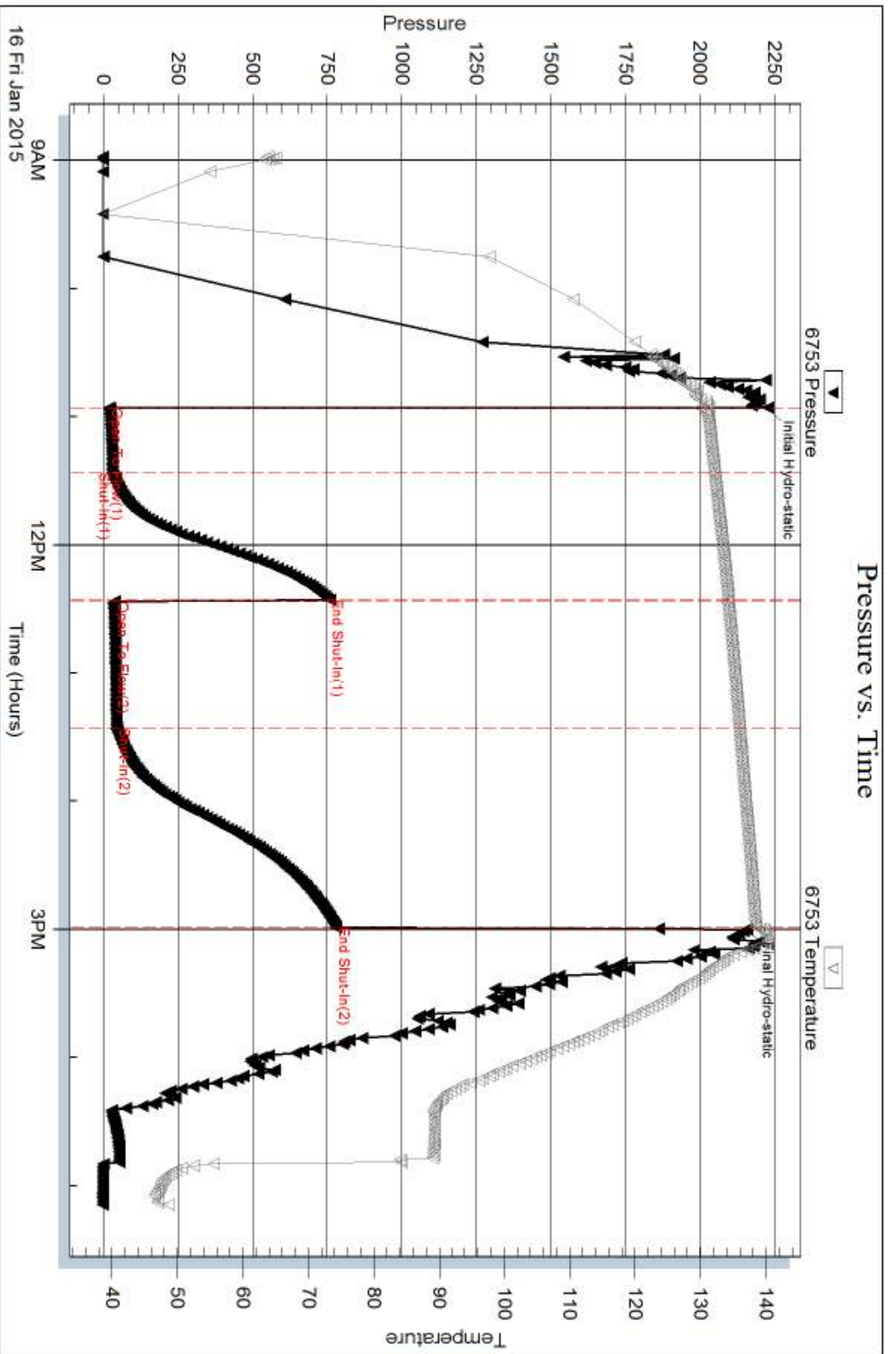
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



