



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.05 @ 21:13:00

End Date: 2014.12.06 @ 05:17:30

Job Ticket #: 62129 DST #: 1

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

Printed: 2014.12.12 @ 14:47:26



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 #1-7

Job Ticket: 62129

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.12.05 @ 21:13:00

GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:27:30

Time Test Ended: 05:17:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4171.00 ft (KB) To 4228.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4228.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8959 Outside

Press@RunDepth: 61.51 psig @ 4172.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.05 End Date: 2014.12.06

Last Calib.: 2014.12.06

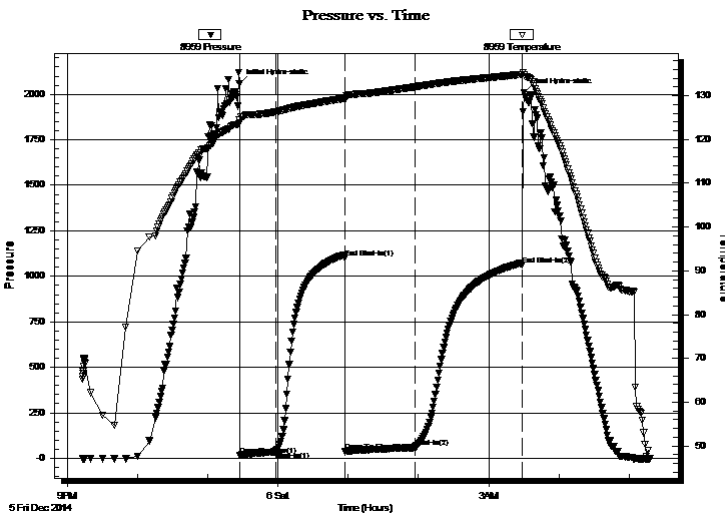
Start Time: 21:13:05 End Time: 05:17:29

Time On Btm: 2014.12.05 @ 23:27:00

Time Off Btm: 2014.12.06 @ 03:30:30

TEST COMMENT: 30 - IF - Strong surface blow built to 3". in 30 min. (In Deisel)
60 - ISI - No return
60 - FF - Surface blow started 12 min. in built to 1". in 48 min.
90 - FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2057.13 | 124.42 | Initial Hydro-static |
| 1 | 16.31 | 123.79 | Open To Flow (1) |
| 31 | 37.64 | 126.31 | Shut-In(1) |
| 90 | 1102.80 | 129.38 | End Shut-In(1) |
| 91 | 40.23 | 129.23 | Open To Flow (2) |
| 150 | 61.51 | 132.02 | Shut-In(2) |
| 242 | 1063.24 | 134.83 | End Shut-In(2) |
| 244 | 2008.59 | 134.67 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 68.00 | OCM - 60M - 40o | 0.33 |
| | | |
| | | |
| | | |
| | | |

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 #1-7

Job Ticket: 62129

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.12.05 @ 21:13:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3951.08 ft | Diameter: 3.80 inches | Volume: 55.42 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: 66000.00 lb |
| | | | <u>Total Volume: 56.43 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 5.00 ft | | | String Weight: Initial 68000.00 lb |
| Depth to Top Packer: | 4171.00 ft | | | Final 64000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 57.00 ft | | | |
| Tool Length: | 76.00 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 | | | 4157.00 | |
| Hydraulic tool | 5.00 | | | 4162.00 | |
| Packer | 5.00 | | | 4167.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4171.00 | |
| Stubb | 1.00 | | | 4172.00 | |
| Recorder | 0.00 | 8521 | Inside | 4172.00 | |
| Recorder | 0.00 | 8959 | Outside | 4172.00 | |
| Perforations | 20.00 | | | 4192.00 | |
| Change Over Sub | 1.00 | | | 4193.00 | |
| Drill Pipe | 31.00 | | | 4224.00 | |
| Change Over Sub | 1.00 | | | 4225.00 | |
| Bullnose | 3.00 | | | 4228.00 | 57.00 Bottom Packers & Anchor |

Total Tool Length: 76.00



**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 #1-7

Job Ticket: 62129

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.12.05 @ 21:13:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 0.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.56 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------|---------------|
| 68.00 | OCM - 60M - 40o | 0.334 |

Total Length: 68.00 ft Total Volume: 0.334 bbl

Num Fluid Samples: 0

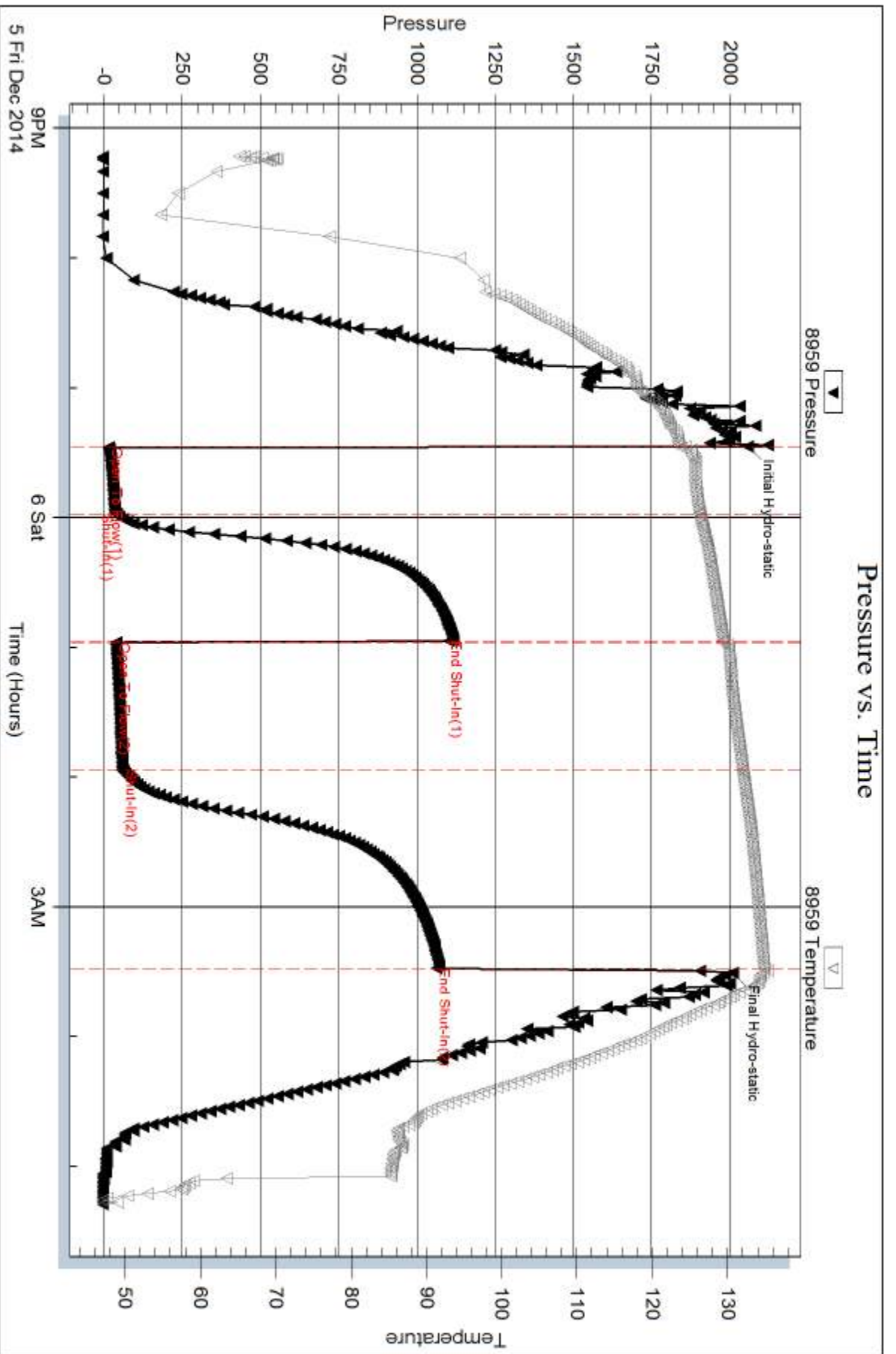
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



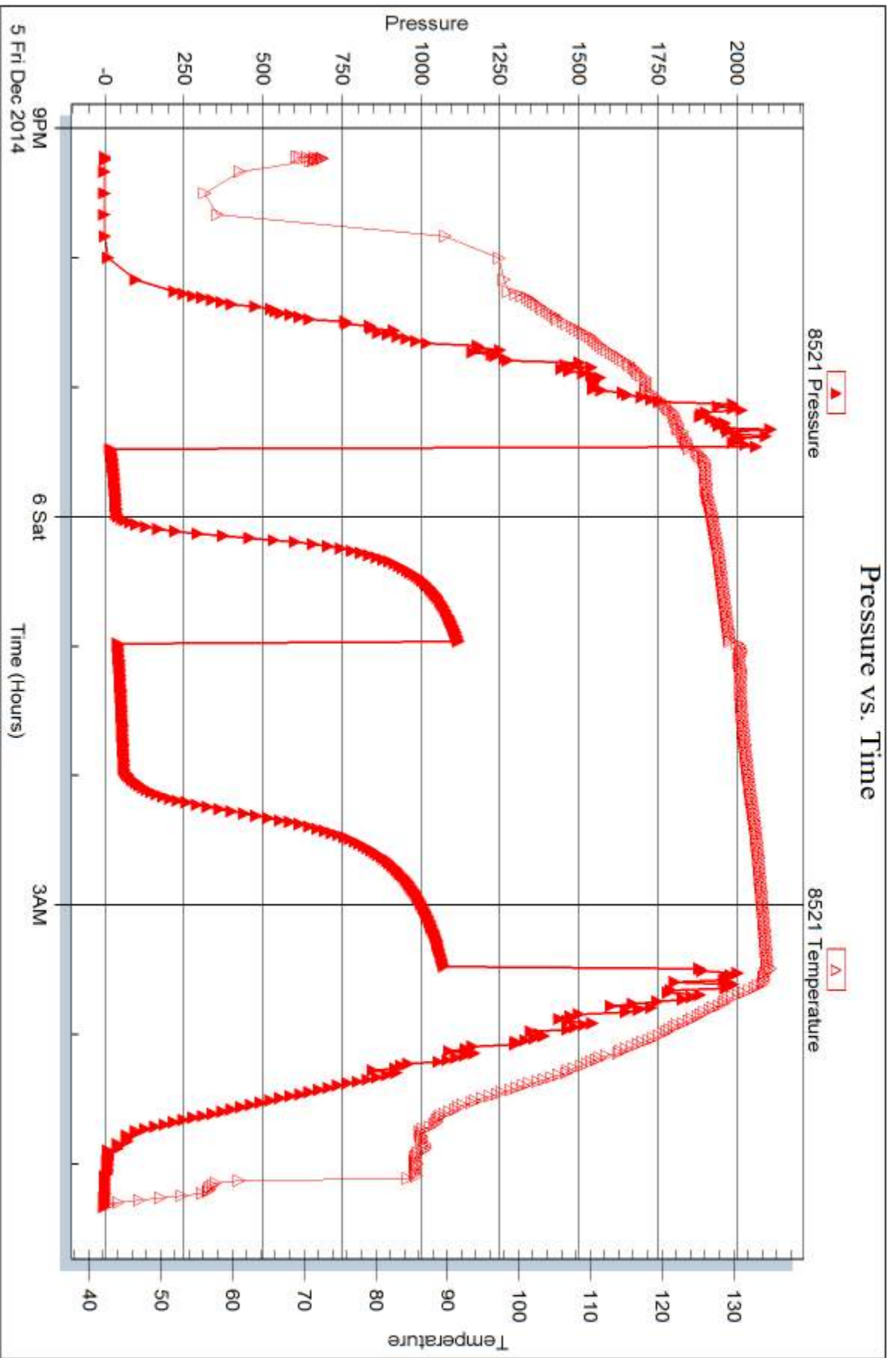
Serial #: 8521

Inside

Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 62129

Printed: 2014.12.12 @ 14:47:28



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.06 @ 16:34:00

End Date: 2014.12.07 @ 00:44:00

Job Ticket #: 62130 DST #: 2

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

Printed: 2014.12.12 @ 14:46:59



**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 #1-7

Job Ticket: 62130

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.12.06 @ 16:34:00

GENERAL INFORMATION:

Formation: **LKC "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:51:00

Time Test Ended: 00:44:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4247.00 ft (KB) To 4330.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8959 Outside

Press@RunDepth: 58.08 psig @ 4248.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.06

End Date:

2014.12.07

Last Calib.:

2014.12.07

Start Time: 16:34:05

End Time:

00:43:59

Time On Btm:

2014.12.06 @ 18:50:00

Time Off Btm:

2014.12.06 @ 22:55:30

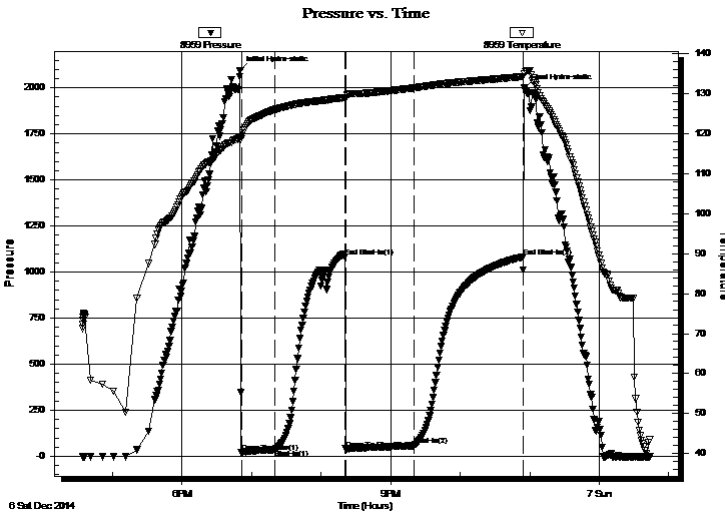
TEST COMMENT: 30 - IF - Weak surface blow built to 6". in 30 min. (In Deisel)

60 - ISI - No return

60 - FF - Weak surface blow built to 7". in 60 min.

