



DRILL STEM TEST REPORT

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

250 N Water STE 300
Wichita KS 67202

ATTN: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.18 @ 09:50:23

End Date: 2014.03.18 @ 18:12:08

Job Ticket #: 56415 DST #: 1

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

Printed: 2014.03.25 @ 16:31:19



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
 250 N Water STE 300
 Wichita KS 67202
 ATTN: Rocky Milford

23-2s-36w Rawlins,KS

Frisbie #3-23

Job Ticket: 56415

DST#: 1

Test Start: 2014.03.18 @ 09:50:23

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:41:08

Time Test Ended: 18:12:08

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 65

Interval: **4010.00 ft (KB) To 4050.00 ft (KB) (TVD)**

Reference Elevations: 3314.00 ft (KB)

Total Depth: 4050.00 ft (KB) (TVD)

3309.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8846

Inside

Press@RunDepth: 105.24 psig @ 4012.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.18

End Date:

2014.03.18

Last Calib.: 2014.03.18

Start Time: 09:50:23

End Time:

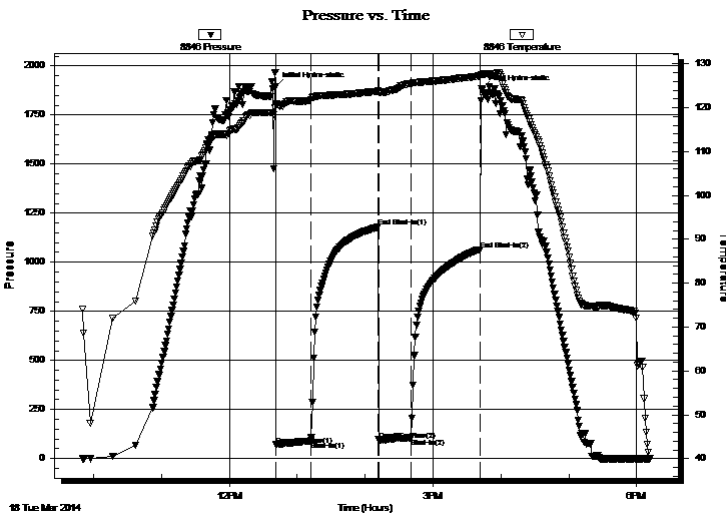
18:12:08

Time On Btm: 2014.03.18 @ 12:40:53

Time Off Btm: 2014.03.18 @ 15:42:53

TEST COMMENT: IF: Built to 2" blow
 IS: No return blow
 FF: Built to 1/4" blow
 FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1893.55 | 120.97 | Initial Hydro-static |
| 1 | 70.45 | 120.67 | Open To Flow (1) |
| 32 | 90.42 | 121.85 | Shut-In(1) |
| 91 | 1179.08 | 123.76 | End Shut-In(1) |
| 91 | 96.12 | 123.51 | Open To Flow (2) |
| 120 | 105.24 | 125.46 | Shut-In(2) |
| 181 | 1064.10 | 127.18 | End Shut-In(2) |
| 182 | 1882.29 | 127.50 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 62.00 | ocm 10%o 90%m | 0.30 |
| 124.00 | mco 40%m 60%o | 0.61 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56415

DST#: 1

ATTN: Rocky Milford

Test Start: 2014.03.18 @ 09:50:23

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3819.00 ft | Diameter: 3.80 inches | Volume: 53.57 bbl | Tool Weight: 1500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: 25000.00 lb |
| Drill Collar: | Length: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | <u>Total Volume: 54.48 bbl</u> | Tool Chased 5.00 ft |
| Drill Pipe Above KB: | 19.00 ft | | | String Weight: Initial 62000.00 lb |
| Depth to Top Packer: | 4010.00 ft | | | Final 63000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 40.00 ft | | | |
| Tool Length: | 64.00 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 | | | 3987.00 | |
| Shut In Tool | 5.00 | | | 3992.00 | |
| Hydraulic tool | 5.00 | | | 3997.00 | |
| Jars | 5.00 | | | 4002.00 | |
| Safety Joint | 3.00 | | | 4005.00 | |
| Packer | 5.00 | | | 4010.00 | 24.00 Bottom Of Top Packer |
| Packer - Shale | 0.00 | | | 4010.00 | |
| Stubb | 1.00 | | | 4011.00 | |
| Perforations | 1.00 | | | 4012.00 | |
| Recorder | 0.00 | 8846 | Inside | 4012.00 | |
| Recorder | 0.00 | 8737 | Outside | 4012.00 | |
| Change Over Sub | 1.00 | | | 4013.00 | |
| Blank Spacing | 31.00 | | | 4044.00 | |
| Change Over Sub | 1.00 | | | 4045.00 | |
| Bullnose | 5.00 | | | 4050.00 | 40.00 Anchor Tool |

