



## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Clayton Erickson

### **Pancirini #3-7**

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

Start Date: 2017.08.05 @ 23:12:00

End Date: 2017.08.06 @ 07:51:30

Job Ticket #: 63335                      DST #: 1

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

Printed: 2017.08.10 @ 10:27:28



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63335

**DST#: 1**

ATTN: Clayton Erickson

Test Start: 2017.08.05 @ 23:12:00

## GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:24:15

Time Test Ended: 07:51:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 83

**Interval: 4176.00 ft (KB) To 4245.00 ft (KB) (TVD)**

Reference Elevations: 3378.00 ft (KB)

Total Depth: 4245.00 ft (KB) (TVD)

3373.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6625 Inside**

Press@RunDepth: 78.19 psig @ 4177.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.08.05

End Date:

2017.08.06

Last Calib.:

2017.08.06

Start Time: 23:12:05

End Time:

07:51:30

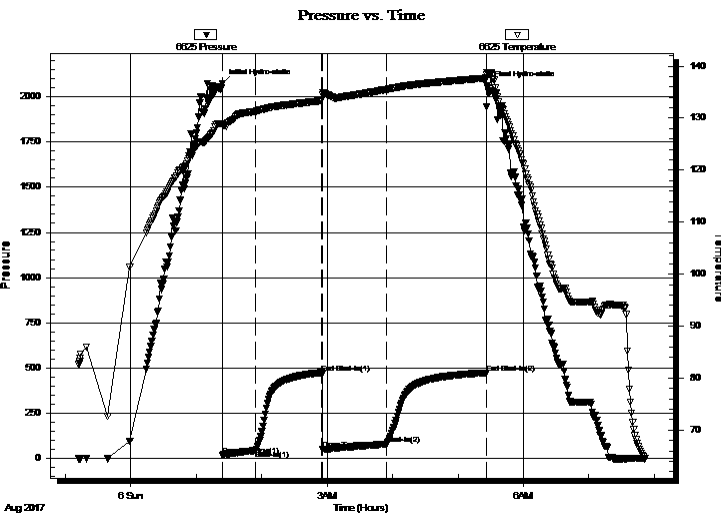
Time On Btm:

2017.08.06 @ 01:24:00

Time Off Btm:

2017.08.06 @ 05:26:45

**TEST COMMENT:** 30 - IF: 1/4" Blow at open, built to 3 1/4"  
60 - IS: No blow back  
60 - FF: Blow started at 5 min., built to 3"  
90 - FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2071.71	128.96	Initial Hydro-static
1	17.48	128.62	Open To Flow (1)
31	42.66	131.30	Shut-In(1)
91	473.84	133.36	End Shut-In(1)
92	48.41	134.58	Open To Flow (2)
151	78.19	135.51	Shut-In(2)
242	472.84	137.69	End Shut-In(2)
243	2063.21	138.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 85% <sub>m</sub> , 10% <sub>g</sub> , 5% <sub>o</sub>	0.30
60.00	OCM 61% <sub>m</sub> , 34% <sub>o</sub> , 5% <sub>g</sub>	0.30
15.00	MO 50% <sub>o</sub> , 49% <sub>m</sub> , 1% <sub>g</sub>	0.07

## 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

**Pancirini #3-7**

Job Ticket: 63335

**DST#: 1**

ATTN: Clayton Erickson

Test Start: 2017.08.05 @ 23:12:00

## Tool Information

Drill Pipe:	Length: 3965.00 ft	Diameter: 3.80 inches	Volume: 55.62 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 205.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4176.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	69.00 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
Change Over Sub	1.00			4148.00	
Shut In Tool	5.00			4153.00	
Hydraulic tool	5.00			4158.00	
Jars	5.00			4163.00	
Safety Joint	3.00			4166.00	
Packer	5.00			4171.00	29.00 Bottom Of Top Packer
Packer	5.00			4176.00	
Packer - Shale	0.00			4176.00	
Stubb	1.00			4177.00	
Recorder	0.00	6625	Inside	4177.00	
Recorder	0.00	8017	Outside	4177.00	
Perforations	29.00			4206.00	
Blank Spacing	33.00			4239.00	
Perforations	3.00			4242.00	
Bullnose	3.00			4245.00	69.00 Bottom Packers & Anchor

**Total Tool Length: 98.00**



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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

**Pancirini #3-7**

Job Ticket: 63335

**DST#: 1**

ATTN: Clayton Erickson

Test Start: 2017.08.05 @ 23:12:00

## 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: 6.37 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
60.00	GOCM 85%m, 10%g, 5%o	0.295
60.00	OCM 61%m, 34%o, 5%g	0.295
15.00	MO 50%o, 49%m, 1%g	0.074