90 - FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2094.19 | 119.11 | Initial Hydro-static |
| 1 | 20.36 | 118.76 | Open To Flow (1) |
| 30 | 36.85 | 125.93 | Shut-In(1) |
| 91 | 1082.43 | 128.91 | End Shut-In(1) |
| 91 | 41.51 | 128.64 | Open To Flow (2) |
| 150 | 58.08 | 131.36 | Shut-In(2) |
| 244 | 1082.80 | 134.18 | End Shut-In(2) |
| 246 | 1997.44 | 134.98 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 63.00 | OCM - 35o - 65M | 0.31 |
| | | |
| | | |
| | | |
| | | |

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 #1-7

Job Ticket: 62130

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.12.06 @ 16:34:00

GENERAL INFORMATION:

Formation: **LKC "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:51:00

Time Test Ended: 00:44:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4247.00 ft (KB) To 4330.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8521

Inside

Press@RunDepth: psig @ 4248.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.06

End Date:

2014.12.07

Last Calib.:

2014.12.07

Start Time: 16:34:05

End Time:

00:45:29

Time On Btm:

Time Off Btm:

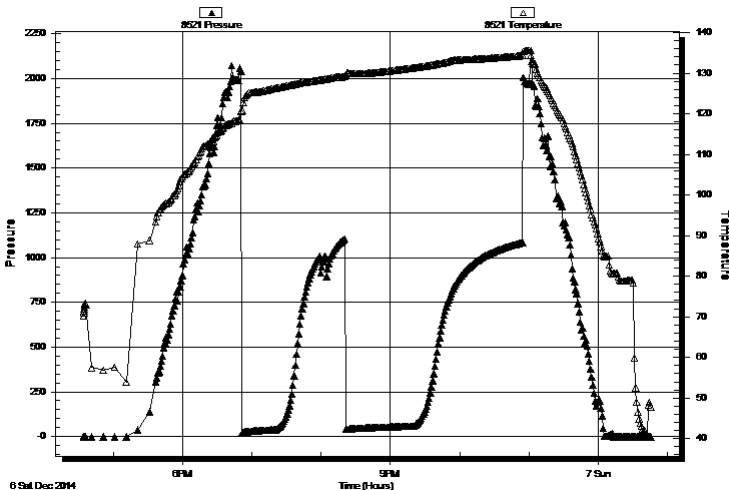
TEST COMMENT: 30 - IF - Weak surface blow built to 6". in 30 min. (In Deisel)

60 - ISI - No return

60 - FF - Weak surface blow built to 7". in 60 min.

90 - FSI - No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 63.00 | OCM - 35o - 65M | 0.31 |
| | | |
| | | |
| | | |
| | | |

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 #1-7

Job Ticket: 62130

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.12.06 @ 16:34:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4045.08 ft | Diameter: 3.80 inches | Volume: 56.74 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: 86000.00 lb |
| | | | <u>Total Volume: 57.75 bbl</u> | Tool Chased 2.00 ft |
| Drill Pipe Above KB: | 23.00 ft | | | String Weight: Initial 66000.00 lb |
| Depth to Top Packer: | 4247.00 ft | | | Final 68000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 83.00 ft | | | |
| Tool Length: | 102.00 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 | | | 4233.00 | |
| Hydraulic tool | 5.00 | | | 4238.00 | |
| Packer | 5.00 | | | 4243.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4247.00 | |
| Stubb | 1.00 | | | 4248.00 | |
| Recorder | 0.00 | 8521 | Inside | 4248.00 | |
| Recorder | 0.00 | 8959 | Outside | 4248.00 | |
| Perforations | 14.00 | | | 4262.00 | |
| Change Over Sub | 1.00 | | | 4263.00 | |
| Drill Pipe | 63.00 | | | 4326.00 | |
| Change Over Sub | 1.00 | | | 4327.00 | |
| Bullnose | 3.00 | | | 4330.00 | 83.00 Bottom Packers & Anchor |

Total Tool Length: 102.00



**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 #1-7

Job Ticket: 62130

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.12.06 @ 16:34:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 0.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------|---------------|
| 63.00 | OCM - 35o - 65M | 0.310 |

Total Length: 63.00 ft Total Volume: 0.310 bbl

Num Fluid Samples: 0

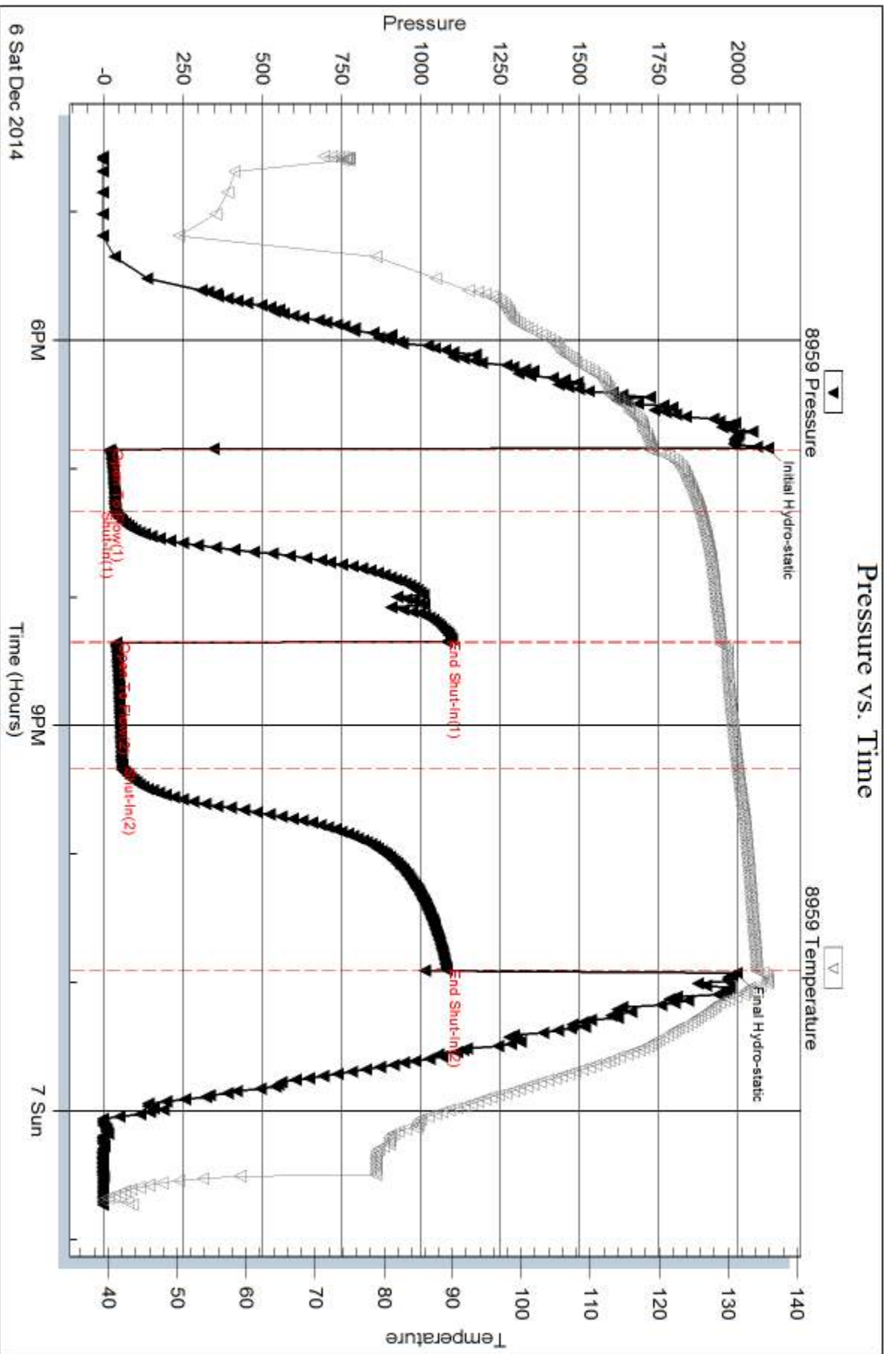
Num Gas Bombs: 0

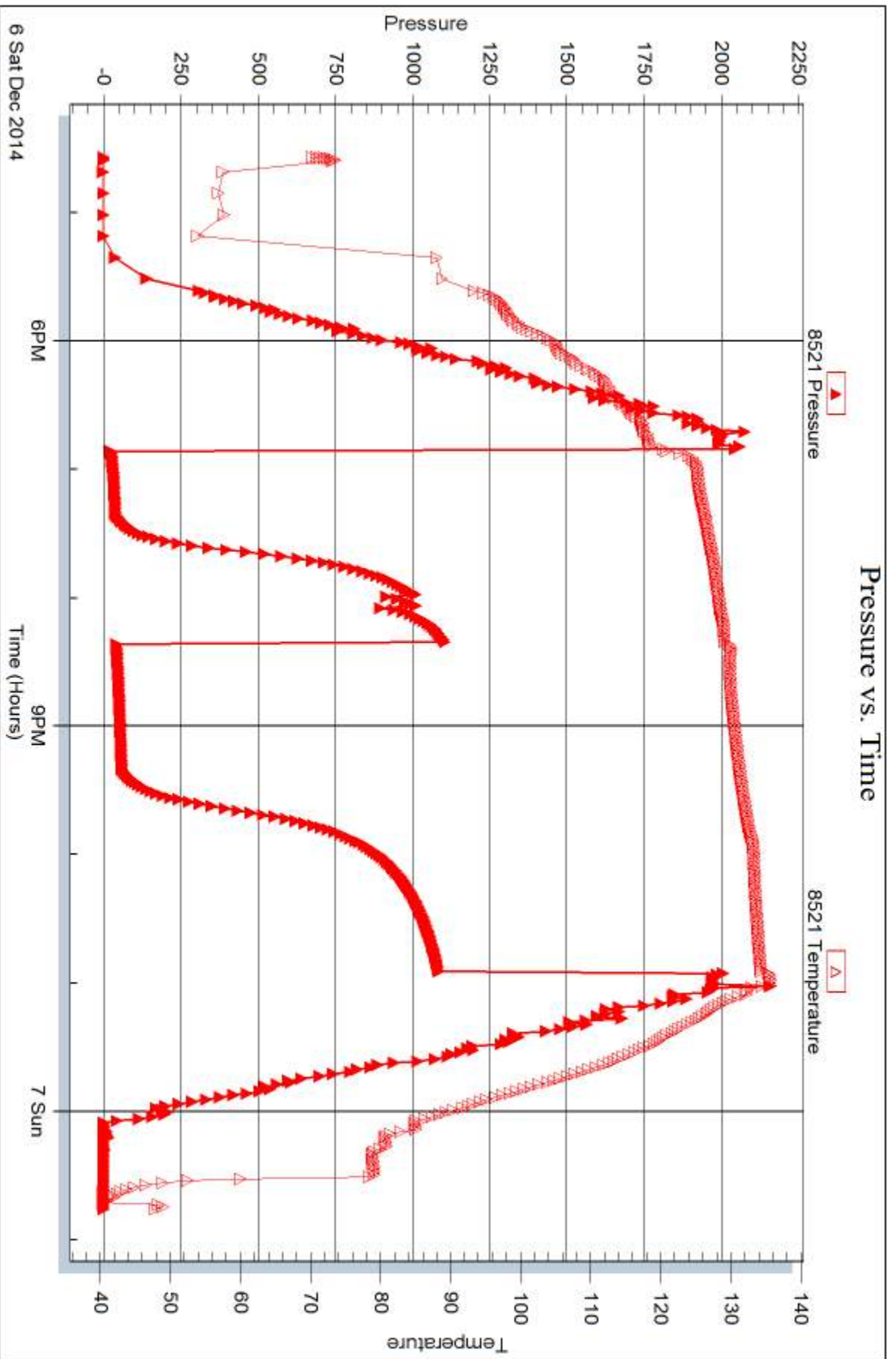
Serial #:

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: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.07 @ 09:04:00

End Date: 2014.12.07 @ 16:12:47

Job Ticket #: 62131 DST #: 3

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

Printed: 2014.12.12 @ 14:46:33

Murfin Drilling CO., Inc 7-2s-36w Rawlins,KS Pancirni #1-7 DST # 3 LKC "D" 2014.12.07



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc
 250 N. Water STE 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

7-2s-36w Rawlins,KS

Pancirni #1-7

Job Ticket: 62131

DST#: 3

Test Start: 2014.12.07 @ 09:04:00

GENERAL INFORMATION:

Formation: **LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:53:30
 Time Test Ended: 16:12:47
 Interval: **4325.00 ft (KB) To 4380.00 ft (KB) (TVD)**
 Total Depth: 4380.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Donovan Baumann
 Unit No: 49
 Reference Elevations: 3381.00 ft (KB)
 3370.00 ft (CF)
 KB to GR/CF: 11.00 ft