Total Tool Length: 64.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56415

DST#: 1

ATTN: Rocky Milford

Test Start: 2014.03.18 @ 09:50:23

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbf

Water Loss: 0.00 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 0.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbf |
|--------------|---------------|---------------|
| 62.00 | ocm 10%o 90%m | 0.305 |
| 124.00 | mco 40%m 60%o | 0.610 |

Total Length: 186.00 ft

Total Volume: 0.915 bbf

Num Fluid Samples: 0

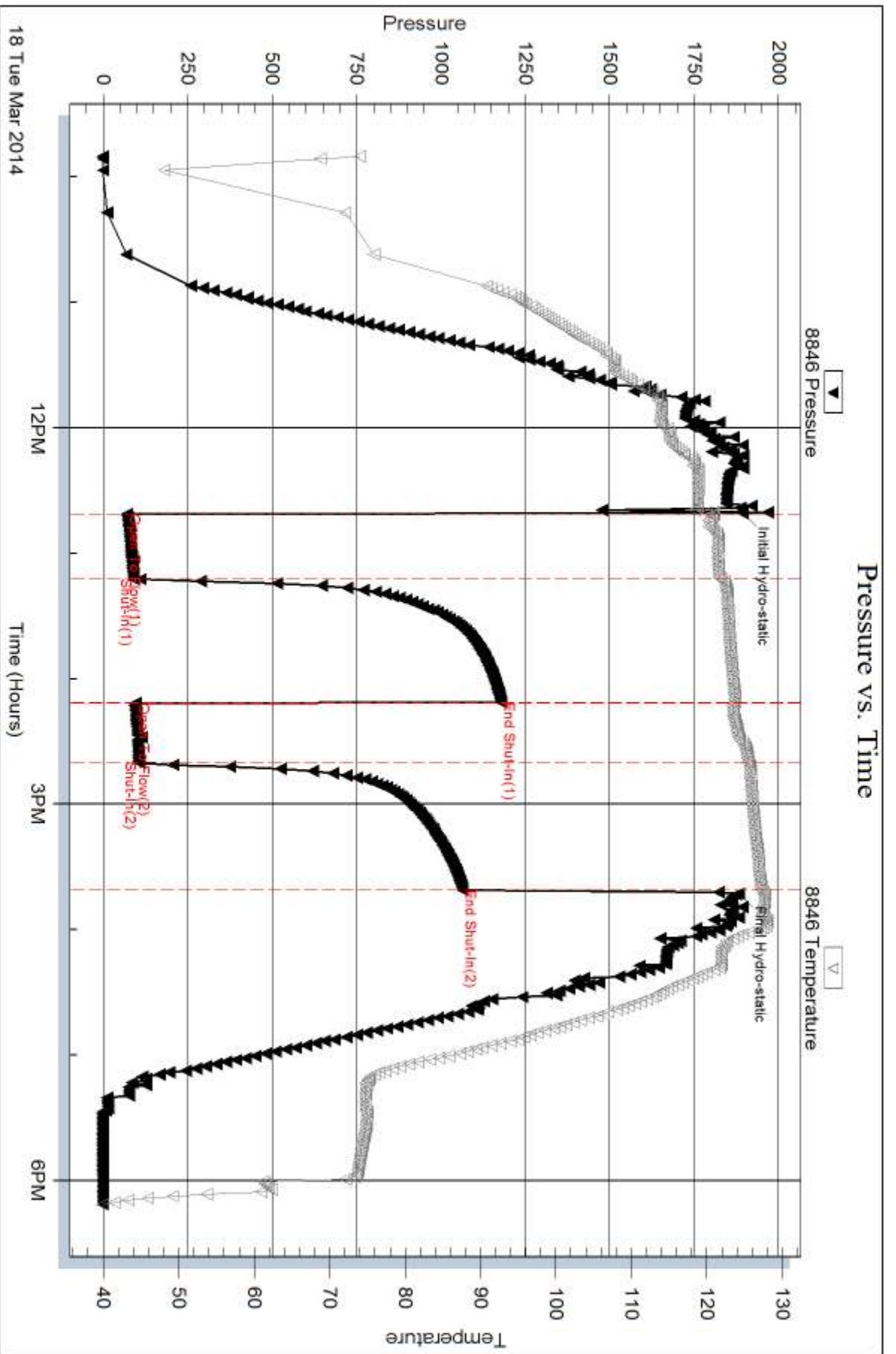
Num Gas Bombs: 0

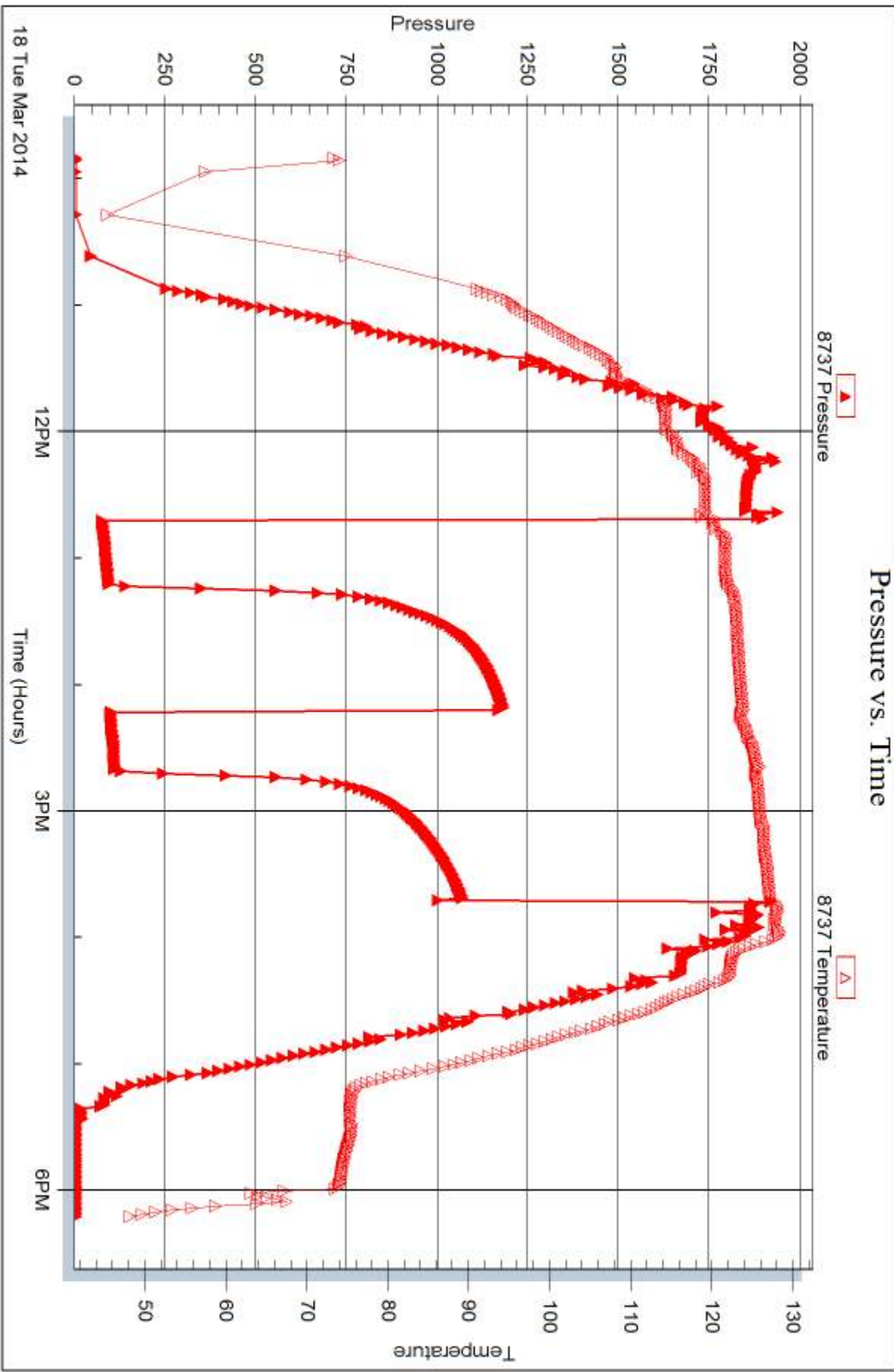
Serial #:

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: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.19 @ 06:17:15

End Date: 2014.03.19 @ 15:37:45

Job Ticket #: 56416 DST #: 2

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

Printed: 2014.03.25 @ 16:30:53



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Rocky Milford

23-2s-36w Rawlins,KS

Frisbie #3-23

Job Ticket: 56416

DST#: 2

Test Start: 2014.03.19 @ 06:17:15

GENERAL INFORMATION:

Formation: **Oread**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:31:30
 Time Test Ended: 15:37:45
 Interval: **4094.00 ft (KB) To 4164.00 ft (KB) (TVD)**
 Total Depth: 4164.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 65
 Reference Elevations: 3314.00 ft (KB)
 3309.00 ft (CF)
 KB to GR/CF: 5.00 ft

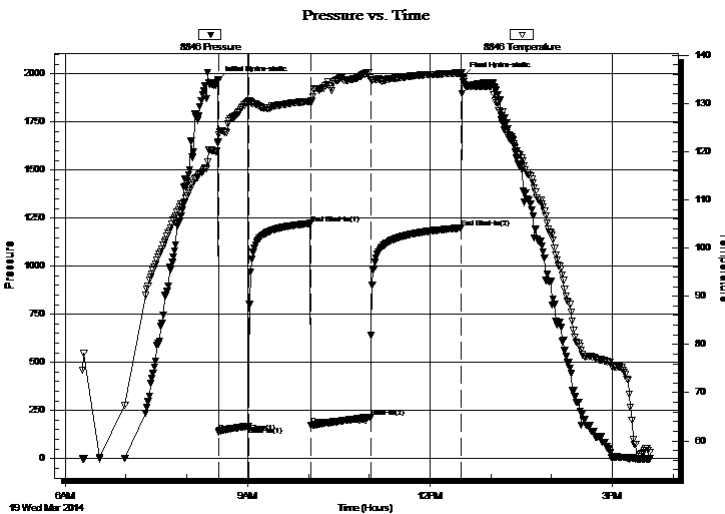
Serial #: 8846

Inside

Press@RunDepth: 216.31 psig @ 4096.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.03.19 End Date: 2014.03.19 Last Calib.: 2014.03.19
 Start Time: 06:17:15 End Time: 15:37:45 Time On Btm: 2014.03.19 @ 08:31:00
 Time Off Btm: 2014.03.19 @ 12:32:30

TEST COMMENT: IF:Built to 5" blow(Diesel)
 IS:No return blow
 FF:Built to 8" blow ...(Diesel)
 FS:No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1966.12 | 121.92 | Initial Hydro-static |
| 1 | 137.78 | 121.98 | Open To Flow (1) |
| 30 | 169.56 | 130.35 | Shut-In(1) |
| 91 | 1222.09 | 130.40 | End Shut-In(1) |
| 92 | 172.86 | 130.17 | Open To Flow (2) |
| 151 | 216.31 | 134.87 | Shut-In(2) |
| 240 | 1199.49 | 136.33 | End Shut-In(2) |
| 242 | 1986.36 | 135.39 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------------------|--------------|
| 392.00 | mud 100% m w ith oil spots in tool | 3.80 |
| | | |
| | | |
| | | |
| | | |

* 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.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56416