Total Length: 135.00 ft

Total Volume: 0.664 bbl

Num Fluid Samples: 0

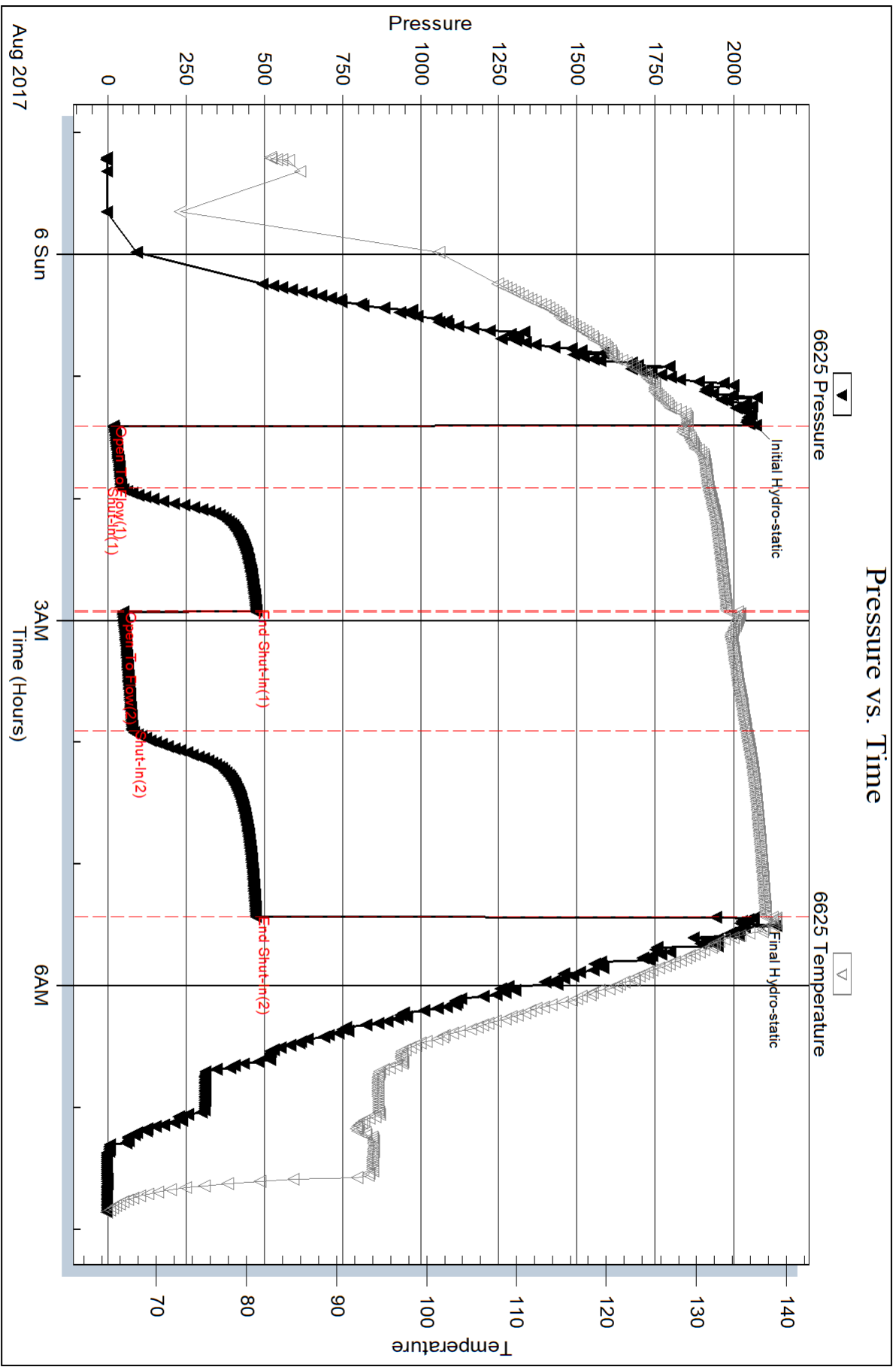
Num Gas Bombs: 0

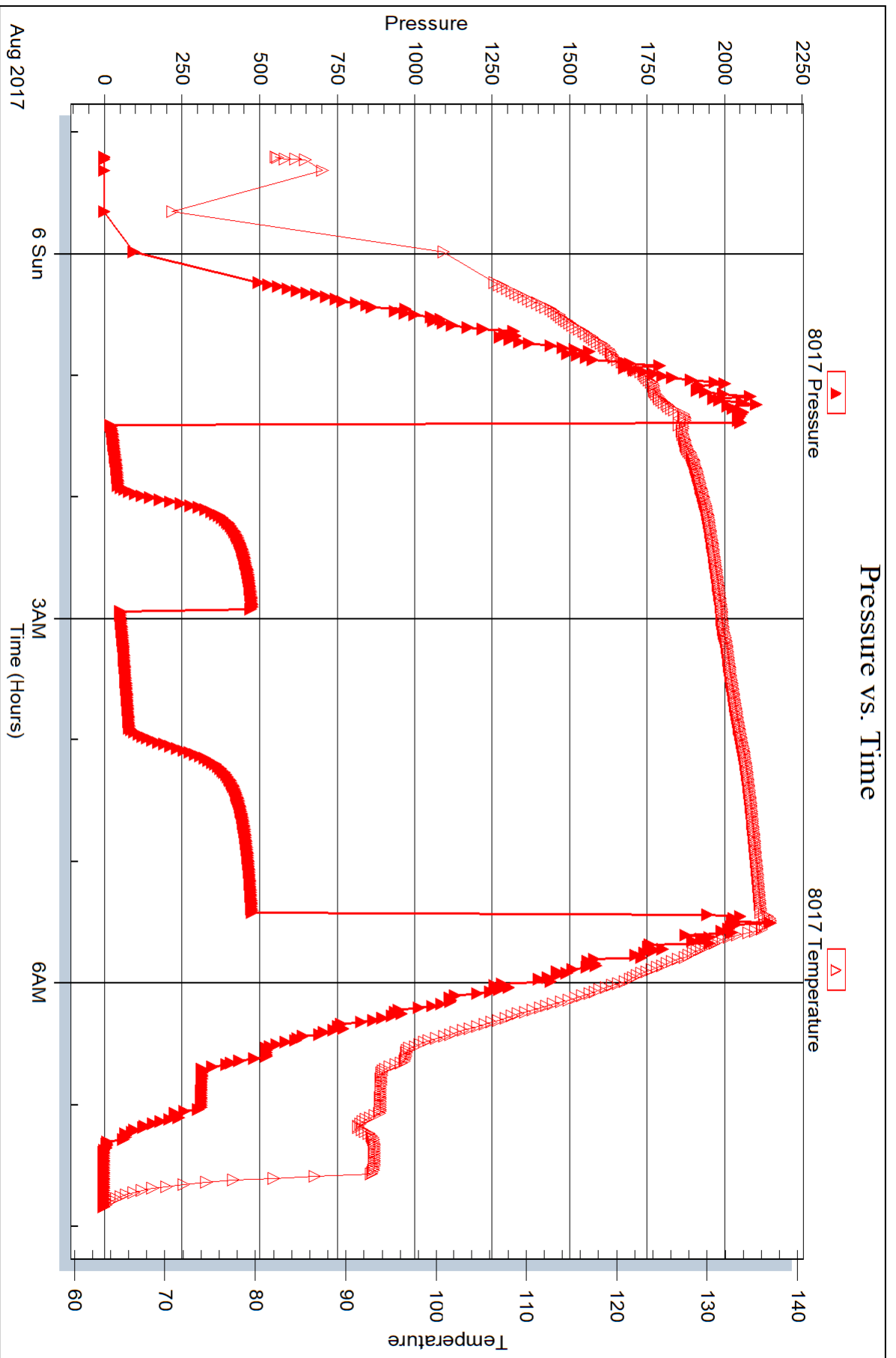
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Clayton Erickson

### **Pancirini #3-7**

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

Start Date: 2017.08.06 @ 18:27:00

End Date: 2017.08.07 @ 02:44:15

Job Ticket #: 63336                      DST #: 2

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

Printed: 2017.08.10 @ 10:24:45





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63336

**DST#: 2**

ATTN: Clayton Erickson

Test Start: 2017.08.06 @ 18:27:00

## GENERAL INFORMATION:

Formation: **LKC "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:28:00  
 Time Test Ended: 02:44:15  
 Interval: **4248.00 ft (KB) To 4330.00 ft (KB) (TVD)**  
 Total Depth: 4330.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Winder  
 Unit No: 83  
 Reference Elevations: 3378.00 ft (KB)  
 3373.00 ft (CF)  
 KB to GR/CF: 5.00 ft

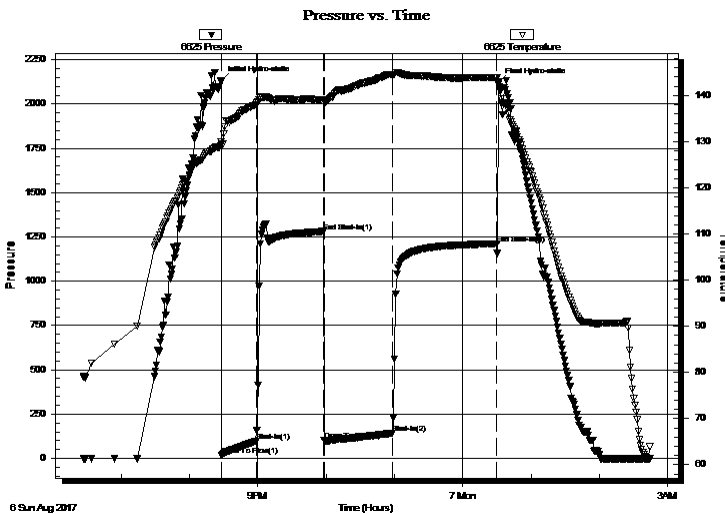
## Serial #: 6625

Inside

Press@RunDepth: 142.44 psig @ 4249.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.08.06 End Date: 2017.08.07 Last Calib.: 2017.08.07  
 Start Time: 18:27:05 End Time: 02:44:14 Time On Btm: 2017.08.06 @ 20:27:45  
 Time Off Btm: 2017.08.07 @ 00:31:00

**TEST COMMENT:** 30 - IF: 1/4" Blow at open, built to BOB (11") at 22 min.  
 60 - IS: Weak surface blow back, dead by 20 min.  
 60 - FF: Blow started at 2 min., built to BOB at 18 1/2 min.  
 90 - FS: Blow back built to 2 3/4"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2130.12	130.04	Initial Hydro-static
1	18.07	129.61	Open To Flow (1)
31	96.82	138.07	Shut-In(1)
90	1280.94	139.20	End Shut-In(1)
91	101.18	138.61	Open To Flow (2)
151	142.44	144.48	Shut-In(2)
243	1211.98	143.85	End Shut-In(2)
244	2121.35	142.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
237.00	GMCO 41%o, 39%g, 20%m	1.46
78.00	GMCO 54%o, 28%m, 18%g	1.09
30.00	Oil 98%o, 2%m	0.42
0.00	GIP = 390'	0.00

\* 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.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63336

**DST#: 2**

ATTN: Clayton Erickson

Test Start: 2017.08.06 @ 18:27:00

## GENERAL INFORMATION:

Formation: **LKC "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:28:00  
 Time Test Ended: 02:44:15  
 Interval: **4248.00 ft (KB) To 4330.00 ft (KB) (TVD)**  
 Total Depth: 4330.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Winder  
 Unit No: 83  
 Reference Elevations: 3378.00 ft (KB)  
 3373.00 ft (CF)  
 KB to GR/CF: 5.00 ft

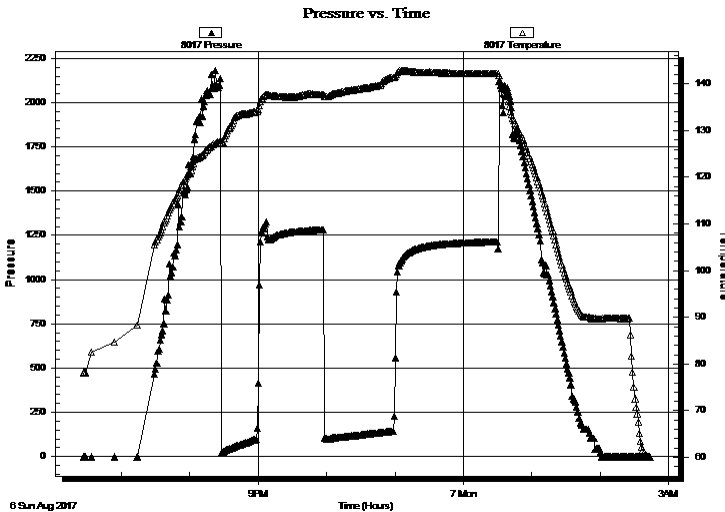
**Serial #: 8017**

**Outside**

Press@RunDepth: psig @ 4249.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.08.06 End Date: 2017.08.07 Last Calib.: 2017.08.07  
 Start Time: 18:27:05 End Time: 02:43:44 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 30 - IF: 1/4" Blow at open, built to BOB (11") at 22 min.  
 60 - IS: Weak surface blow back, dead by 20 min.  
 60 - FF: Blow started at 2 min., built to BOB at 18 1/2 min.  
 90 - FS: Blow back built to 2 3/4"

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
237.00	GMCO 41%o, 39%g, 20%m	1.46
78.00	GMCO 54%o, 28%m, 18%g	1.09
30.00	Oil 98%o, 2%m	0.42
0.00	GIP = 390'	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., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63336

**DST#: 2**

ATTN: Clayton Erickson

Test Start: 2017.08.06 @ 18:27:00

## Tool Information

Drill Pipe:	Length: 4028.00 ft	Diameter: 3.80 inches	Volume: 56.50 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 205.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 57.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	4248.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	111.00 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			4220.00	
Shut In Tool	5.00			4225.00	
Hydraulic tool	5.00			4230.00	
Jars	5.00			4235.00	
Safety Joint	3.00			4238.00	
Packer	5.00			4243.00	29.00 Bottom Of Top Packer
Packer	5.00			4248.00	
Packer - Shale	0.00			4248.00	
Stubb	1.00			4249.00	
Recorder	0.00	6625	Inside	4249.00	
Recorder	0.00	8017	Outside	4249.00	
Perforations	14.00			4263.00	
Blank Spacing	64.00			4327.00	
Bullnose	3.00			4330.00	82.00 Bottom Packers & Anchor