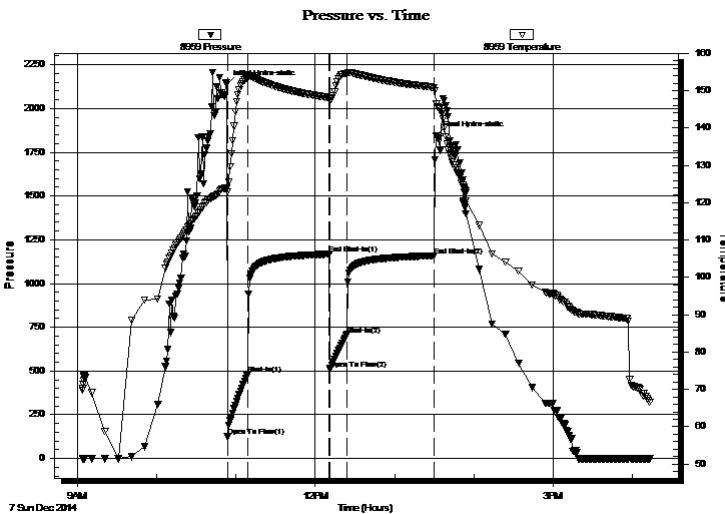
Serial #: 8959

Outside

Press@RunDepth: 708.21 psig @ 4326.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.07 End Date: 2014.12.07 Last Calib.: 2014.12.07
 Start Time: 09:04:05 End Time: 16:12:48 Time On Btm: 2014.12.07 @ 10:53:00
 Time Off Btm: 2014.12.07 @ 13:31:30

TEST COMMENT: 15 - IF - Strong surface blow built to BOB in 1 min. (In Deisel)
 60 - ISI - No return
 15 - FF - Strong surface blow built to BOB in 1 min. (In Deisel)
 60 - FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2135.58 | 123.87 | Initial Hydro-static |
| 1 | 124.50 | 123.02 | Open To Flow (1) |
| 16 | 481.55 | 153.52 | Shut-In(1) |
| 78 | 1168.25 | 148.19 | End Shut-In(1) |
| 78 | 511.65 | 147.87 | Open To Flow (2) |
| 91 | 708.21 | 154.70 | Shut-In(2) |
| 157 | 1156.36 | 150.91 | End Shut-In(2) |
| 159 | 1843.83 | 146.40 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------|--------------|
| 865.00 | OCMW - 5o - 5M - 90W | 10.26 |
| 315.00 | OCM - 30o - 70M | 4.42 |
| 282.00 | MCO - 60o - 40M | 3.96 |
| 0.00 | 30 Feet of gas in pipe | 0.00 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling CO., Inc

7-2s-36w Rawlins,KS

250 N. Water STE 300
Wichita, KS 67202

Pancirni #1-7

Job Ticket: 62131

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.12.07 @ 09:04:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 4108.08 ft | Diameter: 3.80 inches | Volume: 57.63 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: | 100000.0 lb |
| | | | <u>Total Volume: 58.64 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 8.00 ft | | | String Weight: Initial | 68000.00 lb |
| Depth to Top Packer: | 4325.00 ft | | | Final | 74000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 55.00 ft | | | | |
| Tool Length: | 74.00 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 | | | 4311.00 | |
| Hydraulic tool | 5.00 | | | 4316.00 | |
| Packer | 5.00 | | | 4321.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4325.00 | |
| Stubb | 1.00 | | | 4326.00 | |
| Recorder | 0.00 | 8521 | Inside | 4326.00 | |
| Recorder | 0.00 | 8959 | Outside | 4326.00 | |
| Perforations | 18.00 | | | 4344.00 | |
| Change Over Sub | 1.00 | | | 4345.00 | |
| Drill Pipe | 31.00 | | | 4376.00 | |
| Change Over Sub | 1.00 | | | 4377.00 | |
| Bullnose | 3.00 | | | 4380.00 | 55.00 Bottom Packers & Anchor |

Total Tool Length: 74.00



**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 #1-7

Job Ticket: 62131

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.12.07 @ 09:04:00

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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|------------------------|---------------|
| 865.00 | OCMW - 5o - 5M - 90W | 10.258 |
| 315.00 | OCM - 30o - 70M | 4.419 |
| 282.00 | MCO - 60o - 40M | 3.956 |
| 0.00 | 30 Feet of gas in pipe | 0.000 |

Total Length: 1462.00 ft Total Volume: 18.633 bbl

Num Fluid Samples: 0

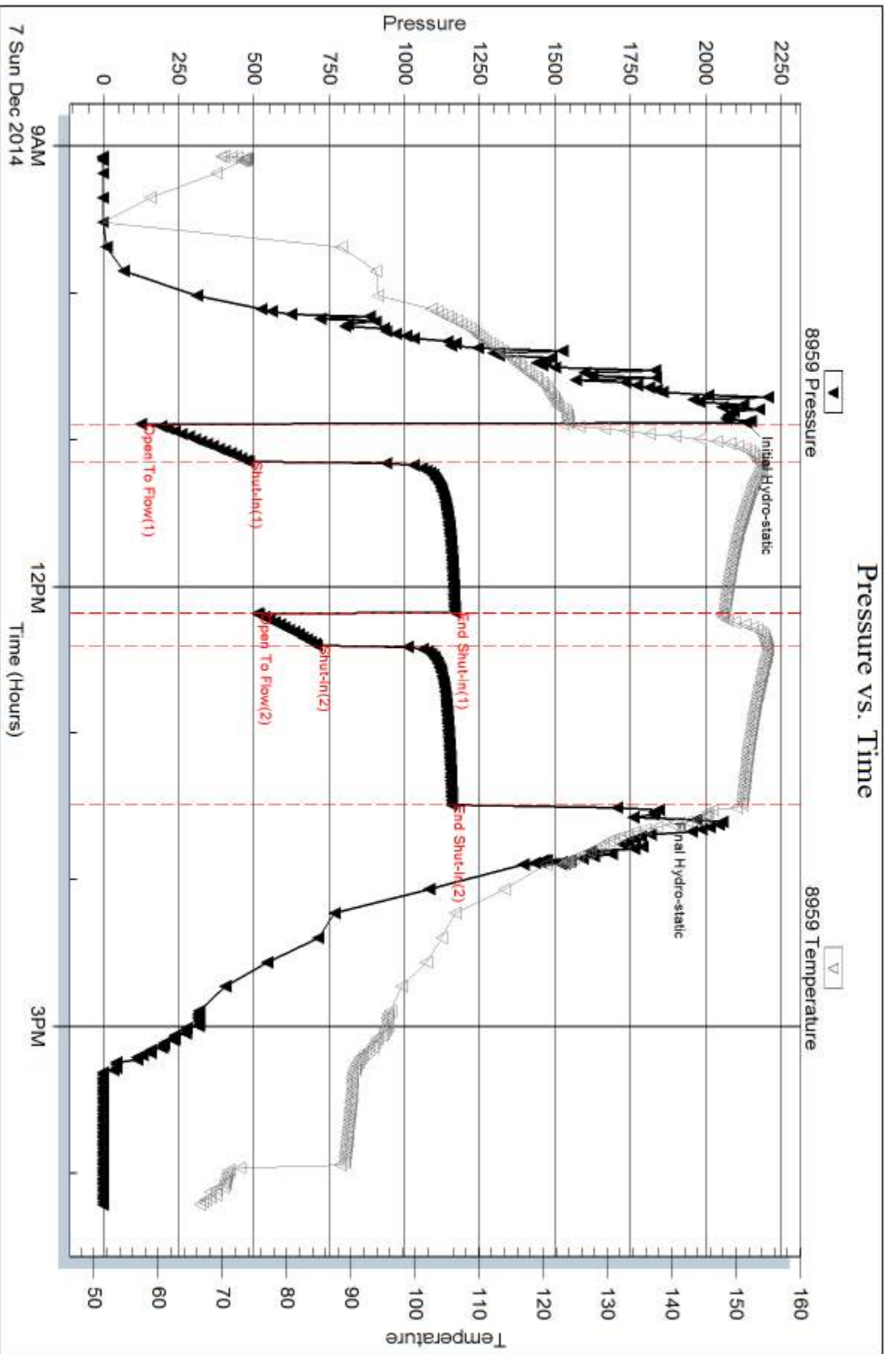
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW - .294 @ 61 deg
27000 ppm



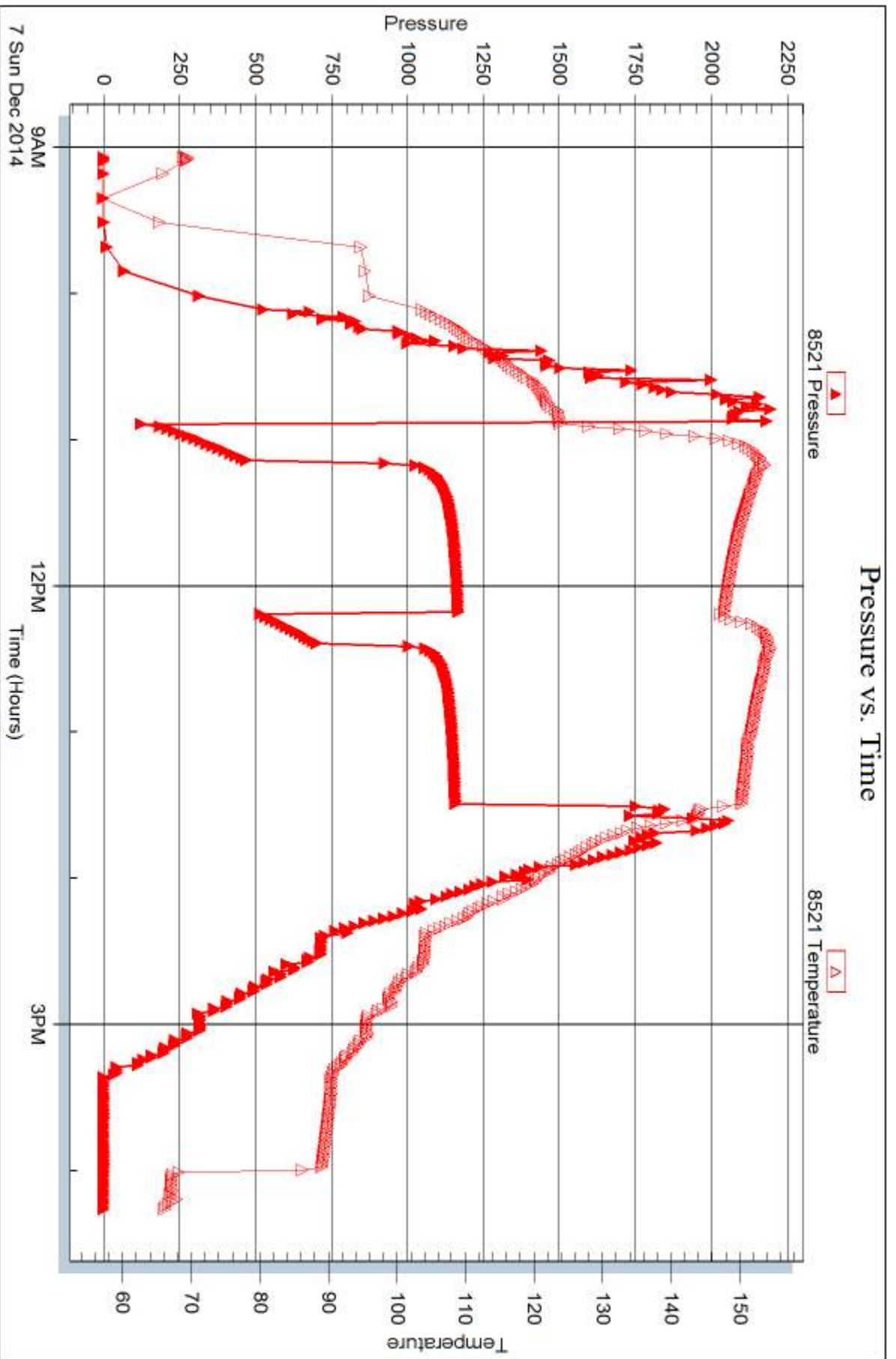
Serial #: 8521

Inside

Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 62131

Printed: 2014, 12, 12 @ 14:46:35



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.08 @ 01:25:00

End Date: 2014.12.08 @ 09:14:17

Job Ticket #: 62132 DST #: 4

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

Printed: 2014.12.12 @ 14:46:10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc

7-2s-36w Rawlins,KS

250 N. Water STE 300
Wichita, KS 67202

Pancirni #1-7

Job Ticket: 62132

DST#: 4

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 01:25:00

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:13:00

Time Test Ended: 09:14:17

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4395.00 ft (KB) To 4435.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4435.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8959 Outside

Press@RunDepth: 15.29 psig @ 4396.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.08

End Date: 2014.12.08

Last Calib.: 2014.12.08

Start Time: 01:25:05

End Time: 09:14:18

Time On Btm: 2014.12.08 @ 03:12:00

Time Off Btm: 2014.12.08 @ 07:19:00

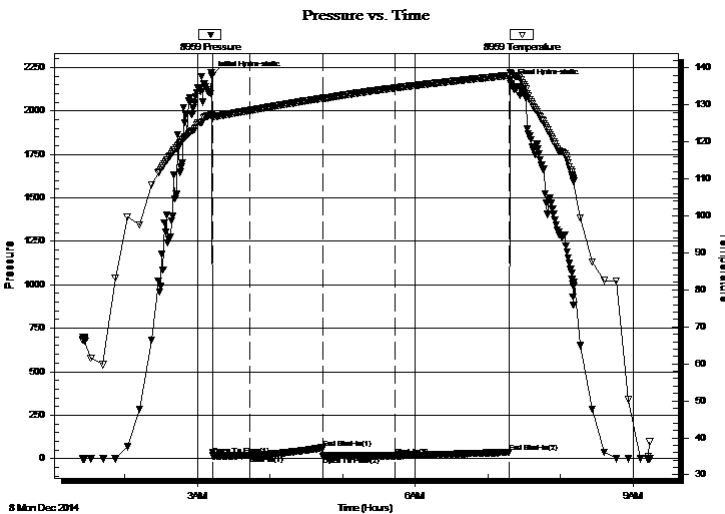
TEST COMMENT: 30 - IF - Weak surface blow built to 1/2 in. in 30 min. (In Deisel)