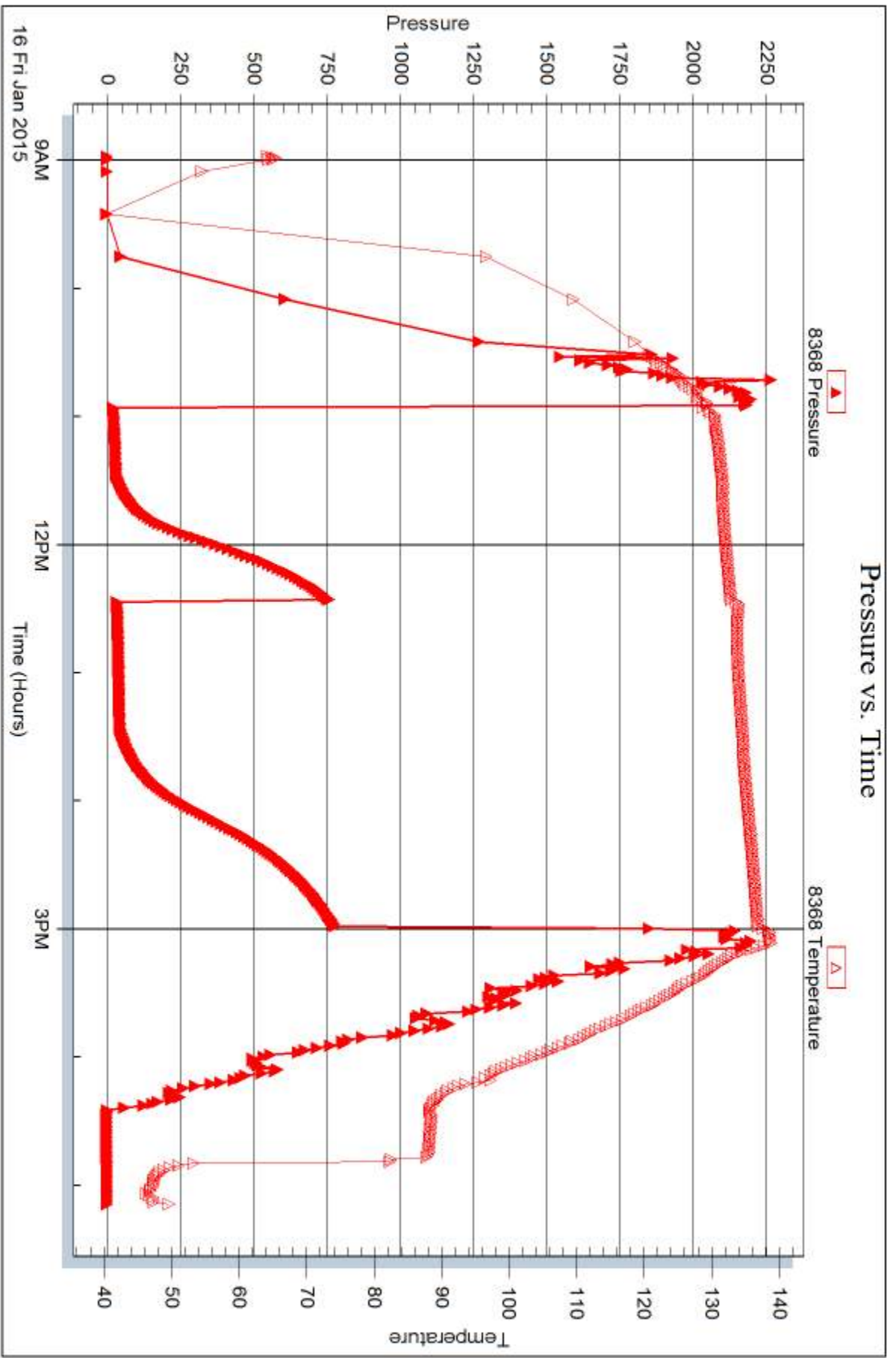
Serial #: 8368

Inside

Murfin Drilling Co., Inc.