DST#: 2

ATTN: Rocky Milford

Test Start: 2014.03.19 @ 06:17:15

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3914.00 ft | Diameter: 3.80 inches | Volume: 54.90 bbl | Tool Weight: | 1500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: | 25000.00 lb |
| Drill Collar: | Length: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: | 90000.00 lb |
| | | | <u>Total Volume: 55.81 bbl</u> | Tool Chased | 20.00 ft |
| Drill Pipe Above KB: | 34.00 ft | | | String Weight: Initial | 64000.00 lb |
| Depth to Top Packer: | 4094.00 ft | | | Final | 70000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 70.00 ft | | | | |
| Tool Length: | 98.00 ft | | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | | |

Tool Comments: Tool slid 10 feet took on weight opened tool , bled off tool and then slid another 10 feet and opened again

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 4067.00 | |
| Shut In Tool | 5.00 | | | 4072.00 | |
| Hydraulic tool | 5.00 | | | 4077.00 | |
| Jars | 5.00 | | | 4082.00 | |
| Safety Joint | 3.00 | | | 4085.00 | |
| Packer | 5.00 | | | 4090.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4094.00 | |
| Stubb | 1.00 | | | 4095.00 | |
| Perforations | 1.00 | | | 4096.00 | |
| Recorder | 0.00 | 8846 | Inside | 4096.00 | |
| Recorder | 0.00 | 8737 | Outside | 4096.00 | |
| Change Over Sub | 1.00 | | | 4097.00 | |
| Blank Spacing | 31.00 | | | 4128.00 | |
| Change Over Sub | 1.00 | | | 4129.00 | |
| Perforations | 30.00 | | | 4159.00 | |
| Bullnose | 5.00 | | | 4164.00 | 70.00 Bottom Packers & Anchor |
| Total Tool Length: | 98.00 | | | | |



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56416

DST#: 2

ATTN: Rocky Milford

Test Start: 2014.03.19 @ 06:17:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.36 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 bbl |
|--------------|-----------------------------------|---------------|
| 392.00 | mud 100% m with oil spots in tool | 3.804 |