**Total Tool Length: 111.00**



**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

**Pancirini #3-7**

Job Ticket: 63336

**DST#: 2**

ATTN: Clayton Erickson

Test Start: 2017.08.06 @ 18:27:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37.6 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 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
237.00	GMCO 41%o, 39%g, 20%m	1.457
78.00	GMCO 54%o, 28%m, 18%g	1.094
30.00	Oil 98%o, 2%m	0.421
0.00	GIP = 390'	0.000

Total Length: 345.00 ft      Total Volume: 2.972 bbl

Num Fluid Samples: 0

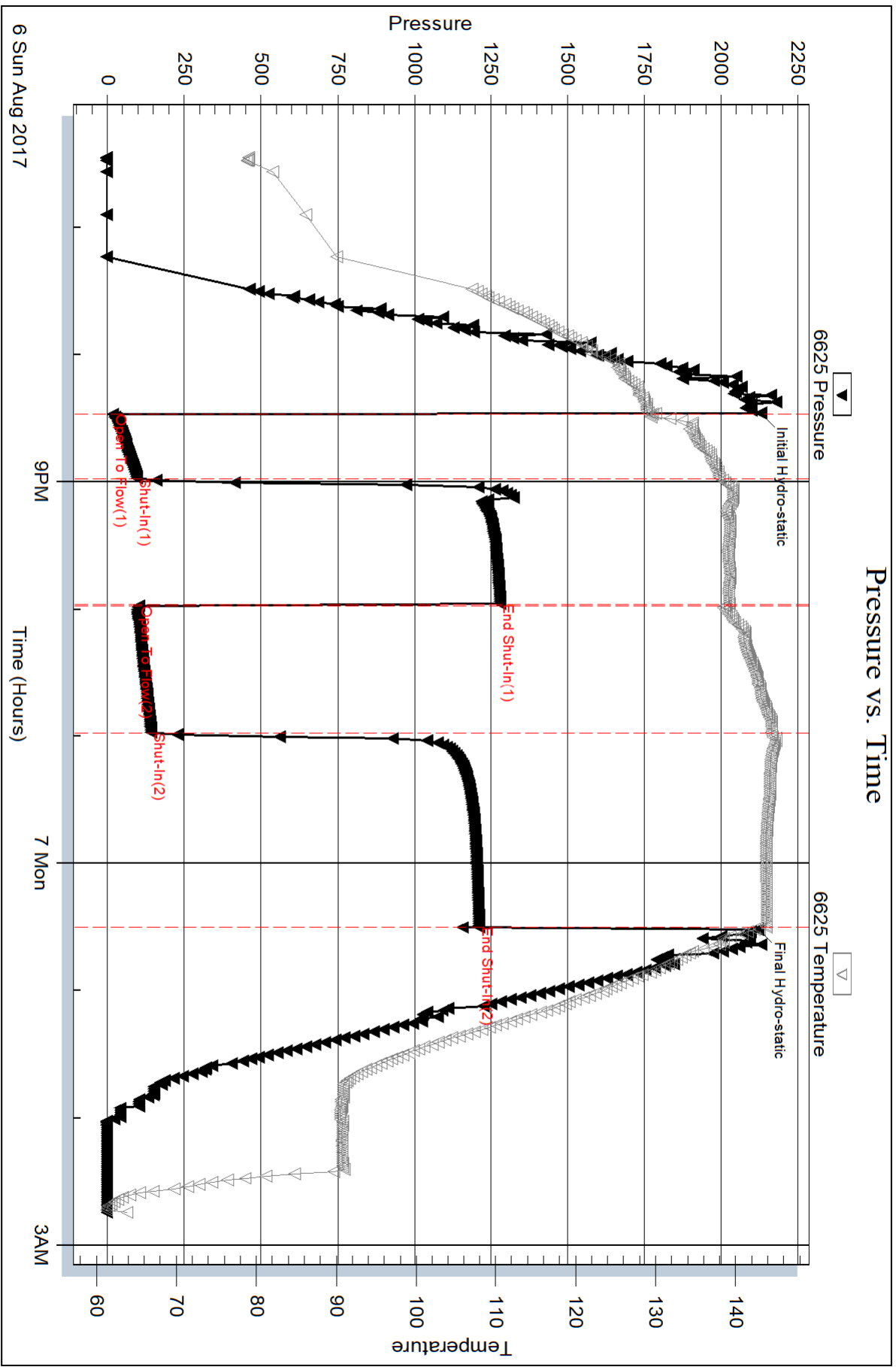
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 38 api @ 64 deg F  
Corrected Gravity = 37.6 api

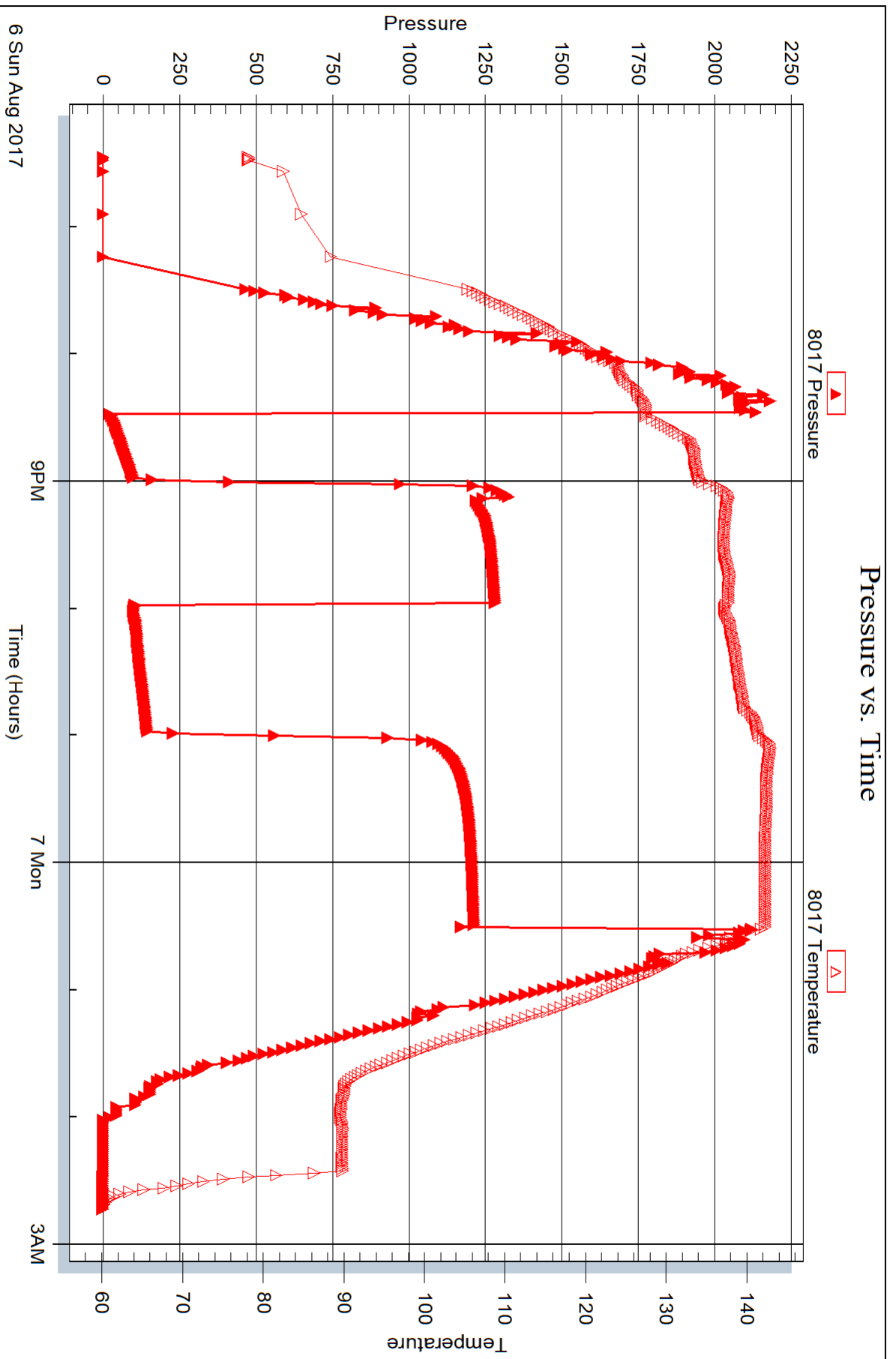


Serial #: 8017

Outside Murfin Drilling Co., Inc.