Pancini #1-SWD

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 61083

Printed: 2015.01.19 @ 15:51:28



## DRILL STEM TEST REPORT

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

250 N. Water, Ste 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Pancirni #1-SWD**

### **7-2s-36w Rawlins,KS**

Start Date: 2015.01.17 @ 19:57:00

End Date: 2015.01.18 @ 02:49:45

Job Ticket #: 61084                      DST #: 5

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.01.19 @ 15:43:44



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61084

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2015.01.17 @ 19:57:00

## GENERAL INFORMATION:

Formation: **Pawnee - Verdagris**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:58:15

Time Test Ended: 02:49:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: #54

Interval: **4643.00 ft (KB) To 4750.00 ft (KB) (TVD)**

Reference Elevations: 3322.00 ft (KB)

Total Depth: 4750.00 ft (KB) (TVD)

3311.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6753 Outside**

Press@RunDepth: 26.40 psig @ 4635.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.17

End Date:

2015.01.18

Last Calib.:

2015.01.18

Start Time: 19:57:05

End Time:

02:49:44

Time On Btm:

2015.01.17 @ 21:58:00

Time Off Btm:

2015.01.18 @ 00:59:45

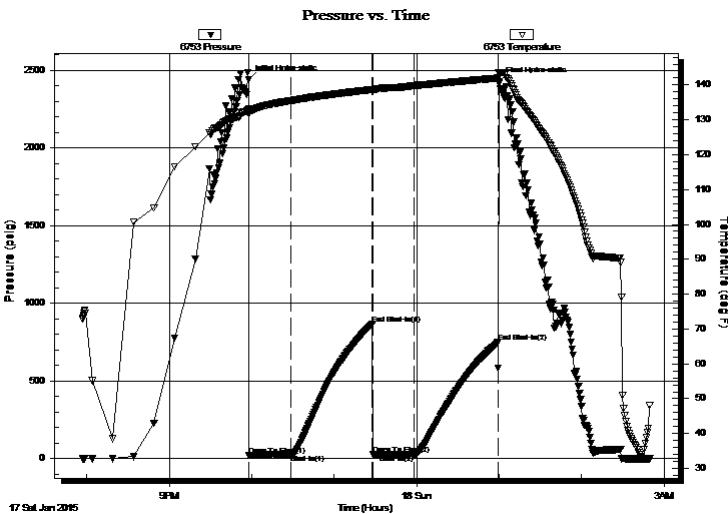
TEST COMMENT: 30 - IF - Surface blow built up to 1 1/4"

60 - ISI - No Return

30 - FF - No Surface blow

60 - FSI - No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2439.46	133.10	Initial Hydro-static
1	20.41	131.75	Open To Flow (1)
31	27.13	135.51	Shut-In(1)
90	865.65	138.68	End Shut-In(1)
90	28.85	138.25	Open To Flow (2)
120	26.40	139.75	Shut-In(2)
181	747.76	141.94	End Shut-In(2)
182	2423.19	143.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud - 100M	0.01

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61084

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2015.01.17 @ 19:57:00

## Tool Information

Drill Pipe:	Length: 4418.43 ft	Diameter: 3.80 inches	Volume: 61.98 bbl	Tool Weight: 2500.00 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: 205.92 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 62.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.35 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4634.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	116.00 ft			
Tool Length:	143.00 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			4612.00	
Hydraulic tool	5.00			4617.00	
Jars	5.00			4622.00	
Safety Joint	3.00			4625.00	
Packer	4.00			4629.00	27.00 Bottom Of Top Packer
Packer	5.00			4634.00	
Stubb	1.00			4635.00	
Recorder	0.00	8368	Inside	4635.00	
Recorder	0.00	6753	Outside	4635.00	
Perforations	15.00			4650.00	
Change Over Sub	1.00			4651.00	
Drill Pipe	94.00			4745.00	
Change Over Sub	1.00			4746.00	
Bullnose	4.00			4750.00	116.00 Bottom Packers & Anchor

**Total Tool Length: 143.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co., Inc.

**7-2s-36w Rawlins,KS**

250 N. Water, Ste 300  
Wichita KS 67202

**Pancirni #1-SWD**

Job Ticket: 61084

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2015.01.17 @ 19:57:00

### 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: 5.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud - 100M	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