Total Length: 392.00 ft Total Volume: 3.804 bbl

Num Fluid Samples: 0

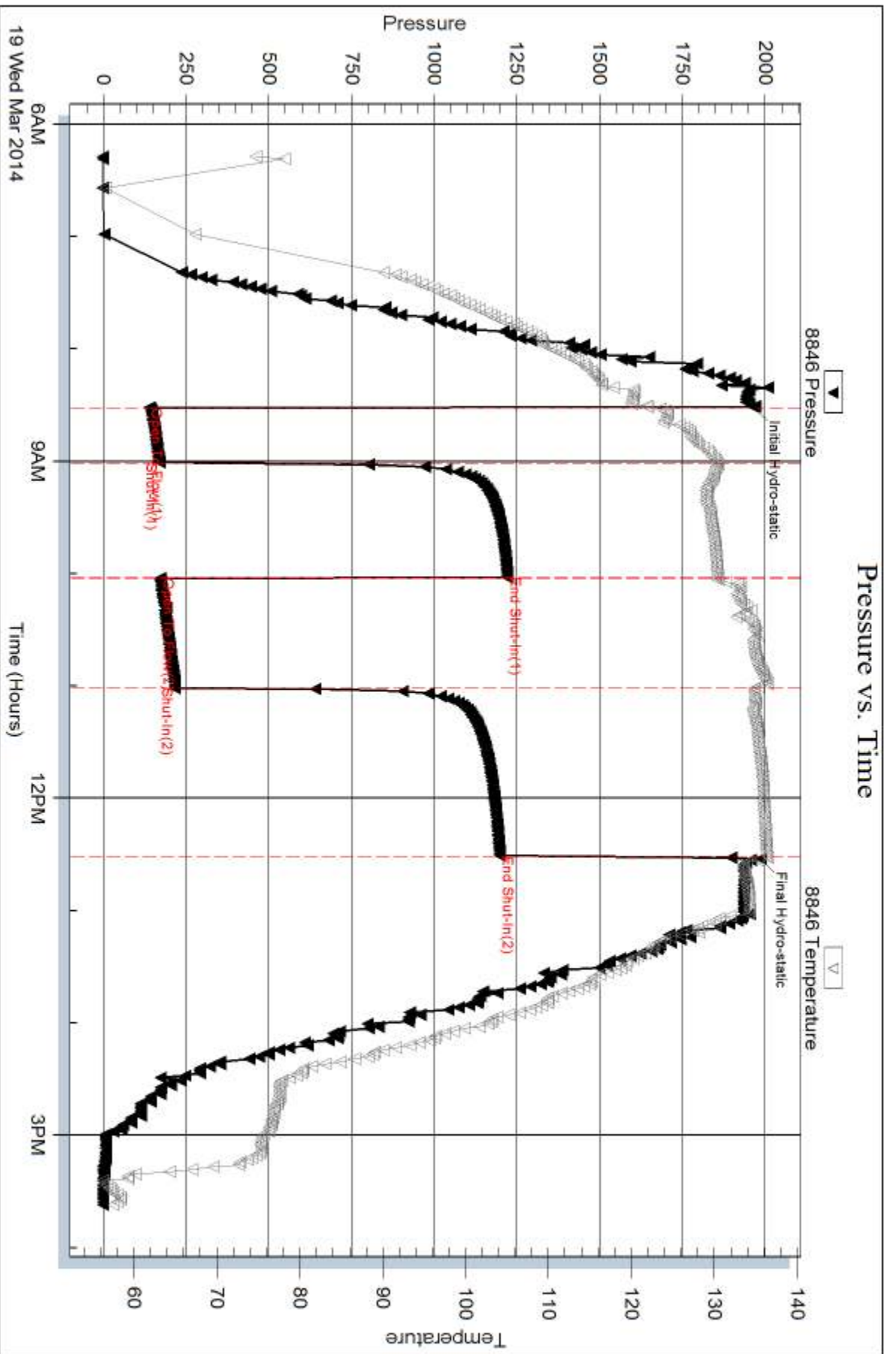
Num Gas Bombs: 0

Serial #:

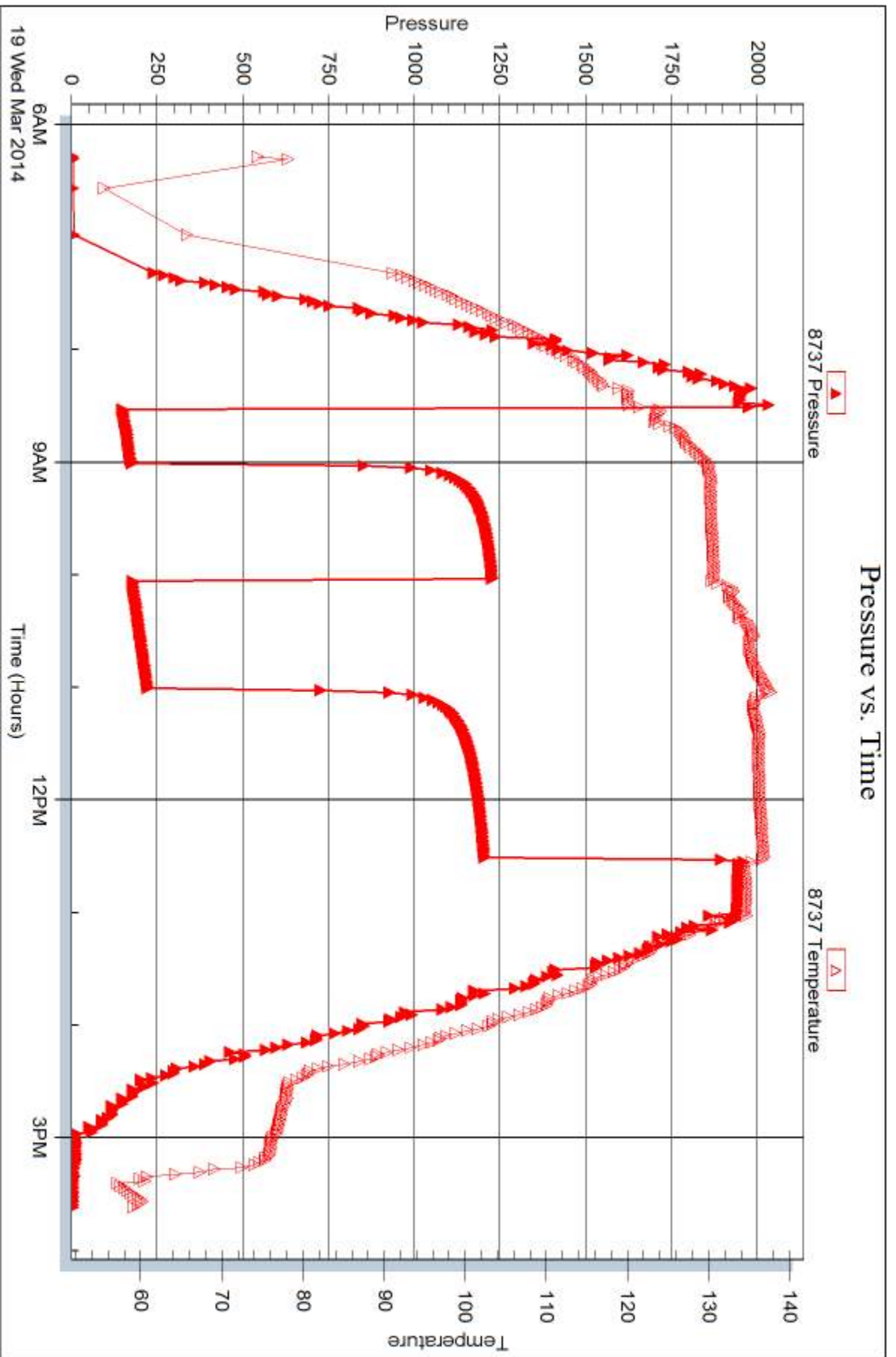
Laboratory Name:

Laboratory Location:

Recovery Comments:



19 Wed Mar 2014





DRILL STEM TEST REPORT

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

250 N Water STE 300
Wichita KS 67202

ATTN: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.20 @ 04:30:15

End Date: 2014.03.20 @ 13:27:15

Job Ticket #: 56417 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.25 @ 16:30:31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56417

DST#: 3

ATTN: Rocky Milford

Test Start: 2014.03.20 @ 04:30:15

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3910.00 ft | Diameter: 3.80 inches | Volume: 54.85 bbl | Tool Weight: | 1500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: | 25000.00 lb |
| Drill Collar: | Length: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: | 80000.00 lb |
| | | | <u>Total Volume: 55.76 bbl</u> | Tool Chased | 5.00 ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial | 63000.00 lb |
| Depth to Top Packer: | 4093.00 ft | | | Final | 65000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 164.00 ft | | | | |
| Tool Length: | 192.00 ft | | | | |
| Number of Packers: | 2 | Diameter: | 6.75 inches | | |

Tool Comments: tool slid 5 feet

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|---------------|------------|----------|------------|--------------------------------|
| Change Over Sub | 1.00 | | | 4066.00 | |
| Shut In Tool | 5.00 | | | 4071.00 | |
| Hydraulic tool | 5.00 | | | 4076.00 | |
| Jars | 5.00 | | | 4081.00 | |
| Safety Joint | 3.00 | | | 4084.00 | |
| Packer | 5.00 | | | 4089.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4093.00 | |
| Stubb | 1.00 | | | 4094.00 | |
| Perforations | 1.00 | | | 4095.00 | |
| Recorder | 0.00 | 8846 | Inside | 4095.00 | |
| Recorder | 0.00 | 8737 | Outside | 4095.00 | |
| Change Over Sub | 1.00 | | | 4096.00 | |
| Blank Spacing | 127.00 | | | 4223.00 | |
| Change Over Sub | 1.00 | | | 4224.00 | |
| Perforations | 28.00 | | | 4252.00 | |
| Bullnose | 5.00 | | | 4257.00 | 164.00 Bottom Packers & Anchor |
| Total Tool Length: | 192.00 | | | | |



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Rocky Milford

23-2s-36w Rawlins,KS
Frisbie #3-23
Job Ticket: 56417 **DST#: 3**
Test Start: 2014.03.20 @ 04:30:15