60 - ISI - No return

60 - FF - No surface blow

90 - FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2205.32 | 127.48 | Initial Hydro-static |
| 1 | 16.01 | 126.96 | Open To Flow (1) |
| 31 | 16.97 | 128.48 | Shut-In(1) |
| 92 | 61.04 | 131.80 | End Shut-In(1) |
| 92 | 14.66 | 131.81 | Open To Flow (2) |
| 151 | 15.29 | 134.58 | Shut-In(2) |
| 246 | 36.28 | 137.95 | End Shut-In(2) |
| 247 | 2155.70 | 138.31 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 3.00 | OCM 30%O 70%M | 0.01 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc
250 N. Water STE 300
Wichita, KS 67202
ATTN: Robert Hendrix

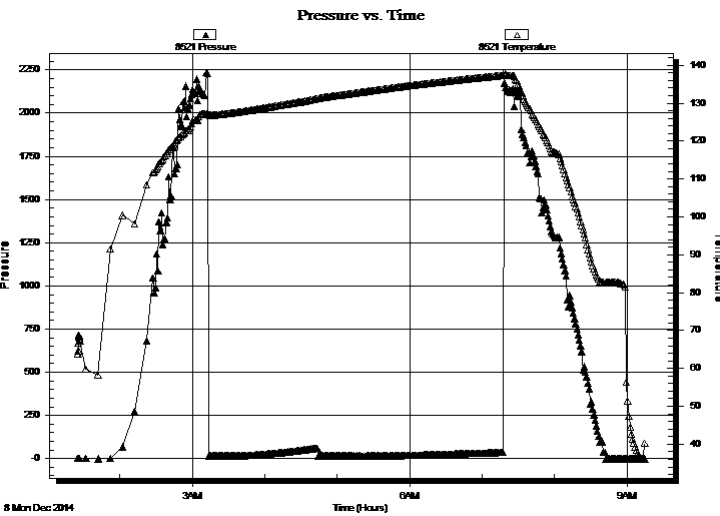
7-2s-36w Rawlins,KS
Pancirni #1-7
Job Ticket: 62132 DST#: 4
Test Start: 2014.12.08 @ 01:25:00

GENERAL INFORMATION:

Formation: LKC "G"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:13:00
Time Test Ended: 09:14:17
Interval: 4395.00 ft (KB) To 4435.00 ft (KB) (TVD)
Total Depth: 4435.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 3381.00 ft (KB)
3370.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8521 Inside
Press@RunDepth: psig @ 4396.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.08 End Date: 2014.12.08 Last Calib.: 2014.12.08
Start Time: 01:25:05 End Time: 09:14:59 Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF - Weak surface blow built to 1/2 in. in 30 min. (In Deisel)
60 - ISI - No return
60 - FF - No surface blow
90 - FSI - No return



PRESSURE SUMMARY

Table with 4 columns: Time (Min.), Pressure (psig), Temp (deg F), Annotation. The table is currently empty.

Recovery

Table with 3 columns: Length (ft), Description, Volume (bbl). Row 1: 3.00, OCM 30%O 70%M, 0.01.

Gas Rates

Table with 4 columns: Choke (inches), Pressure (psig), Gas Rate (Mcf/d). The table is currently empty.



**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 #1-7

Job Ticket: 62132

DST#: 4

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 01:25:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 4202.08 ft | Diameter: 3.80 inches | Volume: 58.94 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: | 80000.00 lb |
| | | | <u>Total Volume: 59.95 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 32.00 ft | | | String Weight: Initial | 68000.00 lb |
| Depth to Top Packer: | 4395.00 ft | | | Final | 68000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 40.00 ft | | | | |
| Tool Length: | 59.00 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 | | | 4381.00 | |
| Hydraulic tool | 5.00 | | | 4386.00 | |
| Packer | 5.00 | | | 4391.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4395.00 | |
| Stubb | 1.00 | | | 4396.00 | |
| Recorder | 0.00 | 8521 | Inside | 4396.00 | |
| Recorder | 0.00 | 8959 | Outside | 4396.00 | |
| Perforations | 36.00 | | | 4432.00 | |
| Bullnose | 3.00 | | | 4435.00 | 40.00 Bottom Packers & Anchor |
| Total Tool Length: | 59.00 | | | | |



**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 #1-7

Job Ticket: 62132

DST#: 4

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 01:25:00

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:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------|---------------|
| 3.00 | OCM 30%O 70%M | 0.015 |

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

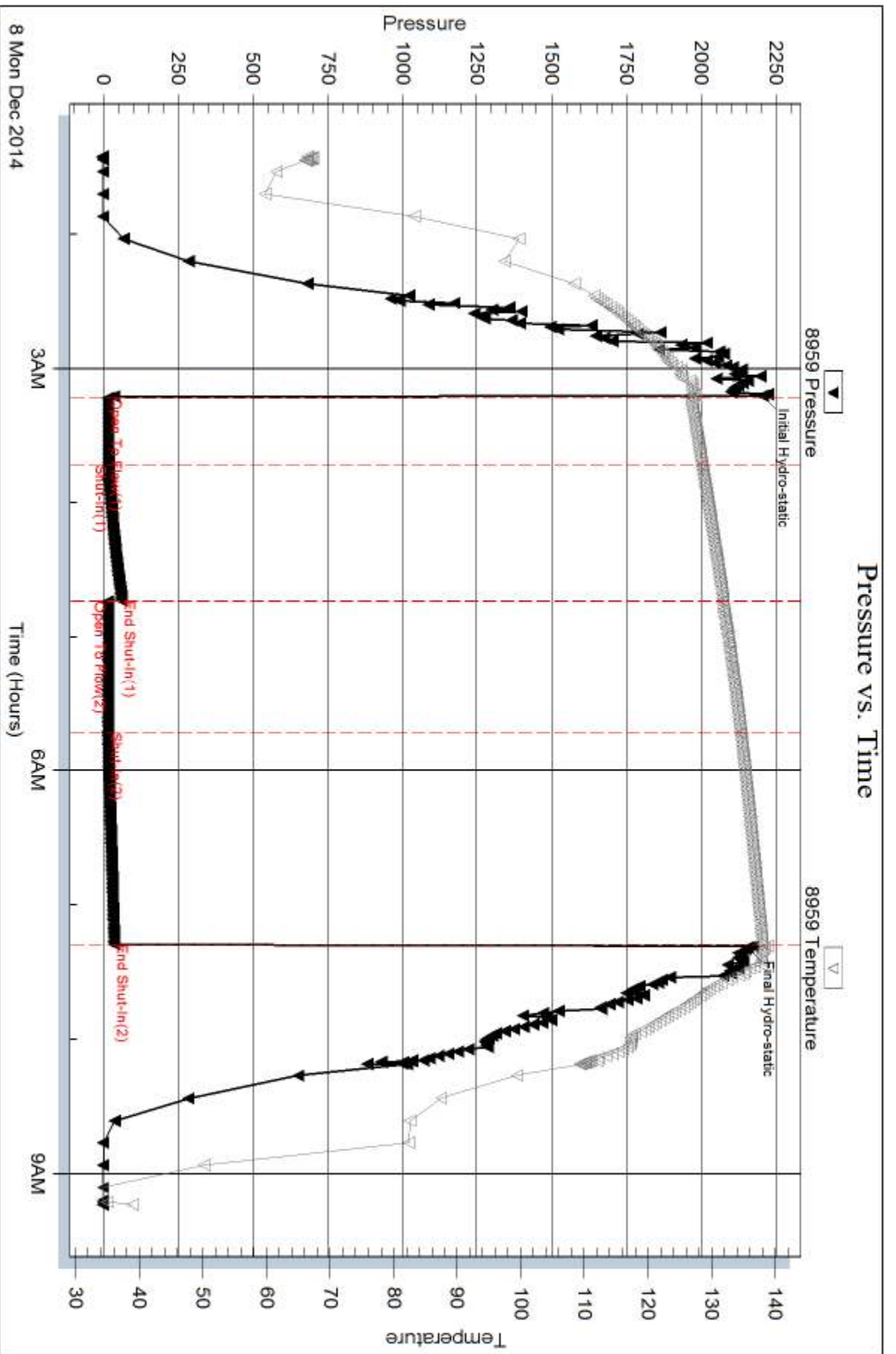
Num Gas Bombs: 0

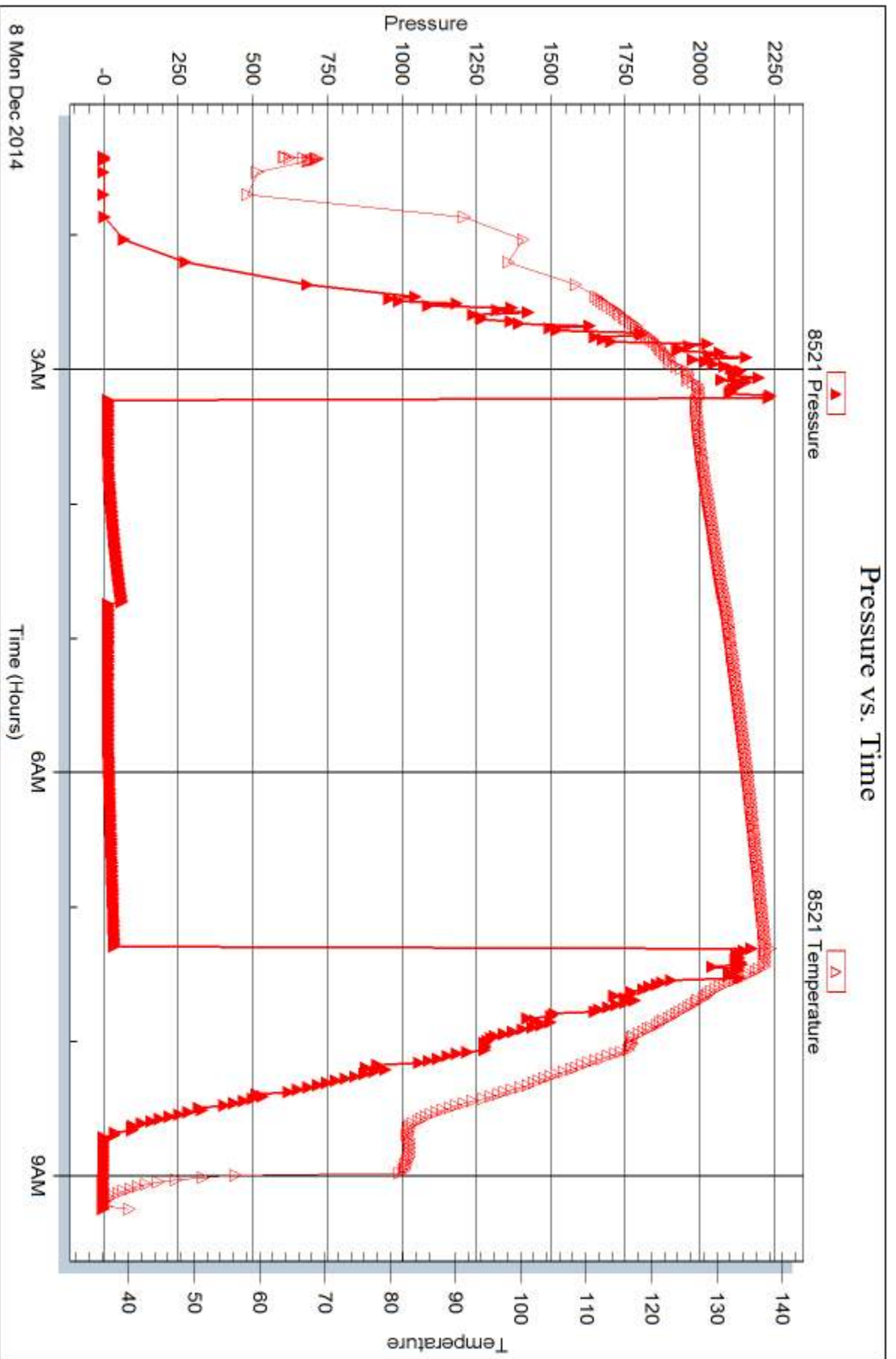
Serial #:

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: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.08 @ 22:56:00

End Date: 2014.12.09 @ 07:27:00

Job Ticket #: 62133 DST #: 5

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

Printed: 2014.12.12 @ 14:45:40



**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 #1-7

Job Ticket: 62133

DST#: 5

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 22:56:00

GENERAL INFORMATION:

Formation: **LKC "H - J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:43:30

Time Test Ended: 07:27:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4432.00 ft (KB) To 4526.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4526.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8959 Outside

Press@RunDepth: 183.67 psig @ 4433.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.08

End Date: 2014.12.09

Last Calib.: 2014.12.09

Start Time: 22:56:05

End Time: 07:26:59

Time On Btm: 2014.12.09 @ 00:43:00

Time Off Btm: 2014.12.09 @ 04:46:00

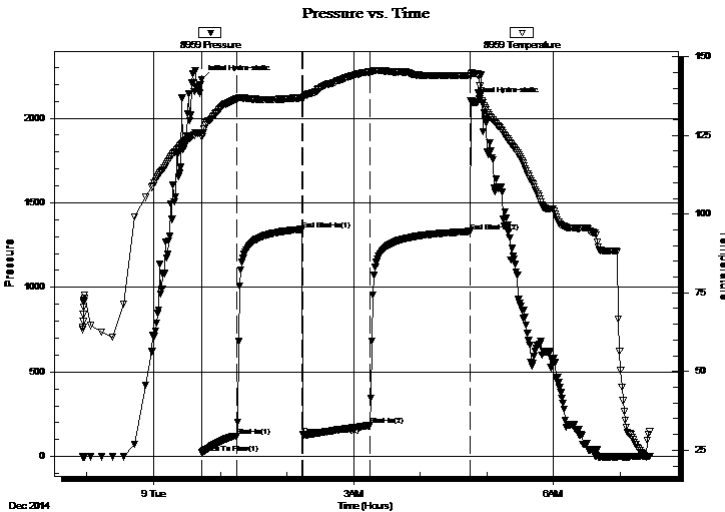
TEST COMMENT: 30 - IF - Strong surface blow built to BOB in 17 min. (In Deisel)

60 - ISI - No return

60 - FF - Weak surface blow built to BOB in 24 min.