Pancirini #3-7

DST Test Number: 2





## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Clayton Erickson

### **Pancirini #3-7**

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

Start Date: 2017.08.07 @ 12:06:00

End Date: 2017.08.07 @ 19:35:15

Job Ticket #: 63337                      DST #: 3

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

Printed: 2017.08.10 @ 10:21:26



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

ATTN: Clayton Erickson

Job Ticket: 63337

**DST#: 3**

Test Start: 2017.08.07 @ 12:06:00

## GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:41:30

Time Test Ended: 19:35:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4326.00 ft (KB) To 4385.00 ft (KB) (TVD)**

Total Depth: 4385.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3378.00 ft (KB)

3373.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 6625**

**Inside**

Press@RunDepth: 891.79 psig @ 4327.00 ft (KB)

Start Date: 2017.08.07

End Date:

2017.08.07

Start Time: 12:06:05

End Time:

19:35:14

Capacity: 8000.00 psig

Last Calib.: 2017.08.07

Time On Btm: 2017.08.07 @ 13:41:15

Time Off Btm: 2017.08.07 @ 16:44:45

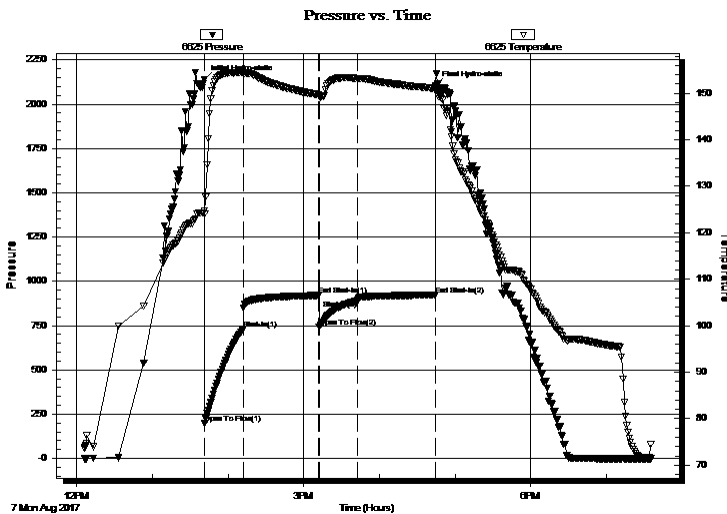
**TEST COMMENT:** 30 - IF: Blow built to BOB (11") at 1 1/2 min.

60 - IS: No blow back

30 - FF: Blow built to BOB at 3 1/4 min.

60 - FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2138.12	124.70	Initial Hydro-static
1	197.76	124.07	Open To Flow (1)
31	728.66	154.36	Shut-In(1)
91	920.39	149.71	End Shut-In(1)
91	741.98	149.42	Open To Flow (2)
122	891.79	153.17	Shut-In(2)
183	922.90	151.03	End Shut-In(2)
184	2106.99	151.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1490.00	Water w/trace oil 97%w , 3%m	19.03
370.00	WCM w/oil spots 61%m, 30%w , 8%g, 1%	5.19
120.00	WCM w/oil spots 75%m, 20%w , 3%g, 2%	1.68

## 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.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63337

**DST#: 3**

ATTN: Clayton Erickson

Test Start: 2017.08.07 @ 12:06:00

## Tool Information

Drill Pipe:	Length: 4114.00 ft	Diameter: 3.80 inches	Volume: 57.71 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 205.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 58.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4326.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4298.00	
Shut In Tool	5.00			4303.00	
Hydraulic tool	5.00			4308.00	
Jars	5.00			4313.00	
Safety Joint	3.00			4316.00	
Packer	5.00			4321.00	29.00 Bottom Of Top Packer
Packer	5.00			4326.00	
Packer - Shale	0.00			4326.00	
Stubb	1.00			4327.00	
Recorder	0.00	6625	Inside	4327.00	
Recorder	0.00	8017	Outside	4327.00	
Perforations	19.00			4346.00	
Blank Spacing	33.00			4379.00	
Perforations	3.00			4382.00	
Bullnose	3.00			4385.00	59.00 Bottom Packers & Anchor

**Total Tool Length: 88.00**



**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

**Pancirini #3-7**

Job Ticket: 63337

**DST#: 3**

ATTN: Clayton Erickson

Test Start: 2017.08.07 @ 12:06:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

11000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 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 bbbl
1490.00	Water w/trace oil 97%w , 3%m	19.033
370.00	WCM w/oil spots 61%m, 30%w , 8%g, 1%o	5.190
120.00	WCM w/oil spots 75%m, 20%w , 3%g, 2%o	1.683

Total Length: 1980.00 ft      Total Volume: 25.906 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .511 ohms @ 79.1 deg F

Chlorides = 11,000 ppm

Serial #: 6625

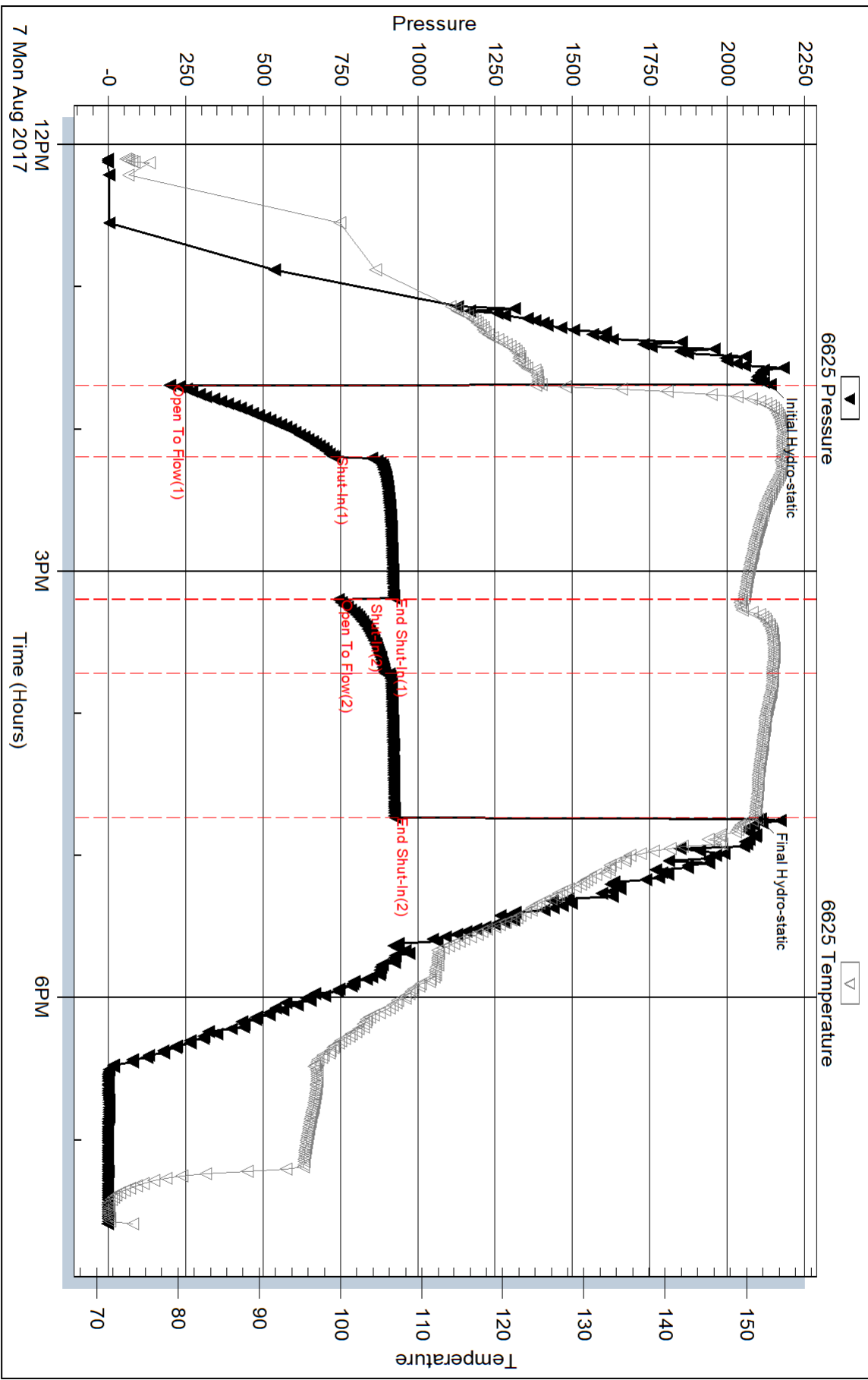
Inside

Murfin Drilling Co., Inc.