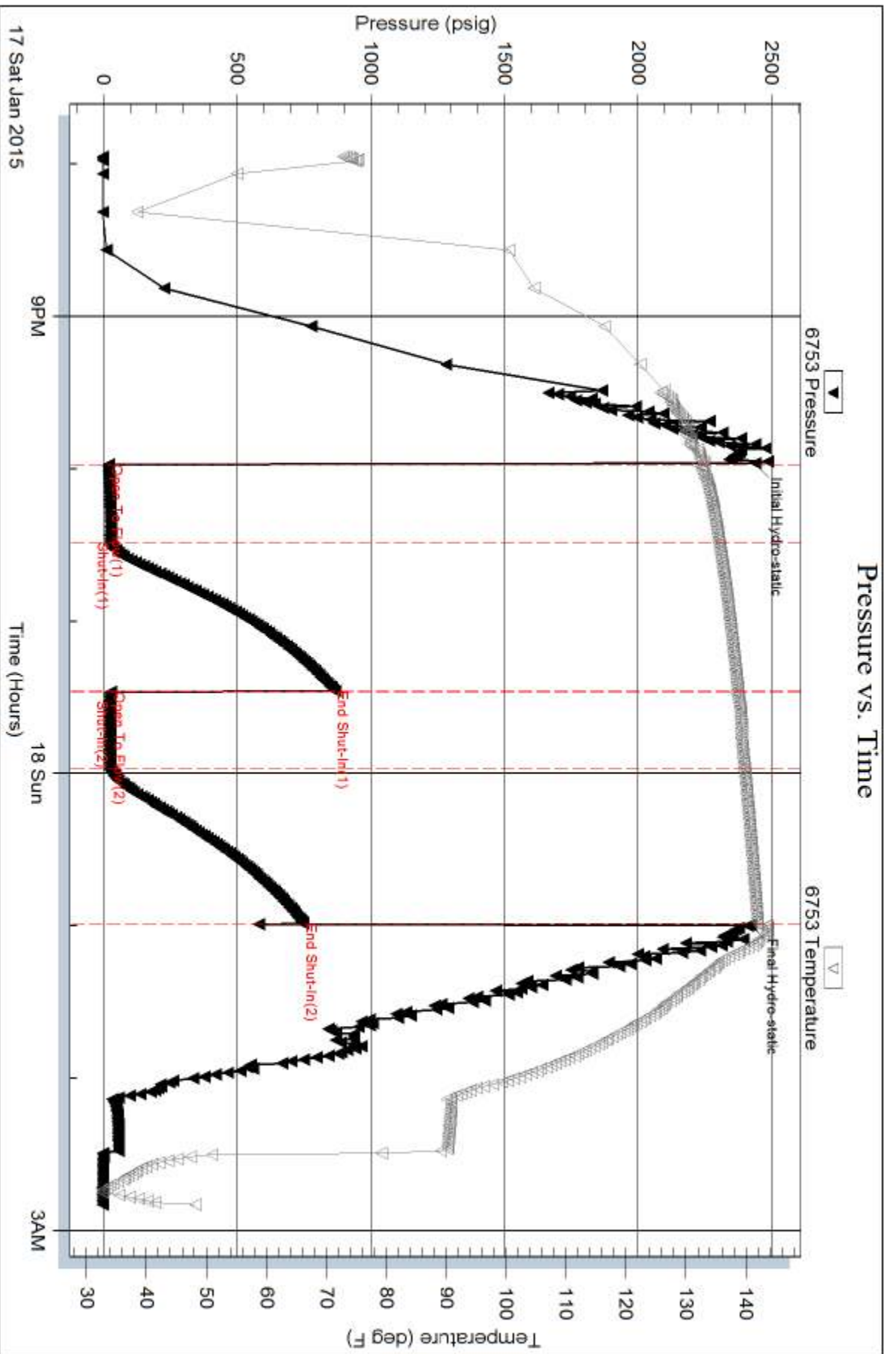
Recovery Comments:

Serial #: 6753

Outside Marfin Drilling Co., Inc.