90 - FSI - No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2228.43 | 125.94 | Initial Hydro-static |
| 1 | 21.37 | 124.60 | Open To Flow (1) |
| 32 | 120.53 | 136.63 | Shut-In(1) |
| 91 | 1340.01 | 136.91 | End Shut-In(1) |
| 91 | 128.17 | 136.39 | Open To Flow (2) |
| 152 | 183.67 | 145.13 | Shut-In(2) |
| 242 | 1330.35 | 144.08 | End Shut-In(2) |
| 243 | 2098.36 | 144.58 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 118.00 | MCW - 35M - 65W | 0.58 |
| 175.00 | OCM - 30o - 70M - | 1.65 |
| 13.00 | OIL - 100%O | 0.18 |
| 0.00 | 63 Feet gas in pipe | 0.00 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

7-2s-36w Rawlins,KS

Pancirni #1-7

Job Ticket: 62133

DST#: 5

Test Start: 2014.12.08 @ 22:56:00

GENERAL INFORMATION:

Formation: **LKC "H - J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:43:30

Time Test Ended: 07:27:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Donovan Baumann

Unit No: 49

Interval: 4432.00 ft (KB) To 4526.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4526.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8521 Inside

Press@RunDepth: psig @ 4433.00 ft (KB)

Start Date: 2014.12.08

End Date:

2014.12.09

Start Time: 22:56:05

End Time:

07:26:59

Capacity: 8000.00 psig

Last Calib.:

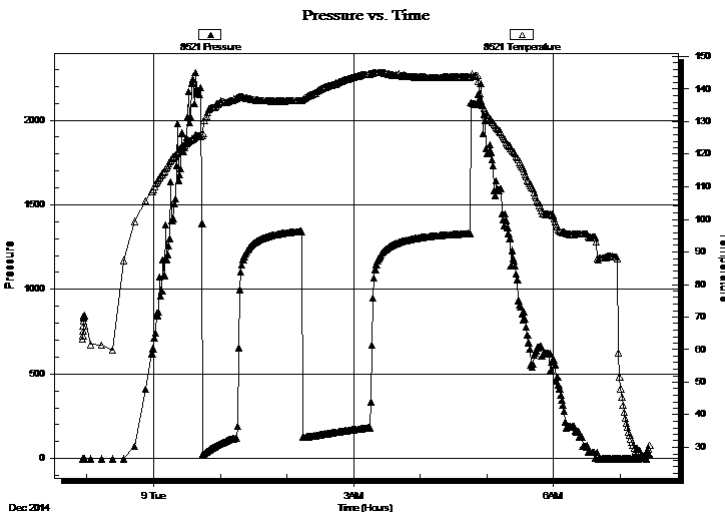
2014.12.09

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF - Strong surface blow built to BOB in 17 min. (In Deisel)
60 - ISI - No return
60 - FF - Weak surface blow built to BOB in 24 min.
90 - FSI - No return

PRESSURE SUMMARY



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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 118.00 | MCW - 35M - 65W | 0.58 |
| 175.00 | OCM - 30o - 70M - | 1.65 |
| 13.00 | OIL - 100%O | 0.18 |
| 0.00 | 63 Feet gas in pipe | 0.00 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling CO., Inc

7-2s-36w Rawlins,KS

250 N. Water STE 300
Wichita, KS 67202

Pancirni #1-7

Job Ticket: 62133

DST#: 5

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 22:56:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4234.08 ft | Diameter: 3.80 inches | Volume: 59.39 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: 74000.00 lb |
| | | | <u>Total Volume: 60.40 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 27.00 ft | | | String Weight: Initial 66000.00 lb |
| Depth to Top Packer: | 4432.00 ft | | | Final 70000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 94.00 ft | | | |
| Tool Length: | 113.00 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 | | | 4418.00 | |
| Hydraulic tool | 5.00 | | | 4423.00 | |
| Packer | 5.00 | | | 4428.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4432.00 | |
| Stubb | 1.00 | | | 4433.00 | |
| Recorder | 0.00 | 8521 | Inside | 4433.00 | |
| Recorder | 0.00 | 8959 | Outside | 4433.00 | |
| Perforations | 25.00 | | | 4458.00 | |
| Change Over Sub | 1.00 | | | 4459.00 | |
| Drill Pipe | 63.00 | | | 4522.00 | |
| Change Over Sub | 1.00 | | | 4523.00 | |
| Bullnose | 3.00 | | | 4526.00 | 94.00 Bottom Packers & Anchor |

Total Tool Length: 113.00



**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 #1-7

Job Ticket: 62133

DST#: 5

ATTN: Robert Hendrix

Test Start: 2014.12.08 @ 22:56:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|---------------------|----------------|
| 118.00 | MCW - 35M - 65W | 0.580 |
| 175.00 | OCM - 30o - 70M - | 1.654 |
| 13.00 | OIL - 100%O | 0.182 |
| 0.00 | 63 Feet gas in pipe | 0.000 |

Total Length: 306.00 ft

Total Volume: 2.416 bbl

Num Fluid Samples: 0

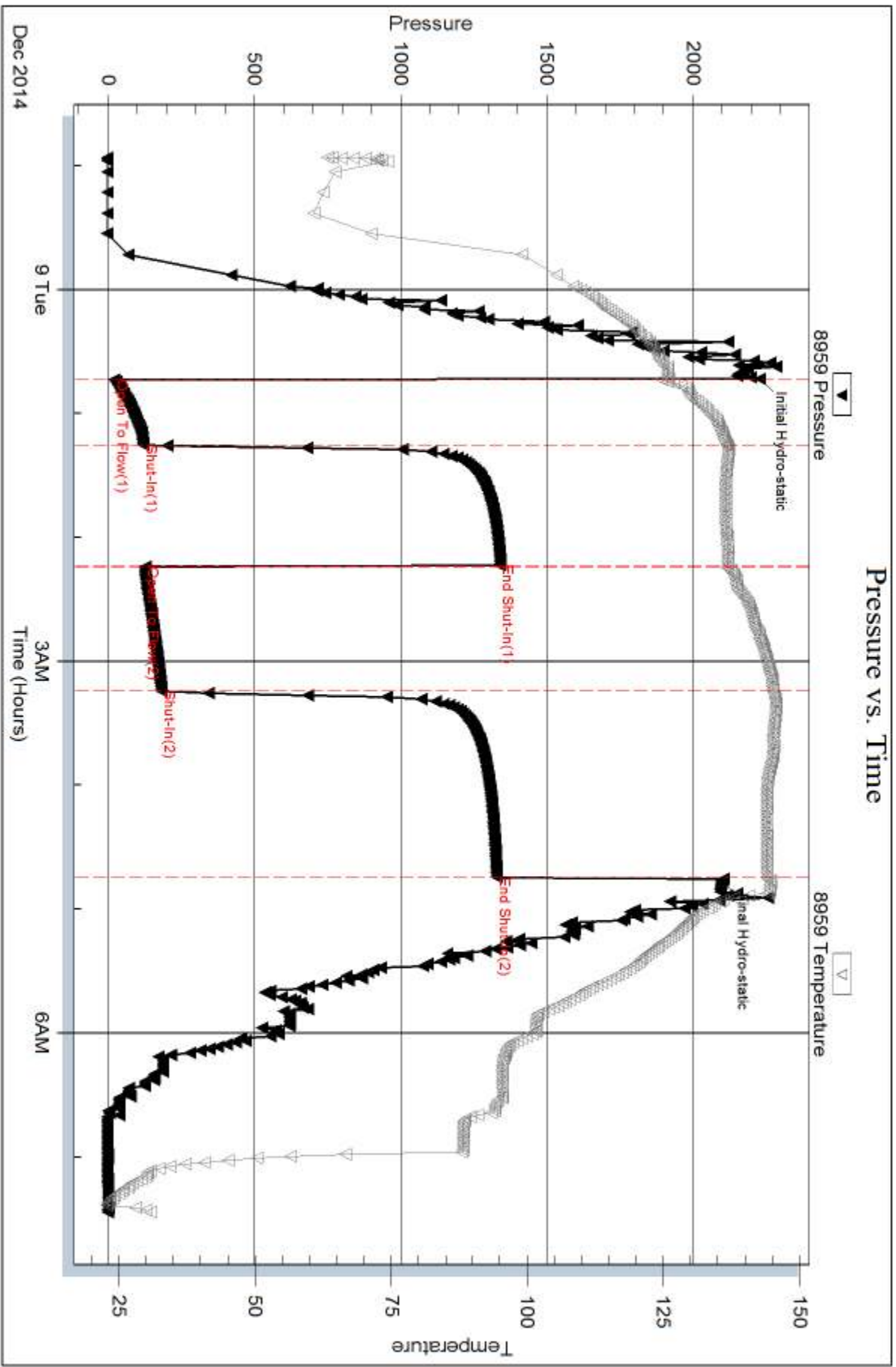
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity - 28



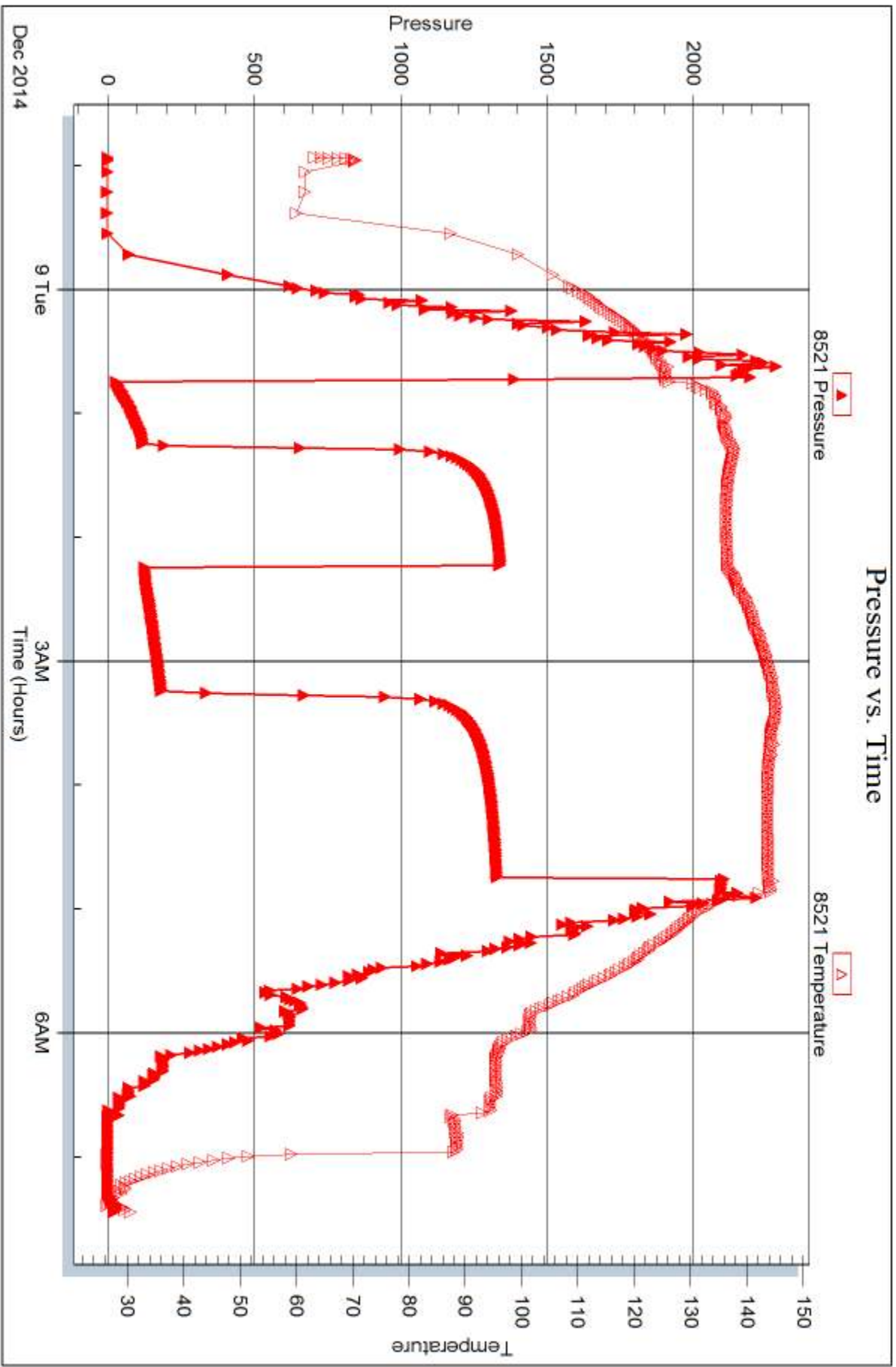
Serial #: 8521

Inside

Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 5





DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.10 @ 05:45:00

End Date: 2014.12.10 @ 12:46:30

Job Ticket #: 62610 DST #: 6

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

Printed: 2014.12.12 @ 14:45:10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc

7-2s-36w Rawlins,KS

250 N. Water STE 300
Wichita, KS 67202

Pancirni #1-7

Job Ticket: 62610

DST#: 6

ATTN: Robert Hendrix

Test Start: 2014.12.10 @ 05:45:00

GENERAL INFORMATION:

Formation: **Marmaton B-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:50:00

Time Test Ended: 12:46:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Robert Zodrow

Unit No: 49

Interval: 4621.00 ft (KB) To 4700.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4700.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8959 Outside

Press@RunDepth: 20.67 psig @ 4622.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.10

End Date:

2014.12.10

Last Calib.: 2014.12.10

Start Time: 05:45:05

End Time:

12:46:29

Time On Btm: 2014.12.10 @ 07:49:30

Time Off Btm: 2014.12.10 @ 10:51:30

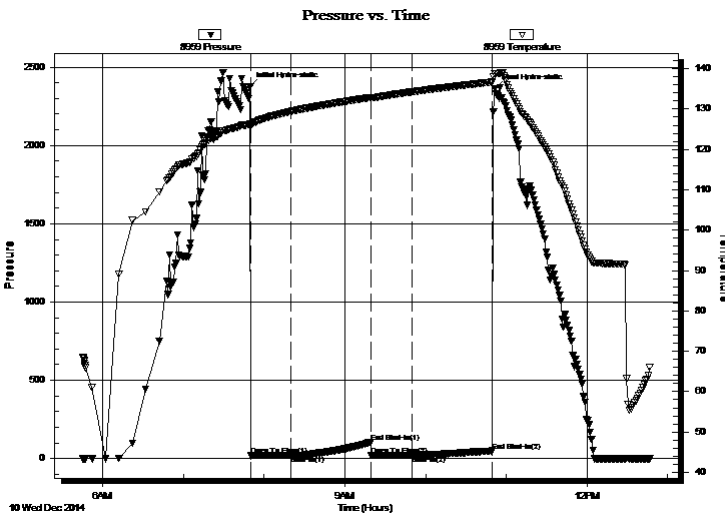
TEST COMMENT: 30-IS- Blow built to 1/2" died back to 1/4"

60-IS- No return

30-FF- No blow

60-FS- No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2377.01 | 126.33 | Initial Hydro-static |
| 1 | 18.38 | 125.56 | Open To Flow (1) |
| 31 | 19.61 | 129.41 | Shut-In(1) |
| 90 | 105.32 | 132.86 | End Shut-In(1) |
| 90 | 20.00 | 132.82 | Open To Flow (2) |
| 120 | 20.67 | 134.23 | Shut-In(2) |
| 180 | 48.81 | 136.69 | End Shut-In(2) |
| 182 | 2365.13 | 138.63 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 2.00 | MUD 100%M | 0.01 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc
 250 N. Water STE 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

7-2s-36w Rawlins,KS

Pancirni #1-7

Job Ticket: 62610 **DST#: 6**
 Test Start: 2014.12.10 @ 05:45:00

GENERAL INFORMATION:

Formation: **Marmaton B-C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:50:00
 Time Test Ended: 12:46:30
 Interval: **4621.00 ft (KB) To 4700.00 ft (KB) (TVD)**
 Total Depth: 4700.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

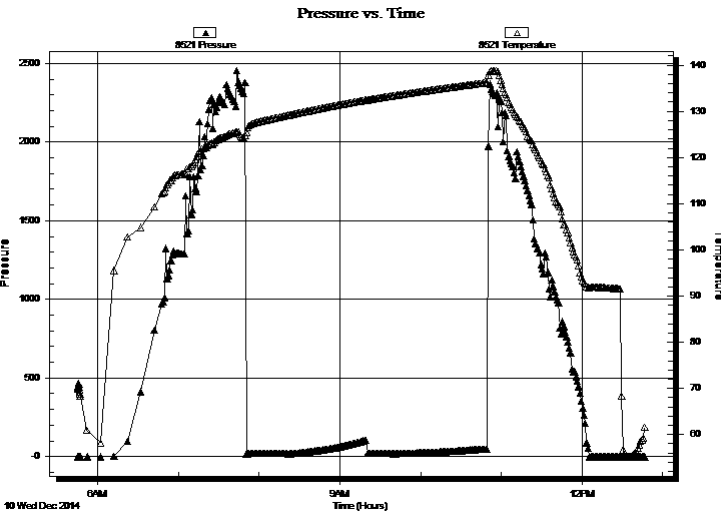
Test Type: Conventional Bottom Hole (Initial)
 Tester: Robert Zodrow
 Unit No: 49
 Reference Elevations: 3381.00 ft (KB)
 3370.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8521

Inside

Press@RunDepth: psig @ 4622.00 ft (KB)
 Start Date: 2014.12.10 End Date: 2014.12.10
 Start Time: 05:45:05 End Time: 12:46:29
 Capacity: 8000.00 psig
 Last Calib.: 2014.12.10
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IF- Blow built to 1/2" died back to 1/4"
 60-ISI- No return
 30-FF- No blow
 60-FSI- No return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 2.00 | MUD 100%M | 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 #1-7

Job Ticket: 62610

DST#: 6

ATTN: Robert Hendrix

Test Start: 2014.12.10 @ 05:45:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 4420.00 ft | Diameter: 3.88 inches | Volume: 64.64 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: 205.00 ft | Diameter: 2.25 inches | Volume: 1.01 bbl | Weight to Pull Loose: | 84000.00 lb |
| | | | <u>Total Volume: 65.65 bbl</u> | Tool Chased | ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial | 70000.00 lb |
| Depth to Top Packer: | 4621.00 ft | | | Final | 70000.00 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 | | | 4599.00 | |
| Hydraulic tool | 5.00 | | | 4604.00 | |
| Jars | 5.00 | | | 4609.00 | |
| Safety Joint | 3.00 | | | 4612.00 | |
| Packer | 5.00 | | | 4617.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4621.00 | |
| Stubb | 1.00 | | | 4622.00 | |
| Recorder | 0.00 | 8521 | Inside | 4622.00 | |
| Recorder | 0.00 | 8959 | Outside | 4622.00 | |
| Perforations | 10.00 | | | 4632.00 | |
| Change Over Sub | 1.00 | | | 4633.00 | |
| Drill Pipe | 63.00 | | | 4696.00 | |
| Change Over Sub | 1.00 | | | 4697.00 | |
| Bullnose | 3.00 | | | 4700.00 | 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 #1-7

Job Ticket: 62610

DST#: 6

ATTN: Robert Hendrix

Test Start: 2014.12.10 @ 05:45:00

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

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 |
|--------------|-------------|---------------|
| 2.00 | MUD 100%M | 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:

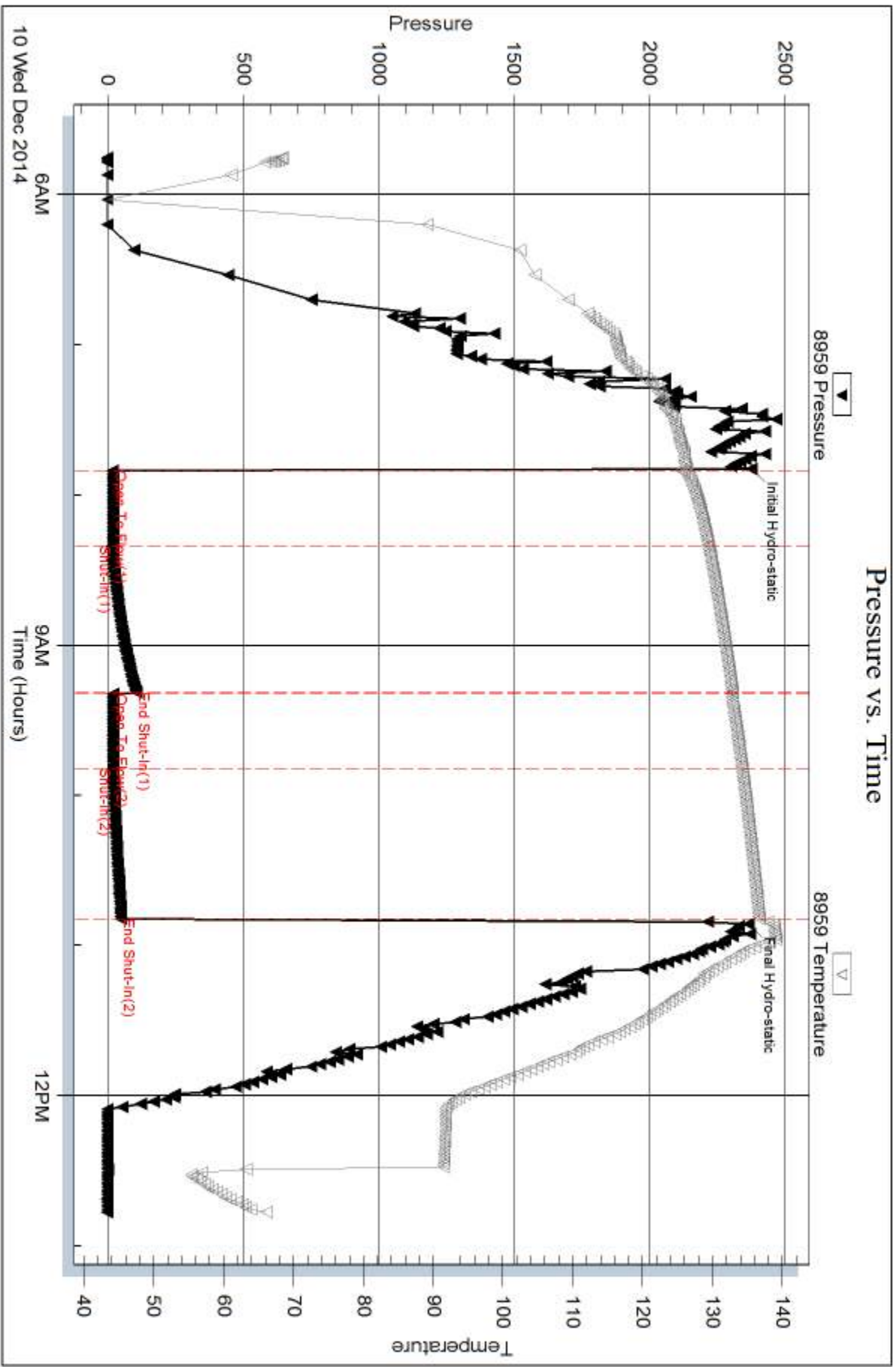
Recovery Comments:

Serial #: 8959

Outside Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 6



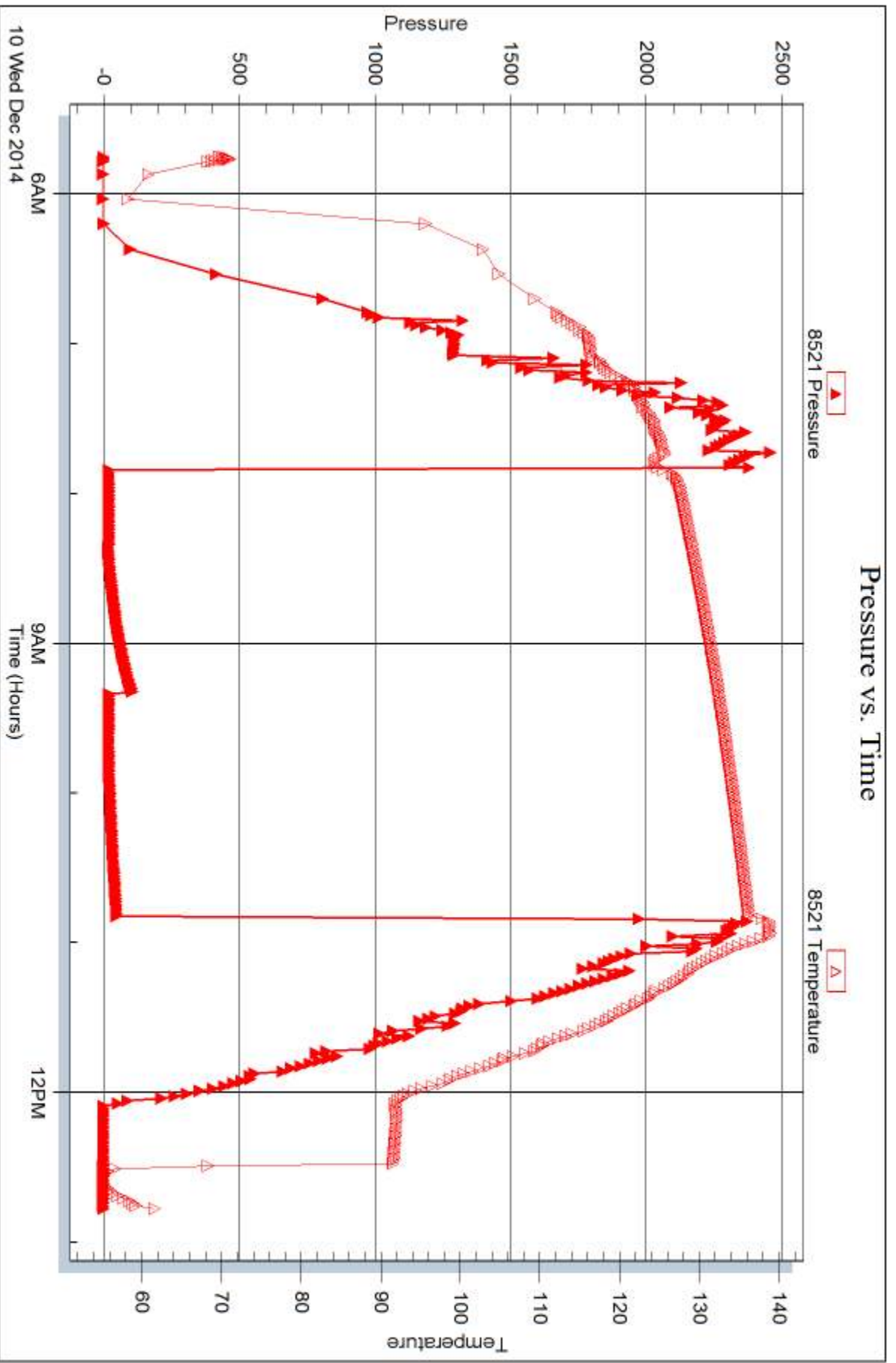
Serial #: 8521

Inside

Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 62610

Printed: 2014.12.12 @ 14:45:11



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 67202

ATTN: Robert Hendrix

Pancirni #1-7

7-2s-36w Rawlins,KS

Start Date: 2014.12.11 @ 00:30:00

End Date: 2014.12.11 @ 06:58:17

Job Ticket #: 62611 DST #: 7

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

Printed: 2014.12.12 @ 14:44:03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO., Inc
 250 N. Water STE 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