Pancirini #3-7

DST Test Number: 3

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 63337

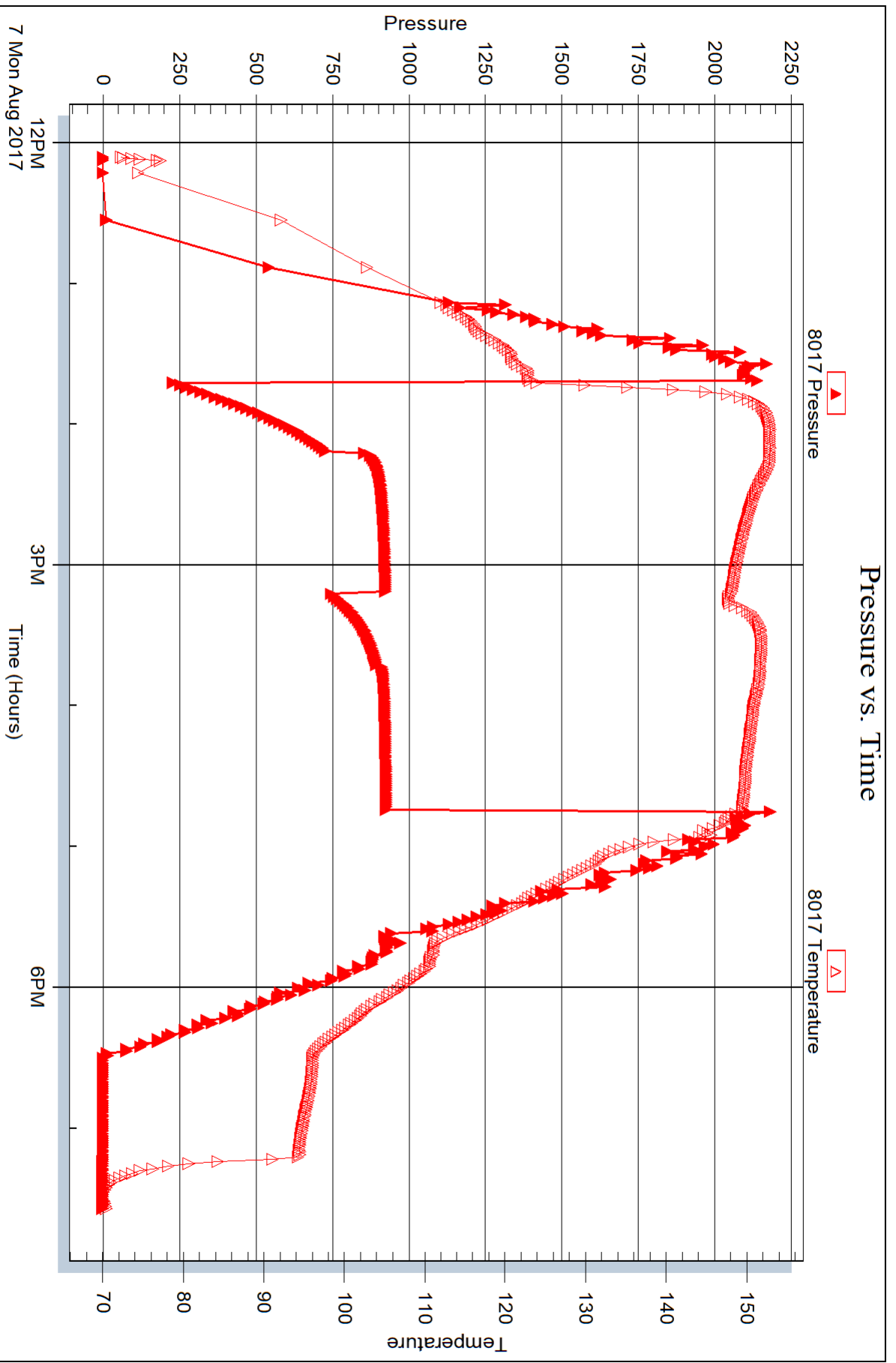
Printed: 2017.08.10 @ 10:21:27

Serial #: 8017

Outside Murfin Drilling Co., Inc.

Pancirini #3-7

DST Test Number: 3





## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Clayton Erickson

### **Pancirini #3-7**

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

Start Date: 2017.08.08 @ 14:04:00

End Date: 2017.08.08 @ 22:18:45

Job Ticket #: 63338                      DST #: 4

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

Printed: 2017.08.10 @ 10:19:54



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63338

**DST#: 4**

ATTN: Clayton Erickson

Test Start: 2017.08.08 @ 14:04:00

## GENERAL INFORMATION:

Formation: **LKC "H - J"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 16:05:00  
 Tester: James Winder  
 Time Test Ended: 22:18:45  
 Unit No: 83  
 Interval: **4435.00 ft (KB) To 4530.00 ft (KB) (TVD)**  
 Reference Elevations: 3378.00 ft (KB)  
 Total Depth: 4530.00 ft (KB) (TVD)  
 3373.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

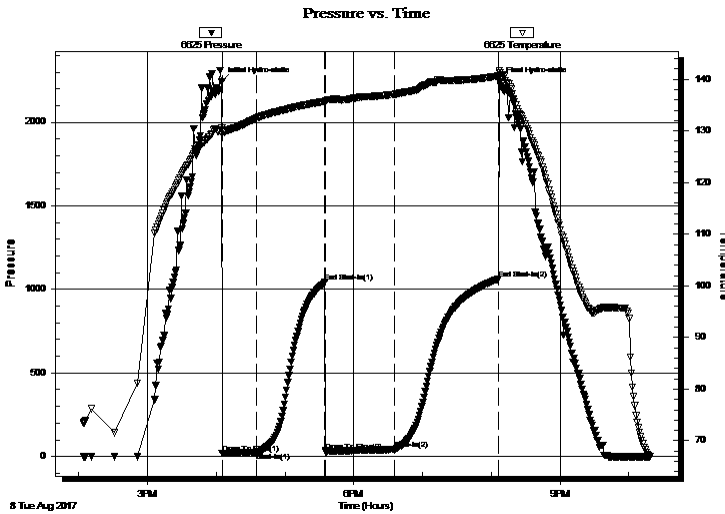
## Serial #: 6625

Inside

Press@RunDepth: 41.81 psig @ 4436.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.08.08 End Date: 2017.08.08 Last Calib.: 2017.08.08  
 Start Time: 14:04:05 End Time: 22:18:44 Time On Btm: 2017.08.08 @ 16:04:45  
 Time Off Btm: 2017.08.08 @ 20:07:30

TEST COMMENT: 30 - IF: 1/4" Blow at open, built to 2 1/2"  
 60 - IS: No blow back  
 60 - FF: Blow built to 4"  
 90 - FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2243.08	130.50	Initial Hydro-static
1	18.17	130.10	Open To Flow (1)
31	26.82	132.44	Shut-In(1)
90	1042.58	135.71	End Shut-In(1)
91	28.26	135.61	Open To Flow (2)
151	41.81	137.06	Shut-In(2)
242	1062.13	140.68	End Shut-In(2)
243	2243.04	141.27	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
53.00	GOCM 55%o, 35%o, 10%g	0.26
10.00	SMCO 94%o, 6%m	0.05
0.00	GIP = 115'	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., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63338

**DST#: 4**

ATTN: Clayton Erickson

Test Start: 2017.08.08 @ 14:04:00

## Tool Information

Drill Pipe:	Length: 4213.00 ft	Diameter: 3.80 inches	Volume: 59.10 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 205.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 60.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4435.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	95.00 ft			
Tool Length:	124.00 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			4407.00	
Shut In Tool	5.00			4412.00	
Hydraulic tool	5.00			4417.00	
Jars	5.00			4422.00	
Safety Joint	3.00			4425.00	
Packer	5.00			4430.00	29.00 Bottom Of Top Packer
Packer	5.00			4435.00	
Packer - Shale	0.00			4435.00	
Stubb	1.00			4436.00	
Recorder	0.00	6625	Inside	4436.00	
Recorder	0.00	8017	Outside	4436.00	
Perforations	27.00			4463.00	
Blank Spacing	64.00			4527.00	
Bullnose	3.00			4530.00	95.00 Bottom Packers & Anchor

**Total Tool Length: 124.00**



**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

**Pancirini #3-7**

Job Ticket: 63338

**DST#: 4**

ATTN: Clayton Erickson

Test Start: 2017.08.08 @ 14:04:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31.2 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 72.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
53.00	GOCM 55% <i>m</i> , 35% <i>o</i> , 10% <i>g</i>	0.261
10.00	SMCO 94% <i>o</i> , 6% <i>m</i>	0.049
0.00	GIP = 115'	0.000

Total Length: 63.00 ft      Total Volume: 0.310 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