Pancini #1-SWD

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 61084

Printed: 2015.01.19 @ 15:43:46

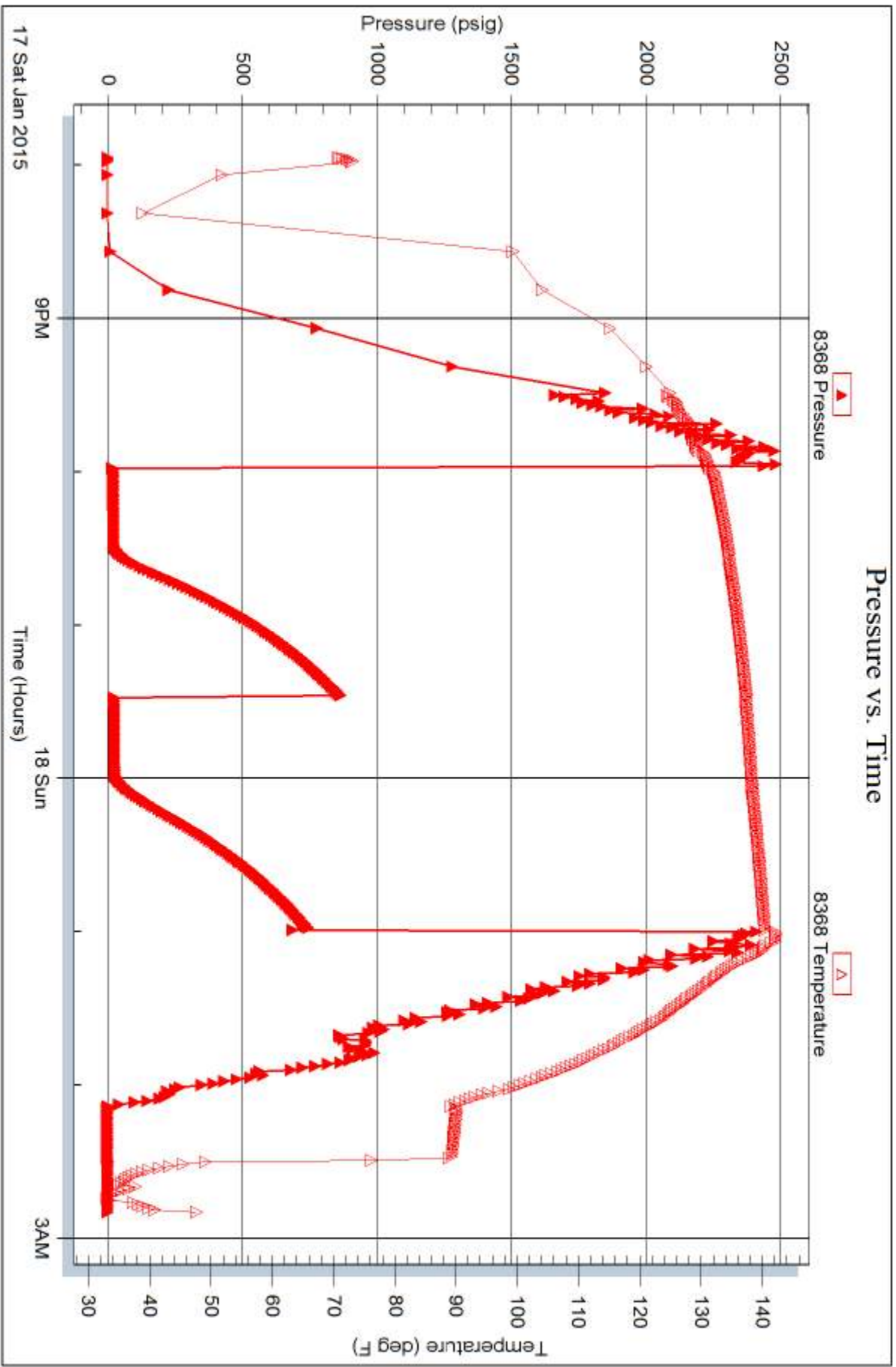
Serial #: 8368

Inside

Murfin Drilling Co., Inc.

Pancini #1-SWD

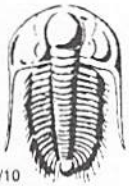
DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 61084

Printed: 2015.01.19 @ 15:43:46



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61080

Well Name & No. Pancinni #1-SWD Test No. 1 Date 1-13-15  
 Company Murfin Drilling Co. Inc., Elevation 3322 KB 3311 GL  
 Address 250 N. Water, Ste 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Sharifaire Rig Murfin #2  
 Location: Sec. 7 Twp. 2S Rge. 36 W Co. Rawlins State KS