7-2s-36w Rawlins,KS

Pancirni #1-7

Job Ticket: 62611

DST#: 7

Test Start: 2014.12.11 @ 00:30:00

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:58:30
 Time Test Ended: 06:58:17
 Interval: **4687.00 ft (KB) To 4754.00 ft (KB) (TVD)**
 Total Depth: 4754.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Robert Zodrow
 Unit No: 49
 Reference Elevations: 3381.00 ft (KB)
 3370.00 ft (CF)
 KB to GR/CF: 11.00 ft

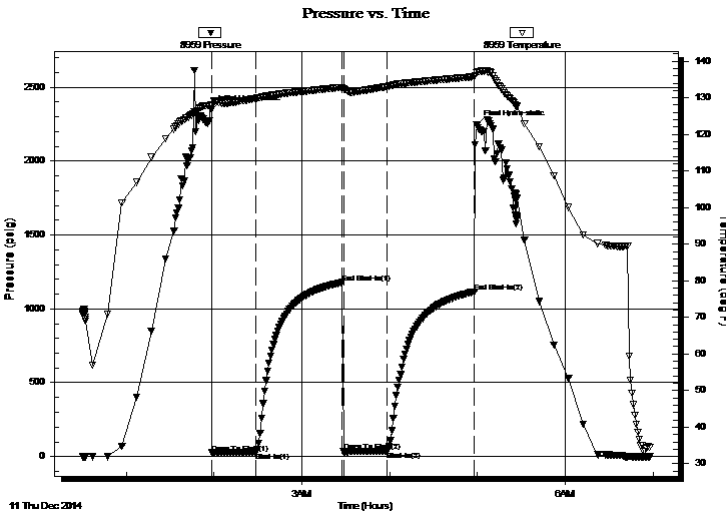
Serial #: 8959

Outside

Press@RunDepth: 38.67 psig @ 4688.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.11 End Date: 2014.12.11 Last Calib.: 2014.12.11
 Start Time: 00:30:05 End Time: 06:58:18 Time On Btm: 2014.12.11 @ 01:58:00
 Time Off Btm: 2014.12.11 @ 04:59:30

TEST COMMENT: 30-IS- Blow built to 1"
 60-IS- No return
 30-FF- No blow
 60-IS- No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2351.56 | 128.07 | Initial Hydro-static |
| 1 | 25.71 | 127.72 | Open To Flow (1) |
| 31 | 30.71 | 129.81 | Shut-In(1) |
| 90 | 1177.84 | 132.84 | End Shut-In(1) |
| 91 | 32.41 | 132.41 | Open To Flow (2) |
| 120 | 38.67 | 133.01 | Shut-In(2) |
| 180 | 1116.04 | 135.74 | End Shut-In(2) |
| 182 | 2244.38 | 136.84 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 10.00 | MUD 100%M | 0.05 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

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 #1-7

Job Ticket: 62611

DST#: 7

ATTN: Robert Hendrix

Test Start: 2014.12.11 @ 00:30:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:58:30

Time Test Ended: 06:58:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 49

Interval: 4687.00 ft (KB) To 4754.00 ft (KB) (TVD)

Reference Elevations: 3381.00 ft (KB)

Total Depth: 4754.00 ft (KB) (TVD)

3370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8521 Inside

Press@RunDepth: psig @ 4688.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.11

End Date:

2014.12.11

Last Calib.:

2014.12.11

Start Time: 00:30:05

End Time:

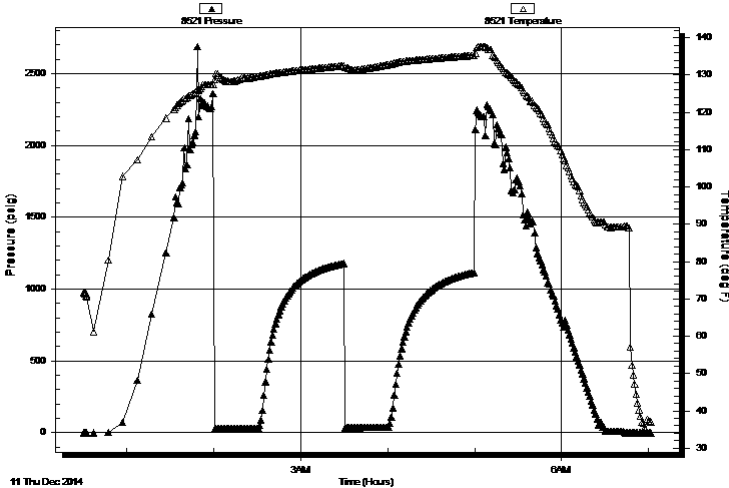
07:01:59

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF- Blow built to 1"
60-ISI- No return
30-FF- No blow
60-ISI- No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 10.00 | MUD 100%M | 0.05 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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

Pancirni #1-7

Job Ticket: 62611

DST#: 7

ATTN: Robert Hendrix

Test Start: 2014.12.11 @ 00:30:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 4479.00 ft | Diameter: 3.88 inches | Volume: 65.50 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: 205.00 ft | Diameter: 2.25 inches | Volume: 1.01 bbl | Weight to Pull Loose: | 76000.00 lb |
| | | | <u>Total Volume: 66.51 bbl</u> | Tool Chased | ft |
| Drill Pipe Above KB: | 24.00 ft | | | String Weight: Initial | 70000.00 lb |
| Depth to Top Packer: | 4687.00 ft | | | Final | 70000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 67.00 ft | | | | |
| Tool Length: | 94.00 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 | | | 4665.00 | |
| Hydraulic tool | 5.00 | | | 4670.00 | |
| Jars | 5.00 | | | 4675.00 | |
| Safety Joint | 3.00 | | | 4678.00 | |
| Packer | 5.00 | | | 4683.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4687.00 | |
| Stubb | 1.00 | | | 4688.00 | |
| Recorder | 0.00 | 8521 | Inside | 4688.00 | |
| Recorder | 0.00 | 8959 | Outside | 4688.00 | |
| Perforations | 30.00 | | | 4718.00 | |
| Change Over Sub | 1.00 | | | 4719.00 | |
| Drill Pipe | 31.00 | | | 4750.00 | |
| Change Over Sub | 1.00 | | | 4751.00 | |
| Bullnose | 3.00 | | | 4754.00 | 67.00 Bottom Packers & Anchor |

Total Tool Length: 94.00



**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 #1-7

Job Ticket: 62611

DST#: 7

ATTN: Robert Hendrix

Test Start: 2014.12.11 @ 00:30:00

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: 7.19 in³

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 |
|--------------|-------------|---------------|
| 10.00 | MUD 100%M | 0.049 |

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

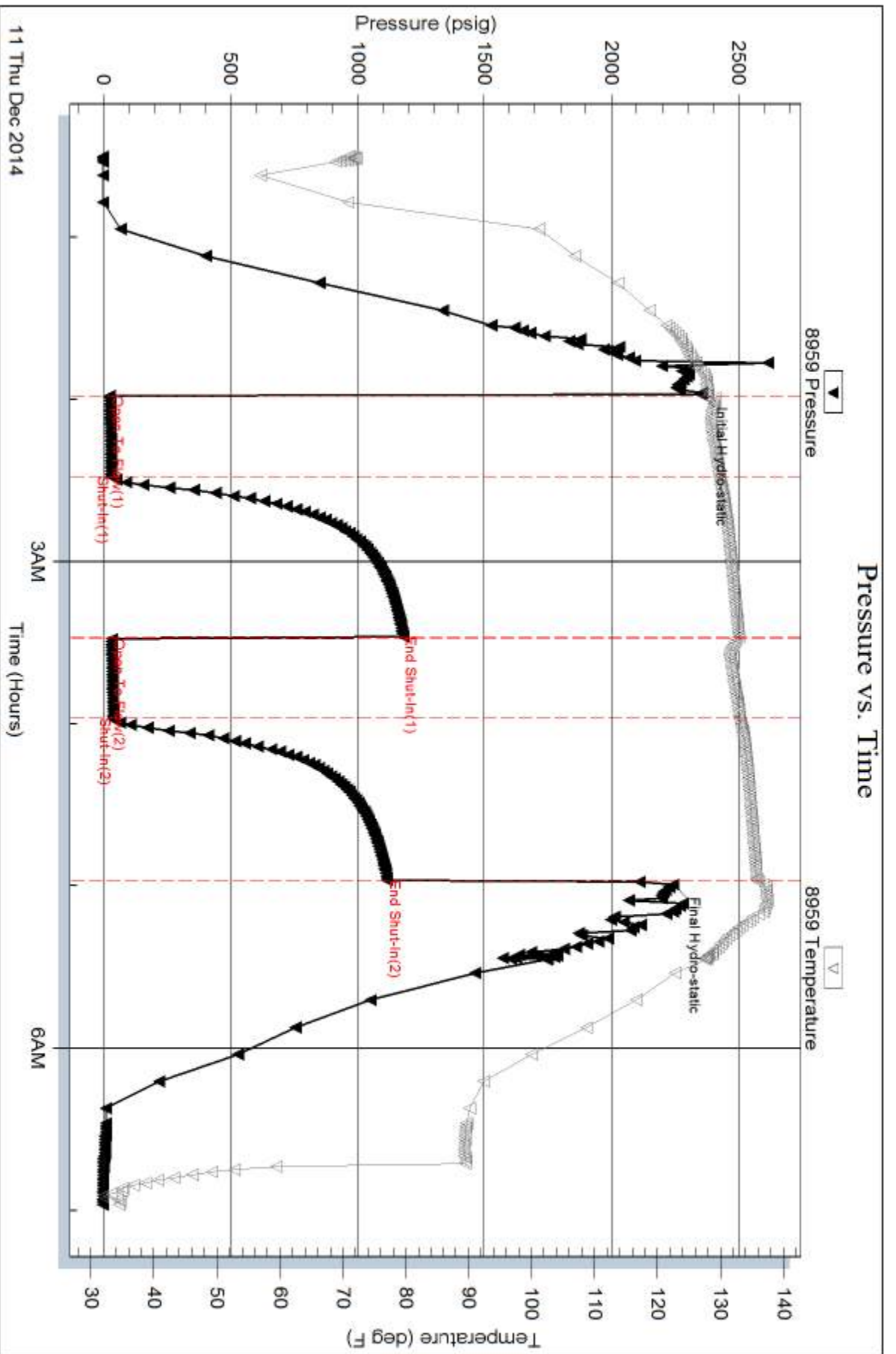
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



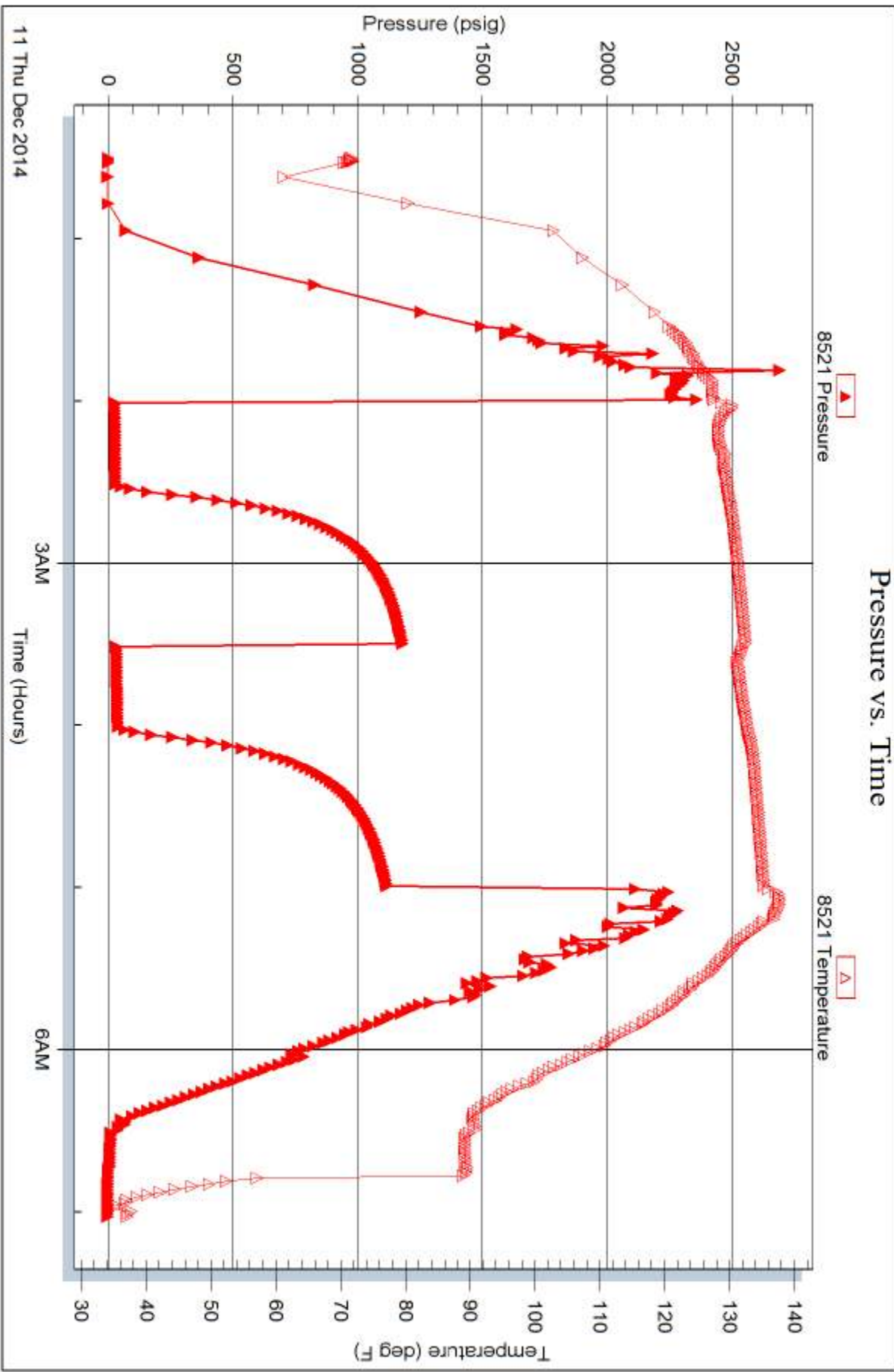
Serial #: 8521

Inside

Murfin Drilling CO., Inc

Pancini #1-7

DST Test Number: 7



Trilobite Testing, Inc

Ref. No: 62611

Printed: 2014.12.12 @ 14:44:04



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62129

Well Name & No. Pancini #1-7 Test No. 1 Date 12-5-14
 Company Murfin Drilling Co. Elevation 3381 KB 3370 GL
 Address 250 N. Water STE 300, Wichita, KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 2S Rge. 36w Co. Rawlins State KS