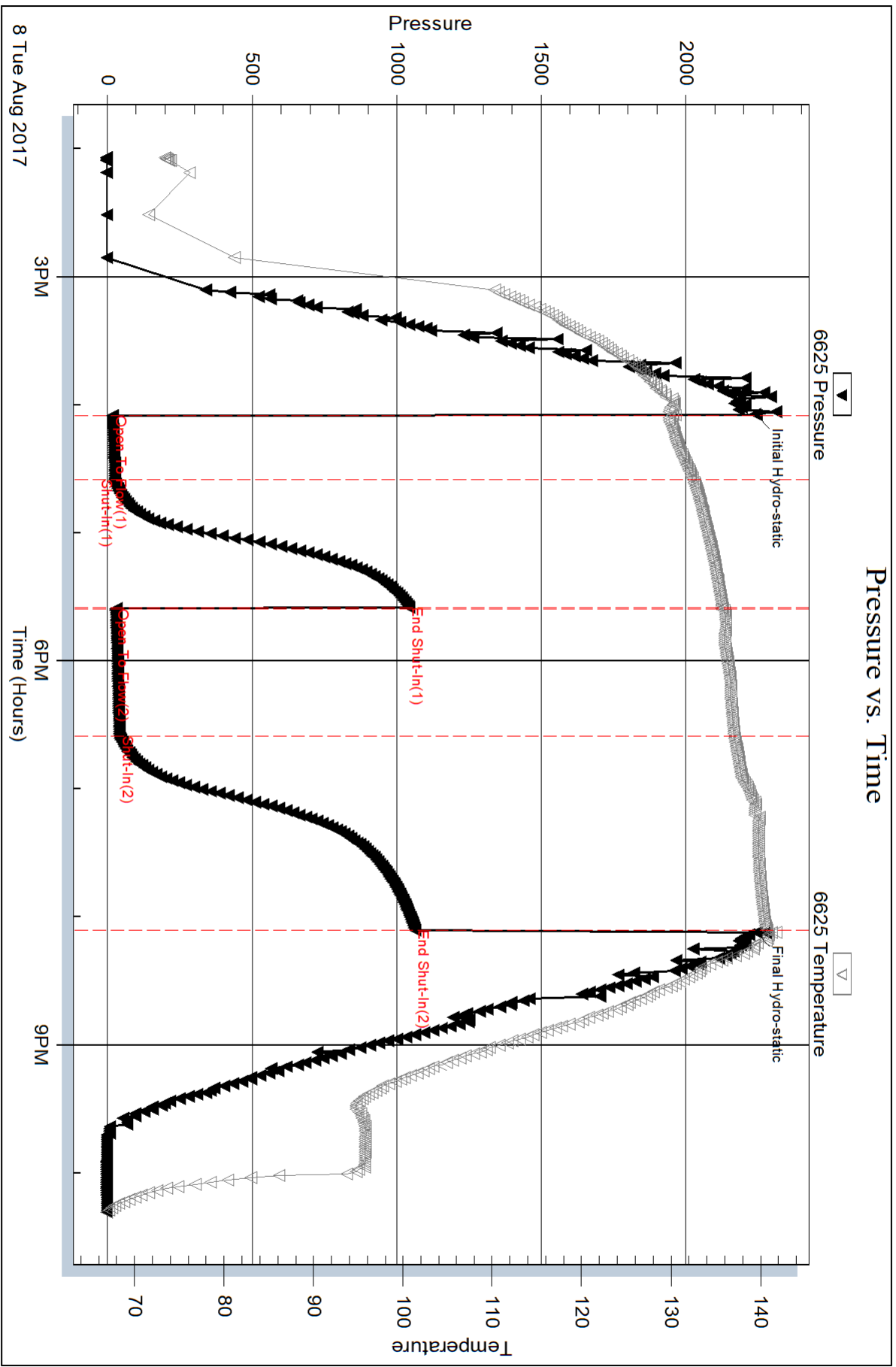
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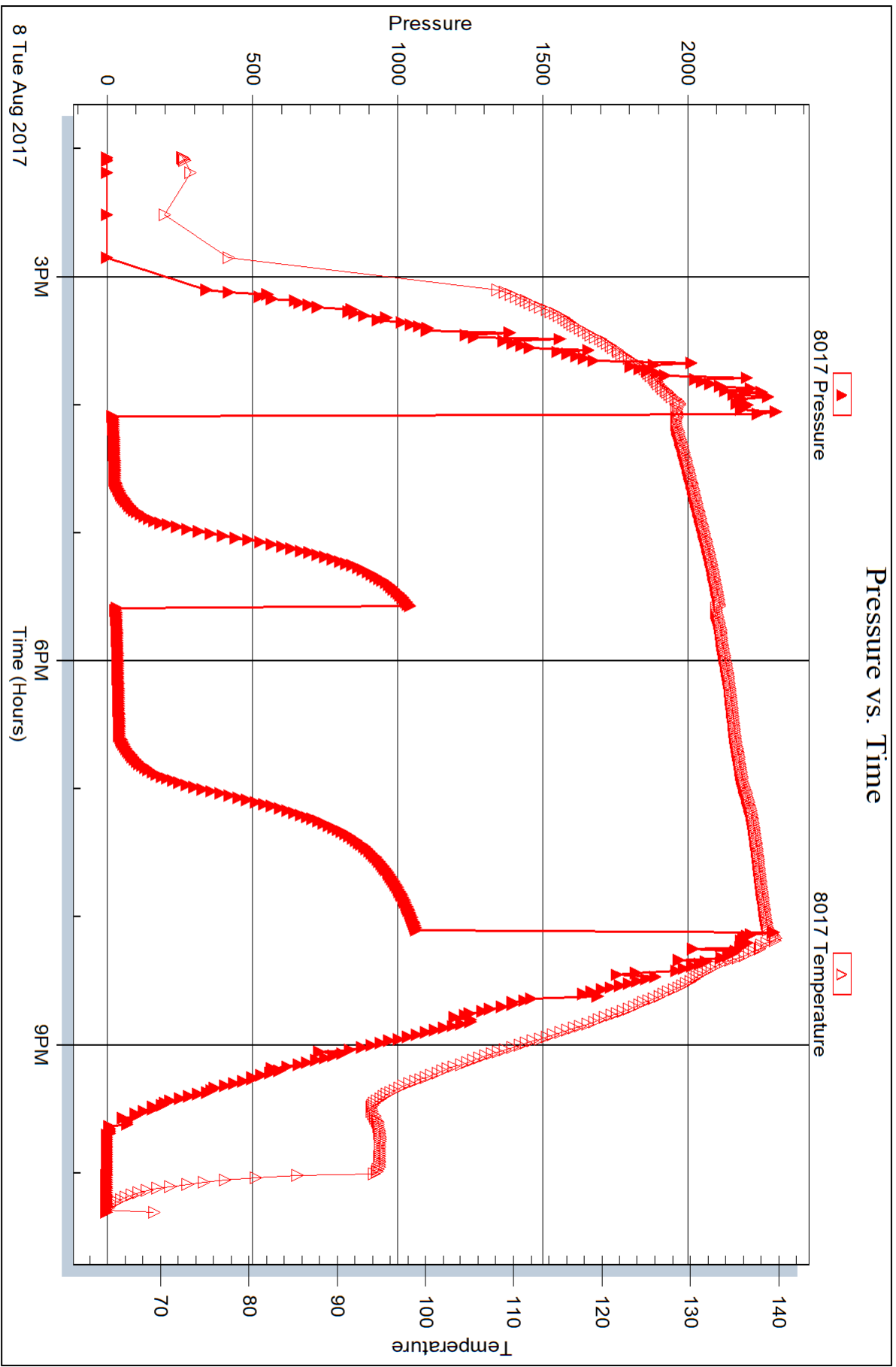
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 32 api @ 68 deg F

Corrected Gravity = 31.2 api







## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Clayton Erickson

### **Pancirini #3-7**

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

Start Date: 2017.08.10 @ 00:01:00

End Date: 2017.08.10 @ 07:46:45

Job Ticket #: 63339                      DST #: 5

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

Printed: 2017.08.10 @ 10:18:52

Murfin Drilling Co., Inc.

7-2s-36w Rawlins,KS

Pancirini #3-7

DST # 5

Marmaton - Ft. Scott

2017.08.10



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63339

**DST#: 5**

ATTN: Clayton Erickson

Test Start: 2017.08.10 @ 00:01:00

## GENERAL INFORMATION:

Formation: **Marmaton - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:21:00

Time Test Ended: 07:46:45

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4624.00 ft (KB) To 4760.00 ft (KB) (TVD)**

Reference Elevations: 3378.00 ft (KB)

Total Depth: 4760.00 ft (KB) (TVD)

3373.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6625**

**Inside**

Press@RunDepth: 36.51 psig @ 4625.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.08.10

End Date:

2017.08.10

Last Calib.: 2017.08.10

Start Time: 00:01:05

End Time:

07:46:44

Time On Btm: 2017.08.10 @ 02:20:45

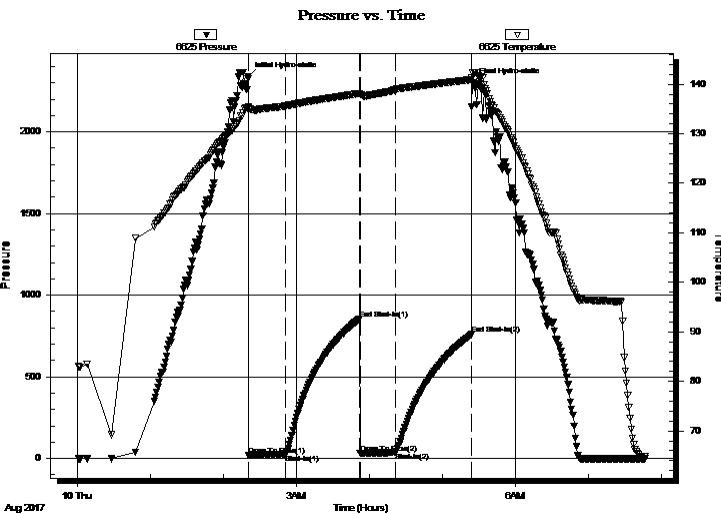
Time Off Btm: 2017.08.10 @ 05:25:00

TEST COMMENT: 30 - IF: Blow built to 1 3/4"

60 - IS: No blow back

30 - FF: No blow

60 - FS: No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2338.89	135.45	Initial Hydro-static
1	19.75	134.88	Open To Flow (1)
31	27.68	135.61	Shut-In(1)
91	853.79	138.13	End Shut-In(1)
92	30.31	137.97	Open To Flow (2)
121	36.51	138.92	Shut-In(2)
183	758.53	140.93	End Shut-In(2)
185	2301.78	142.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	Mud w /oil spots 99%m, 1%o	0.22

\* 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.