Interval Tested 4130 - 4201 Zone Tested Oread  
 Anchor Length 71' Drill Pipe Run 3913.26' Mud Wt. 9.2  
 Top Packer Depth 4125 Drill Collars Run 205.92 Vis 53  
 Bottom Packer Depth 4130 Wt. Pipe Run 0 WL 6.0  
 Total Depth 4201 Chlorides 1400 ppm System LCM 5#

Blow Description IF-Surface blow built to 3 1/2"  
ISI-No Return  
FF-Surface blow built to 2 1/2"  
FSI-No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>20'</u>	<u>Free Oil</u>	<u>100</u>			
<u>63'</u>	<u>OCM</u>	<u>50</u>		<u>50</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

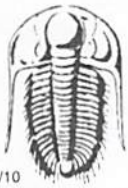
Rec Total 83' BHT 136°F Gravity 31 @ 60°F API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2132  Test 1150 T-On Location 10:15pm  
 (B) First Initial Flow 17  Jars 250 T-Started 11:51pm  
 (C) First Final Flow 37  Safety Joint 75 T-Open 1:46am  
 (D) Initial Shut-In 1185  Circ Sub N/C T-Pulled 5:46am  
 (E) Second Initial Flow 44  Hourly Standby T-Out 8:02am  
 (F) Second Final Flow 66  Mileage 108 R/T 108 Comments \_\_\_\_\_  
 (G) Final Shut-In 1178  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2110  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1583

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90  
 Sub Total 0  
 Total 1583  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative [Signature]

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61081

Well Name & No. Pancirni #1-SWD Test No. 2 Date 1-14-15  
 Company Murfin Drilling Co., Inc. Elevation 3322 KB 3311 GL  
 Address 250 N. Water, Ste. 300 Wichita Ks 67202  
 Co. Rep / Geo. Saman Sharifaie Rig Murfin #2  
 Location: Sec. 7 Twp. 25 Rge. 36W Co. Rawlins State Ks

Interval Tested 4201-4280 Zone Tested Lans. 'A'  
 Anchor Length 79' Drill Pipe Run 3975.53' Mud Wt. 9.4  
 Top Packer Depth 4196 Drill Collars Run 205.92' Vis 51  
 Bottom Packer Depth 4201 Wt. Pipe Run 0 WL 6.8  
 Total Depth 4280 Chlorides 1700 ppm System LCM 4#  
 Blow Description IF - Surface blow built to 3/4"  
ISI - No Return  
FF - No Surface blow  
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>asm</u>	<u>spots</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 5' BHT 136°F Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2246</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>4:16pm</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>4:47pm</u>
(C) First Final Flow <u>20</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>6:49pm</u>
(D) Initial Shut-In <u>227</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>9:49pm</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>11:44pm</u>
(F) Second Final Flow <u>22</u>	<input checked="" type="checkbox"/> Mileage <u>108 R/T</u> <sup>108</sup>	Comments _____
(G) Final Shut-In <u>93</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2198</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
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>1583</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1583</u>	

Approved By \_\_\_\_\_ Our Representative [Signature]

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **61082**

Well Name & No. Pancini #1-SWD Test No. 3 Date 1-15-15  
 Company Murkin Drilling Co., Inc. Elevation 3322 KB 3311 GL  
 Address 250 N. Water, Ste 300 Wichita Ks 67202  
 Co. Rep / Geo. Saman Sharifaie Rig Murkin #2  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State Ks

Interval Tested 4278-4330 Zone Tested Lans. - B4D'  
 Anchor Length 52' Drill Pipe Run 4071.08' Mud Wt. 9.4  
 Top Packer Depth 4273 Drill Collars Run 205.92' Vis 51  
 Bottom Packer Depth 4278 Wt. Pipe Run Ø WL 6.8  
 Total Depth 4330 Chlorides 1700 ppm System LCM 4#  
 Blow Description IF- Bottom of the bucket in 2 mins  
ISI- No Return  
FF- Bottom of the bucket in 3 mins.  
FST- No Return

Rec	Feet of	%gas	spots	%oil	%water	%mud
<u>630'</u>	<u>OS WM</u>			<u>20</u>	<u>80</u>	
<u>630'</u>	<u>OS MW</u>			<u>90</u>	<u>10</u>	
<u>630'</u>	<u>OS MW</u>			<u>95</u>	<u>5</u>	
Rec	Feet of	%gas		%oil	%water	%mud
Rec	Feet of	%gas		%oil	%water	%mud