Interval Tested 4171' - 4228' Zone Tested Oread
 Anchor Length 57' Drill Pipe Run 3951.08 Mud Wt. 1.4836
 Top Packer Depth 4166' Drill Collars Run 205.92 Vis 60
 Bottom Packer Depth 4171' Wt. Pipe Run 0 WL 7.6
 Total Depth 4228' Chlorides 600 ppm System LCM #6
 Blow Description IF - Strong surface blow built to 3 in. in 30 min (IN DEISEL)
ISI - NO return
FF - Surface blow started 12 min. in built to 1 in. in 48 min
FSI - NO return

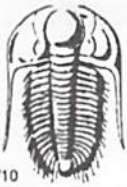
| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------|-----------|----------|-----------|----------|
| <u>68</u> | <u>OCM</u> | <u>40</u> | <u>0</u> | <u>60</u> | <u>0</u> |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 68 BHT 135 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2057 Test 1250 T-On Location 7:30pm
 (B) First Initial Flow 16 Jars 250 T-Started 9:13pm
 (C) First Final Flow 38 Safety Joint 75 T-Open 11:28pm
 (D) Initial Shut-In 1103 Circ Sub N/C T-Pulled 3:28am-12/6
 (E) Second Initial Flow 40 Hourly Standby _____ T-Out 5:20am 12/6
 (F) Second Final Flow 62 Mileage 108 RIT 167.40 Comments _____
 (G) Final Shut-In 1063 Sampler _____
 (H) Final Hydrostatic 2009 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1742.40
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1742.40

Approved By _____ Our Representative Konaran Baumgardner

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. 62130

Well Name & No. Pancinni #1-7 Test No. 2 Date 12-6-14
 Company Murfin Drilling Co., Inc Elevation 3381 KB 3370 GL
 Address 250 N. Water St #300, Wichita, KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4247'-4330' Zone Tested LKC "A"
 Anchor Length 83' Drill Pipe Run 4045.08 Mud Wt. 14680
 Top Packer Depth 4242' Drill Collars Run 205.92 Vis 58
 Bottom Packer Depth 4247' Wt. Pipe Run 0 WL 6.4
 Total Depth 41330' Chlorides 600 ppm System LCM #7
 Blow Description IF-Weak surface blow built to 6 in. in 30 min. CIA Deised
ISI - NO return
FF-Weak surface blow built to 7 in. in 60 min.
FSI - NO return

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------|------|-----------|--------|-----------|
| <u>63</u> | <u>OCM</u> | | <u>35</u> | | <u>65</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 63 BHT 134 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2094 Test 1250 T-On Location 3:23pm
 (B) First Initial Flow 20 Jars 250 T-Started 4:34pm
 (C) First Final Flow 37 Safety Joint 75 T-Open 6:50pm
 (D) Initial Shut-In 1082 Circ Sub N/C T-Pulled 10:54pm
 (E) Second Initial Flow 42 Hourly Standby _____ T-Out 12:46 am 12-7
 (F) Second Final Flow 58 Mileage 108 R/T 167.40 Comments _____
 (G) Final Shut-In 1083 Sampler _____
 (H) Final Hydrostatic 1997 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1742.40
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1742.40

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. 62131

Well Name & No. Pancirni # 1-7 Test No. 3 Date 12-7-14
 Company Murfin Drilling Co. Inc. Elevation 3381 KB 3370 GL
 Address 250 N. Water STE 300, Wichita, KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 25 Rge. 36W Co. Rawlins State KS

Interval Tested 4325' - 4380' Zone Tested LKC "D"
 Anchor Length 55' Drill Pipe Run 4108.08 Mud Wt. ~~11.6~~ 9.1
 Top Packer Depth 4320 Drill Collars Run 205.92 Vis ~~5.8~~ 6.1
 Bottom Packer Depth 4325 Wt. Pipe Run 0 WL ~~6.4~~ 6.8
 Total Depth 4380 Chlorides 600 ppm System LCM ~~#7~~ #8

Blow Description IF - Strong surface blow built to BOB in 1 min. (In Deisel)
ISI - NO return
FF - Strong surface blow built to BOB in 1 min (In Deisel)
FSI - NO return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|--------------------|-----------|------|-----------|----------|
| <u>282</u> | <u>MCO</u> | <u>60</u> | | <u>40</u> | |
| <u>315</u> | <u>OCM</u> | <u>30</u> | | <u>70</u> | |
| <u>865</u> | <u>OCMW</u> | <u>5</u> | | <u>90</u> | <u>5</u> |
| <u>30</u> | <u>gas in pipe</u> | | | | |

Rec Total 1462 BHT 151 Gravity _____ API RW .294 @ 61° F Chlorides 27000 ppm

(A) Initial Hydrostatic 2136 Test 1250' T-On Location 8:20am
 (B) First Initial Flow 125 Jars 250 T-Started 9:04am
 (C) First Final Flow 482 Safety Joint 75 T-Open 10:54am
 (D) Initial Shut-In 1168 Circ Sub N/C T-Pulled 1:29pm
 (E) Second Initial Flow 512 Hourly Standby _____ T-Out 4:16pm
 (F) Second Final Flow 708 Mileage 108 RT 167.40
 (G) Final Shut-In 1156 Sampler _____
 (H) Final Hydrostatic 1844 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 15
 Initial Shut-In 60
 Final Flow 15
 Final Shut-In 60

Comments _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1742.40
 MP/DST Disc't _____

Sub Total 1742.40

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. 62132

Well Name & No. Pancirni #1-7 Test No. 4 Date 12-8-14
 Company Murfin Drilling Co., Inc Elevation 3381 KB 3370 GL
 Address 250 N. Water STE 300, Wichita, KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 25 Rge. 36w Co. Rawlins State KS

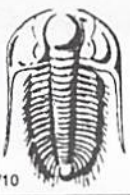
Interval Tested 4395'-4435' Zone Tested LKC 'G'
 Anchor Length 40' Drill Pipe Run 4202.08 Mud Wt. 9.1
 Top Packer Depth 4390' Drill Collars Run 205.92 Vis 61
 Bottom Packer Depth 4395' Wt. Pipe Run 0 WL 6.8
 Total Depth 4435' Chlorides 600 ppm System LCM #8
 Blow Description IF - weak surface blow built to 1/2 in. in 30 min. (In Deisel)
ISI - No return
FF - no surface blow
FSI - No return

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----|---------|------|------|--------|------|
| 3 | OCM | | 30% | | 70% |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 3 BHT 138 Gravity 1250 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 22.05 Test 1250 T-On Location 12:40am
 (B) First Initial Flow 16 Jars 250 T-Started 1:25am
 (C) First Final Flow 17 Safety Joint 75 T-Open 3:13am
 (D) Initial Shut-In 61 Circ Sub N/C T-Pulled 7:16am
 (E) Second Initial Flow 15 Hourly Standby _____ T-Out 9:15am
 (F) Second Final Flow 36.15 Mileage 108 R/T 167.40 Comments _____
 (G) Final Shut-In 36 Sampler _____
 (H) Final Hydrostatic 2156 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1742.40
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1742.40

Approved By _____ Our Representative Robert Hendrix

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. 62133

Well Name & No. Pancini #1-7 Test No. 5 Date 12-8-14
 Company Murfin Drilling Co, Inc. Elevation 3381 KB 3370 GL
 Address 250 N. Water St #300, Wichita, KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 2S Rge. 36w Co. Rawlins State KS

Interval Tested 4432'-4526' Zone Tested LKC "H-5"
 Anchor Length 94' Drill Pipe Run 4234.08 Mud Wt. 9.3
 Top Packer Depth 4427' Drill Collars Run 205.92 Vis 53
 Bottom Packer Depth 4432' Wt. Pipe Run 0 WL 6.4
 Total Depth 4526' Chlorides 700 ppm System LCM #6
 Blow Description IF - Strong surface blow built to BOB in 17 min. (In Deisel)
IST - No return
FF - weak surface blow built to BOB in 24 min.
FST - No return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|--------------------|------|------------|-----------|-----------|
| <u>13</u> | <u>oil</u> | | <u>100</u> | | |
| <u>175</u> | <u>OCM</u> | | <u>30</u> | | <u>70</u> |
| <u>118</u> | <u>mcw</u> | | | <u>65</u> | <u>35</u> |
| <u>63</u> | <u>gas in pipe</u> | | | | |
| | | | | | |

Rec Total 306 BHT 144 Gravity 2.8 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2228 Test 1250 T-On Location 10:02 pm
 (B) First Initial Flow 21 Jars 250 T-Started 10:56 pm
 (C) First Final Flow 121 Safety Joint 75 T-Open 12:44 am 12-9
 (D) Initial Shut-In 1340 Circ Sub N/C T-Pulled 4:44 am 12-9
 (E) Second Initial Flow 128 Hourly Standby _____ T-Out 7:27 am 12-9
 (F) Second Final Flow 184 Mileage 108 R/T 167.40 Comments _____
 (G) Final Shut-In 1330 Sampler _____
 (H) Final Hydrostatic 2098 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1742.40

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

Sub Total _____
 Total 1742.40
 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. 62610

Well Name & No. Paniciini #1-7 Test No. 6 Date 12-10-2014
 Company Murfin Drilling CO Inc Elevation 3381 KB 3370 GL
 Address 250 N Water STE 300 Wichita KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 2 Rge. 36W Co. Rawlins State KS

Interval Tested 4621 — 4700 Zone Tested Marmaton B-C
 Anchor Length 79 Drill Pipe Run 4420 Mud Wt. 9.0
 Top Packer Depth 4617 Drill Collars Run 205 Vis 58
 Bottom Packer Depth 4621 Wt. Pipe Run 0 WL 6.0
 Total Depth 4700 Chlorides 700 ppm System LCM 6.0
 Blow Description IF - Blow built to 1/2" died back to 1/4"
ISI - NO return
FF - NO Blow
FSI - 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 137 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|--|--|
| (A) Initial Hydrostatic <u>2377</u> | <input checked="" type="checkbox"/> Test <u>1250</u> | T-On Location <u>05:00 12-10</u> |
| (B) First Initial Flow <u>18</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>05:45 12-10</u> |
| (C) First Final Flow <u>19</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>07:50 12-10</u> |
| (D) Initial Shut-In <u>105</u> | <input type="checkbox"/> Circ Sub | T-Pulled <u>10:49 12-10</u> |
| (E) Second Initial Flow <u>20</u> | <input type="checkbox"/> Hourly Standby | T-Out <u>12:46 12-10</u> |
| (F) Second Final Flow <u>21</u> | <input checked="" type="checkbox"/> Mileage <u>108 RT</u> 167.40 | Comments |
| (G) Final Shut-In <u>49</u> | <input type="checkbox"/> Sampler | |
| (H) Final Hydrostatic <u>2365</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>1742.40</u> |
| | <input type="checkbox"/> Accessibility | MP/DST Disc't |
| | Sub Total <u>1742.40</u> | |

Approved By [Signature] Our Representative Robert Zelenow
 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. 62611

Well Name & No. Pancirni #1-7 Test No. 7 Date 12-11-2014
 Company Murfin Drilling CO Inc Elevation 3381 KB 3370 GL
 Address 250 N water STE 300 Wichita KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 7 Twp. 2 Rge. 36w Co. Rawlins State K5

Interval Tested 4687 — 4754 Zone Tested Pawnee
 Anchor Length 67 Drill Pipe Run 4479 Mud Wt. 9.2
 Top Packer Depth 4683 Drill Collars Run 205 Vis 6.2
 Bottom Packer Depth 4687 Wt. Pipe Run 0 WL 7.2
 Total Depth 4754 Chlorides 700 ppm System LCM 16
 Blow Description FF - Blow built 102"
ISE - No return
FF - No blow
FSE - No return

| 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 136 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>2351</u> | <input checked="" type="checkbox"/> Test <u>1250</u> | T-On Location <u>00:05 12-11</u> |
| (B) First Initial Flow <u>26</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>00:30 12-11</u> |
| (C) First Final Flow <u>31</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>01:58 12-11</u> |
| (D) Initial Shut-In <u>1178</u> | <input type="checkbox"/> Circ Sub | T-Pulled <u>04:58 12-11</u> |
| (E) Second Initial Flow <u>32</u> | <input type="checkbox"/> Hourly Standby | T-Out <u>06:58 12-11</u> |
| (F) Second Final Flow <u>39</u> | <input checked="" type="checkbox"/> Mileage <u>108 RT X 2</u> | Comments <u>Loaded 100 L</u> |
| (G) Final Shut-In <u>1116</u> | <input type="checkbox"/> Sampler <u>334.80</u> | <u>at 19:30 on 12-11-2014</u> |
| (H) Final Hydrostatic <u>2244</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>1909.80</u> |
| | <input type="checkbox"/> Accessibility | MP/DST Disc't |
| | Sub Total <u>1909.80</u> | |

Approved By R. D. Hays Our Representative Robert Zoznow
 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.