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

250 N. Water STE 300  
Wichita, KS 67202

**Pancirini #3-7**

Job Ticket: 63339

**DST#: 5**

ATTN: Clayton Erickson

Test Start: 2017.08.10 @ 00:01:00

## Tool Information

Drill Pipe:	Length: 4401.00 ft	Diameter: 3.80 inches	Volume: 61.73 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 205.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 62.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4624.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	136.00 ft			
Tool Length:	165.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4596.00	
Shut In Tool	5.00			4601.00	
Hydraulic tool	5.00			4606.00	
Jars	5.00			4611.00	
Safety Joint	3.00			4614.00	
Packer	5.00			4619.00	29.00 Bottom Of Top Packer
Packer	5.00			4624.00	
Packer - Shale	0.00			4624.00	
Stubb	1.00			4625.00	
Recorder	0.00	6625	Inside	4625.00	
Recorder	0.00	8017	Outside	4625.00	
Perforations	32.00			4657.00	
Blank Spacing	96.00			4753.00	
Perforations	4.00			4757.00	
Bullnose	3.00			4760.00	136.00 Bottom Packers & Anchor

**Total Tool Length: 165.00**





**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

**Pancirini #3-7**

Job Ticket: 63339

**DST#: 5**

ATTN: Clayton Erickson

Test Start: 2017.08.10 @ 00:01:00

## 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: 70.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	Mud w /oil spots 99%m, 1%o	0.221

Total Length: 45.00 ft      Total Volume: 0.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

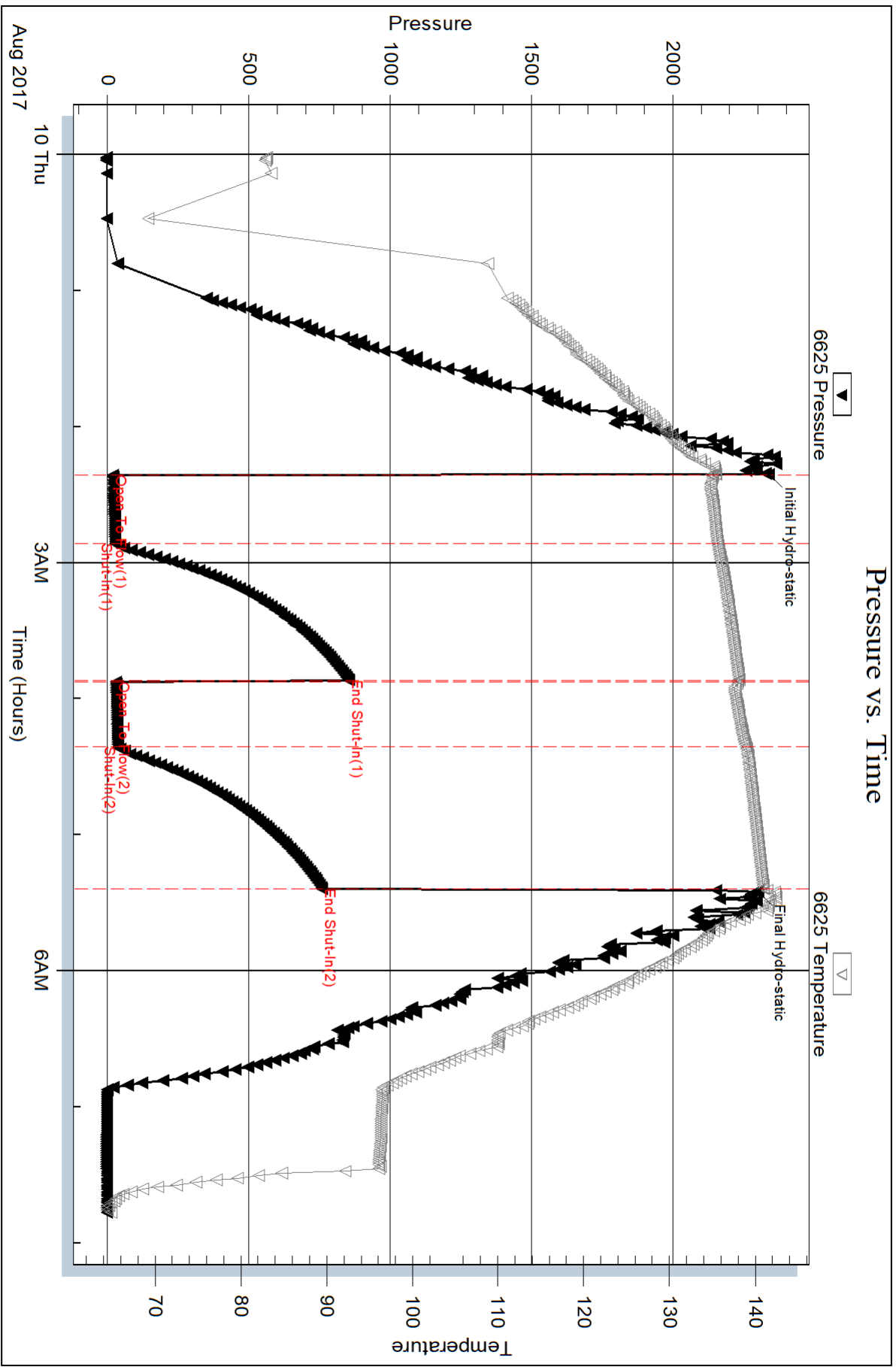
Serial #: 6625

Inside

Murfin Drilling Co., Inc.

Pancirini #3-7

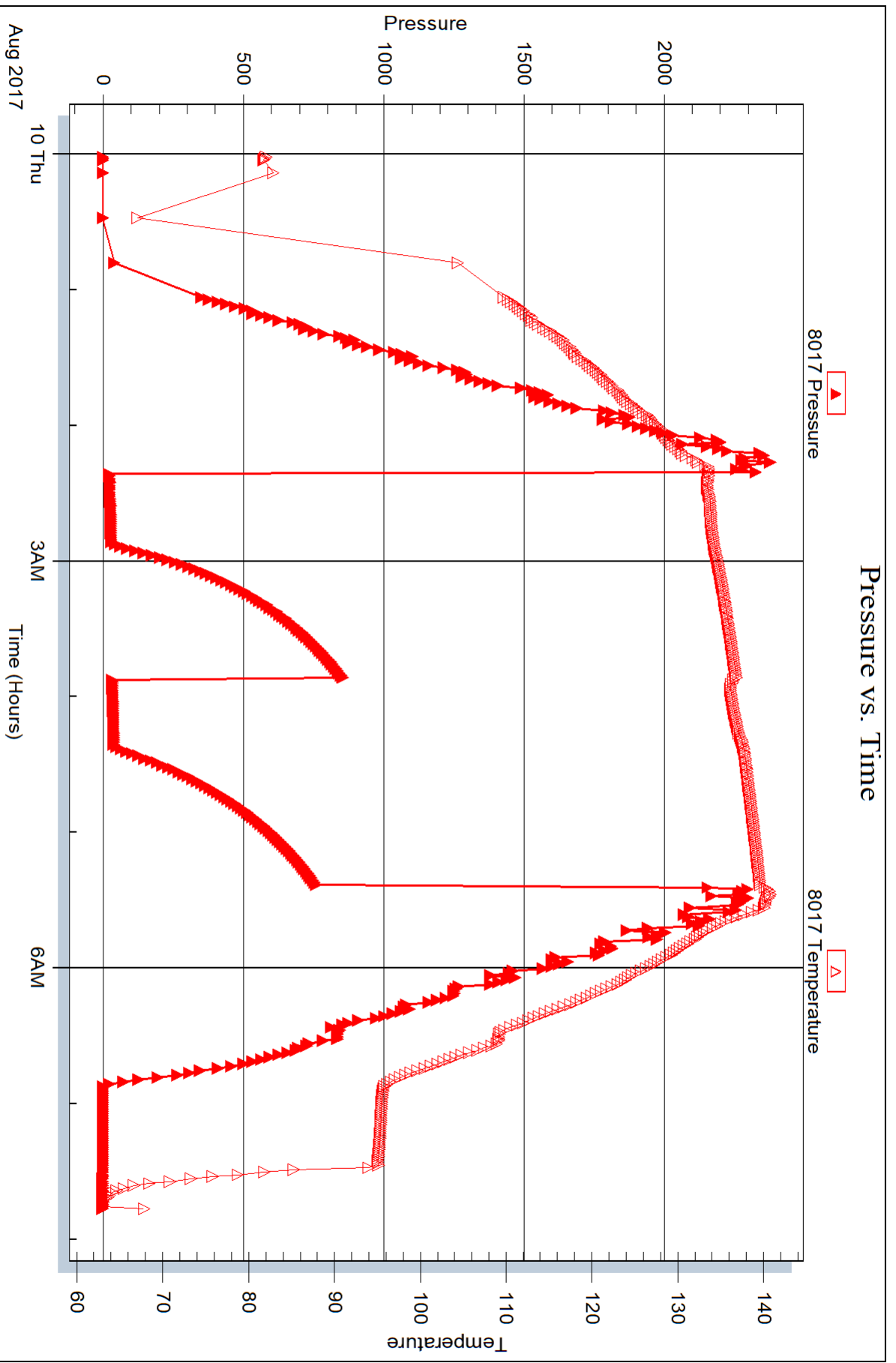
DST Test Number: 5

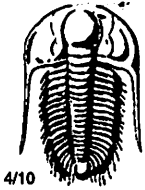


Trilobite Testing, Inc

Ref. No: 63339

Printed: 2017.08.10 @ 10:18:53





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63335

Well Name & No. Pancirini #3-7 Test No. 1 Date 8-5-17  
 Company Murfin Drilling Co Inc Elevation 3378 KB 3373 GL  
 Address 250 N. Water STE 300 Wichita, KS ~~67202~~ 67202  
 Co. Rep / Geo. Clayton Erickson Rig Murfin #24  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4176-4245 Zone Tested Oread  
 Anchor Length 69 Drill Pipe Run 3965 Mud Wt. 8.9  
 Top Packer Depth 4171 Drill Collars Run 205 175 Vis 65  
 Bottom Packer Depth 4176 (shale) Wt. Pipe Run - WL 6.4  
 Total Depth 4245 Chlorides 800 ppm System LCM 4  
 Blow Description IF: 1/4" Blow at open, built to 3 1/4"  
ISI: No blowback  
FF: Blow started at 5 min., built to 3"  
FSI: No blowback