Rec Total 1890' BHT 151°F Gravity \_\_\_\_\_ API RW .268 @ 54° F Chlorides 36,000 ppm

(A) Initial Hydrostatic <u>2121</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>7:45 am</u>
(B) First Initial Flow <u>86</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>8:25 am</u>
(C) First Final Flow <u>478</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:04 am</u>
(D) Initial Shut-In <u>1133</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2:04 pm</u>
(E) Second Initial Flow <u>496</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>4:53 pm</u>
(F) Second Final Flow <u>888</u>	<input checked="" type="checkbox"/> Mileage <u>108 R/T</u> 108	Comments _____
(G) Final Shut-In <u>1139</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2118</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby _____	Total <u>1583</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1583</u>	

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. **61083**

4/10

Well Name & No. Pancirni #1-SWD Test No. 4 Date 1-16-15  
 Company Murfin Drilling Co., Inc. Elevation 3322 KB 3311 GL  
 Address 250 N. Water, Ste 300 Wichita Ks 67202  
 Co. Rep / Geo. Saman ShariFaie Rig Murfin #2  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State Ks

Interval Tested 4345-4480 Zone Tested Lans. - 'G-J'  
 Anchor Length 135' Drill Pipe Run 4134.08' Mud Wt. 9.2  
 Top Packer Depth 4340 Drill Collars Run 205.92' Vis 69  
 Bottom Packer Depth 4345 Wt. Pipe Run 0 WL 5.6  
 Total Depth 4480 Chlorides 1700 ppm System LCM 8#

Blow Description IF-Surface blow built to 2"  
ISI-No Return  
FF-Surface blow built to 2"  
FSI-No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>Free Oil</u>	<u>100</u>			
<u>63'</u>	<u>mco</u>	<u>50</u>		<u>50</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 68' BHT 138°F Gravity 33 API RW @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2227</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>8:35am</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>8:58am</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:56am</u>
(D) Initial Shut-In <u>758</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2:56pm</u>
(E) Second Initial Flow <u>38</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>5:10 pm</u>
(F) Second Final Flow <u>45</u>	<input checked="" type="checkbox"/> Mileage <u>108 R/T</u> 108	Comments _____
(G) Final Shut-In <u>780</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2158</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90

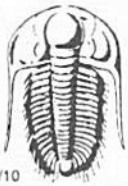
Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Sub Total 1583

Total 1583  
 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. 61084

Well Name & No. Pancirni #1-SWD Test No. 5 Date 1-17-15  
 Company Murfin Drilling Co., Inc. Elevation 3322 KB 3311 GL  
 Address 250 N. Water, Ste 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Sharifaie Rig Murfin #2  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State Ks

Interval Tested 4634-4750 Zone Tested Pawnee - Verdigris  
 Anchor Length 116' Drill Pipe Run 4418.43' Mud Wt. 9.4  
 Top Packer Depth 4629 Drill Collars Run 205.82' Vis 65  
 Bottom Packer Depth 4634 Wt. Pipe Run 0 WL 6.0  
 Total Depth 4750 Chlorides 1800 ppm System LCM 7#

Blow Description IF - Surface blow built to 1/4"  
ISI - No return  
FF - No surface blow  
FSL - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>2'</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 2' BHT 141°F Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2439  Test 1150 T-On Location 7:05pm  
 (B) First Initial Flow 20  Jars 250 T-Started 7:57pm  
 (C) First Final Flow 27  Safety Joint 75 T-Open 9:58pm  
 (D) Initial Shut-In 865  Circ Sub N/C T-Pulled 12:58am  
 (E) Second Initial Flow 28  Hourly Standby \_\_\_\_\_ T-Out 2:50 am  
 (F) Second Final Flow 26  Mileage 108 RIT 108 Comments \_\_\_\_\_  
 (G) Final Shut-In 747  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2423  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 60  
 Sub Total 0  
 Total 1583  
 MP/DST Disc't \_\_\_\_\_  
 Sub Total 1583

Approved By \_\_\_\_\_ Our Representative [Signature]

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