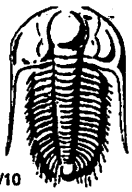
Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>MO</u>	<u>1</u>	<u>50</u>	<u>-</u>	<u>49</u>
<u>60</u>	<u>OCM</u>	<u>5</u>	<u>34</u>	<u>-</u>	<u>61</u>
<u>60</u>	<u>60cm</u>	<u>10</u>	<u>5</u>	<u>-</u>	<u>85</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 135 BHT 138 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2072  Test 1150 T-On Location 21:45 8/5  
 (B) First Initial Flow 17  Jars 250 T-Started 23:12  
 (C) First Final Flow 43  Safety Joint 75 T-Open 1:24  
 (D) Initial Shut-In 474  Circ Sub \_\_\_\_\_ T-Pulled 5:25  
 (E) Second Initial Flow 48  Hourly Standby \_\_\_\_\_ T-Out 7:45 8/6  
 (F) Second Final Flow 78  Mileage 114RT 85.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 473  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2063  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1810.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.50

Approved By [Signature] Our Representative James Winkler

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. 63336

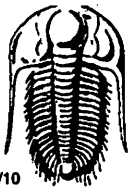
Well Name & No. Pancirini #3-7 Test No. 2 Date 8-6-17  
 Company Murfin Drilling Co. Inc Elevation 3378 KB 3373 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Clayton Erickson Rig Murfin #24  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4248 - 4330 Zone Tested LKC "A"  
 Anchor Length 82 Drill Pipe Run 4028 Mud Wt. 8.9  
 Top Packer Depth 4243 Drill Collars Run 205 Vis 54  
 Bottom Packer Depth 4248 (shale) Wt. Pipe Run - WL 6.8  
 Total Depth 4330 Chlorides 800 ppm System LCM 5  
 Blow Description IF: 1/4' Blow at open, built to BOB(11") at 22min  
ISI: Weak surface blowback, dead by 20min.  
FF: Blow started at 2min, built to BOB at 18 1/2 min.  
FSI: Blowback built to 2 3/4 min

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Oil</u>	<u>-</u>	<u>98</u>	<u>-</u>	<u>2</u>
<u>78</u>	<u>GMCO</u>	<u>18</u>	<u>54</u>	<u>-</u>	<u>28</u>
<u>237</u>	<u>GMCO</u>	<u>39</u>	<u>41</u>	<u>-</u>	<u>20</u>
	<u>GIP=390'</u>				

Rec Total 345 BHT 144 Gravity 37.6 API RW @ °F Chlorides ppm  
 (A) Initial Hydrostatic 2130  Test 1150 T-On Location 1700 8/6  
 (B) First Initial Flow 18  Jars 250 T-Started 18:27  
 (C) First Final Flow 97  Safety Joint 75 T-Open 20:28  
 (D) Initial Shut-In 1281  Circ Sub \_\_\_\_\_ T-Pulled 00:30  
 (E) Second Initial Flow 101  Hourly Standby \_\_\_\_\_ T-Out 2:40 8/7  
 (F) Second Final Flow 142  Mileage 114RT 85.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1212  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2121  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 60  Day Standby \_\_\_\_\_ Total 1810.50  
 Final Shut-In 90  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.50

Approved By [Signature] Our Representative James Winder  
 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. 63337

Well Name & No. Pancirini #3-7 Test No. 3 Date 8-7-17  
 Company Murfin Drilling Co, Inc Elevation 3378 KB 3373 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Clayton Erickson Rig murfin #24  
 Location: Sec. 7 Twp. 25 Rge. 36w Co. Rawlins State KS

Interval Tested 4326 - 4385 Zone Tested LKC "D"  
 Anchor Length 59 Drill Pipe Run 4114 Mud Wt. 8.9  
 Top Packer Depth 4321 Drill Collars Run 205 Vis 54  
 Bottom Packer Depth 4326 (shale) Wt. Pipe Run - WL 6.8  
 Total Depth 4385 Chlorides 800 ppm System LCM 5

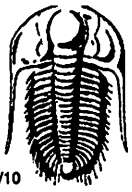
Blow Description IF: Blow built to BOB (11") at 1 1/2 min.  
ISI: No blowback  
FF: Blow built to BOB at 3 1/4 min.  
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>Wcm w/oil spots</u>	<u>3</u>	<u>2</u>	<u>20</u>	<u>75</u>
<u>370</u>	<u>Wcm w/oil spots</u>	<u>8</u>	<u>1</u>	<u>30</u>	<u>61</u>
<u>1490</u>	<u>Water w/trace oil</u>	<u>-</u>	<u>trace</u>	<u>97</u>	<u>3</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1980 BHT 151 Gravity API RW .511 @ 79.1 °F Chlorides 11,000 ppm

(A) Initial Hydrostatic 2138  Test 1150 T-On Location 11:20  
 (B) First Initial Flow 198  Jars 250 T-Started 12:06  
 (C) First Final Flow 729  Safety Joint 75 T-Open 13:41  
 (D) Initial Shut-In 920  Circ Sub \_\_\_\_\_ T-Pulled 16:44  
 (E) Second Initial Flow 742  Hourly Standby \_\_\_\_\_ T-Out 19:30  
 (F) Second Final Flow 892  Mileage 85.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 923  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2107  Straddle \_\_\_\_\_  
 Shale Packer 250  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1810.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.50

Approved By [Signature] Our Representative James Winkler  
 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. 63338

Well Name & No. Pancirini #3-7 Test No. 4 Date 8-8-17  
 Company Murfin Drilling Co. Inc Elevation 3378 KB 3373 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Clayton Erickson Rig Murfin #24  
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State KS

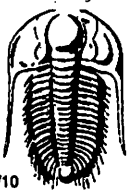
Interval Tested 4435 - 4530 Zone Tested LKC "H-J"  
 Anchor Length 95 Drill Pipe Run 4213 Mud Wt. 8.9  
 Top Packer Depth 4430 Drill Collars Run 205 Vis 72  
 Bottom Packer Depth 4435 (shale) Wt. Pipe Run - WL 6.4  
 Total Depth 4530 Chlorides 900 ppm System LCM 5  
 Blow Description IF: 1/4" Blow at open, built to 2 1/2"  
ISI: No blowback  
FF: Blow built to 4"  
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>SMCO</u>	<u>-</u>	<u>94</u>	<u>6</u>	<u>6</u>
<u>53</u>	<u>GOCM</u>	<u>10</u>	<u>35</u>	<u>-</u>	<u>55</u>
<u>Rec</u>	<u>Feet of GIP = 115'</u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u>	<u>%mud</u>
<u>Rec</u>	<u>Feet of</u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u>	<u>%mud</u>
<u>Rec</u>	<u>Feet of</u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u>	<u>%mud</u>

Rec Total 63 BHT 141 Gravity 31.2 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2243  Test 1150 T-On Location 13:15  
 (B) First Initial Flow 18  Jars 250 T-Started 14:04  
 (C) First Final Flow 27  Safety Joint 75 T-Open 16:05  
 (D) Initial Shut-In 1043  Circ Sub \_\_\_\_\_ T-Pulled 20:06  
 (E) Second Initial Flow 28  Hourly Standby \_\_\_\_\_ T-Out 22:10  
 (F) Second Final Flow 42  Mileage 114RT 85.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1062  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2243  Straddle \_\_\_\_\_  
 Shale Packer 250  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1810.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1810.50

Approved By \_\_\_\_\_ Our Representative James Winder  
 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. 63339

Well Name & No. Pancirini #3-7 Test No. 5 Date 8-9-17  
 Company Murfin Drilling Co. Inc Elevation 3378 KB 3373 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Clayton Erickson Rig Murfin #24  
 Location: Sec. 7 Twp. 2s Rge. 36w Co. Rawlins State KS

Interval Tested 4624-4760 Zone Tested marmaton - Ft. Scott  
 Anchor Length 136 Drill Pipe Run 4401 Mud Wt. 9.0  
 Top Packer Depth 4619 Drill Collars Run 205 Vis 70  
 Bottom Packer Depth 4624 (shale) Wt. Pipe Run - WL 6.8  
 Total Depth 4760 Chlorides 900 ppm System LCM 4  
 Blow Description IF: Blow built to 1 3/4"  
ISI: No blowback  
FF: No blow  
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>Mud w/oil spots</u>	<u>1</u>	<u></u>	<u>99</u>	<u></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 45 BHT 142 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2339  Test 1150 T-On Location 23:05 8/9  
 (B) First Initial Flow 20  Jars 250 T-Started 00:01  
 (C) First Final Flow 28  Safety Joint 75 T-Open 2:21  
 (D) Initial Shut-In 854  Circ Sub \_\_\_\_\_ T-Pulled 5:23  
 (E) Second Initial Flow 30  Hourly Standby \_\_\_\_\_ T-Out 7:45 8/10  
 (F) Second Final Flow 37  Mileage 114 85.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 759  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2302  Straddle \_\_\_\_\_  Ruined Shale Packer 350  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_  
 Final Flow 30  Day Standby \_\_\_\_\_  
 Final Shut-In 60  Accessibility \_\_\_\_\_  
 Sub Total 1810.50 Sub Total 2160.50 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative James Winder  
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