Mud and Cushion Information

| | | | |
|----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | 0 deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | 0 ppm |
| Viscosity: 55.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 6.37 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 700.00 ppm | | | |
| Filter Cake: 2.00 inches | | | |

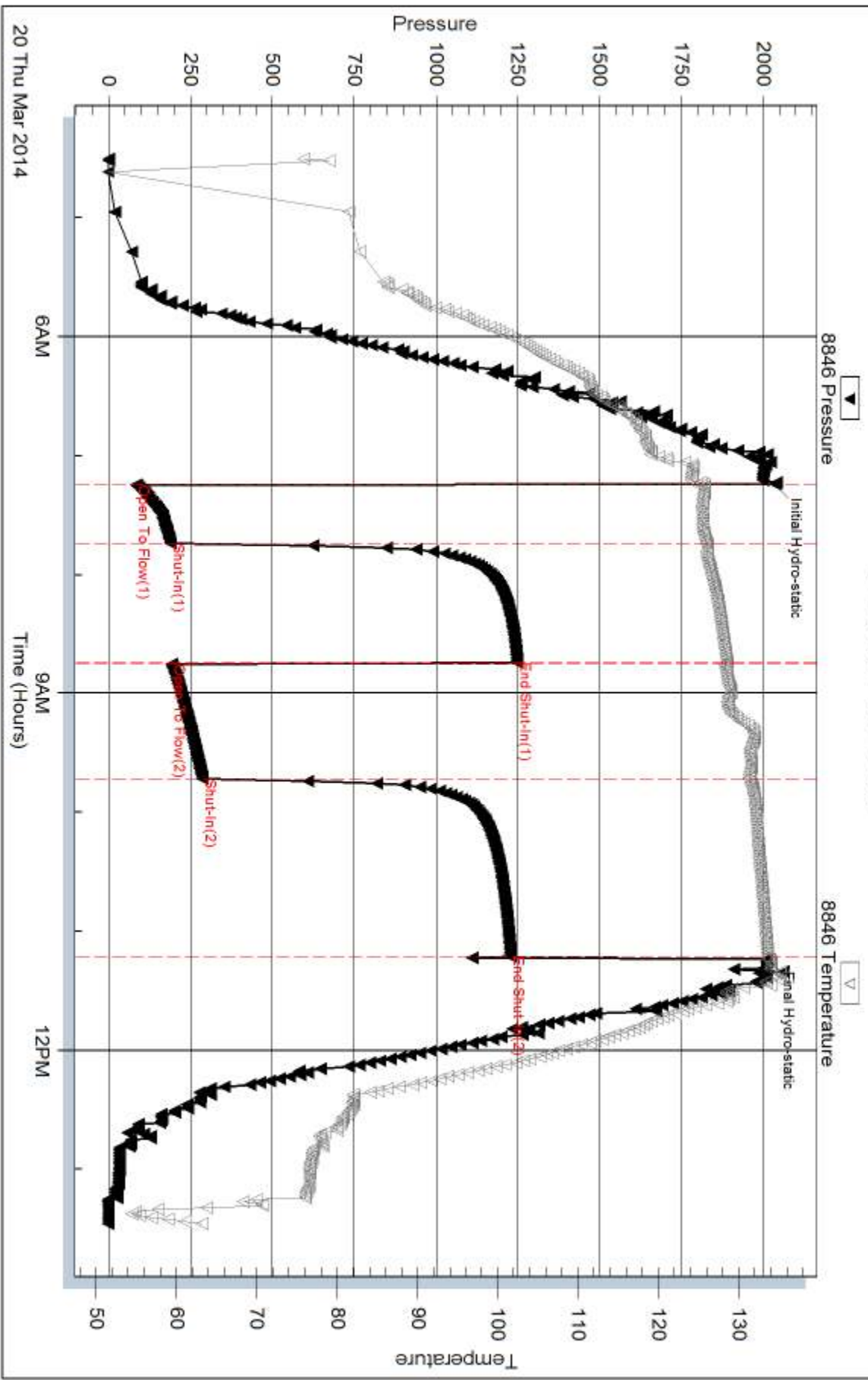
Recovery Information

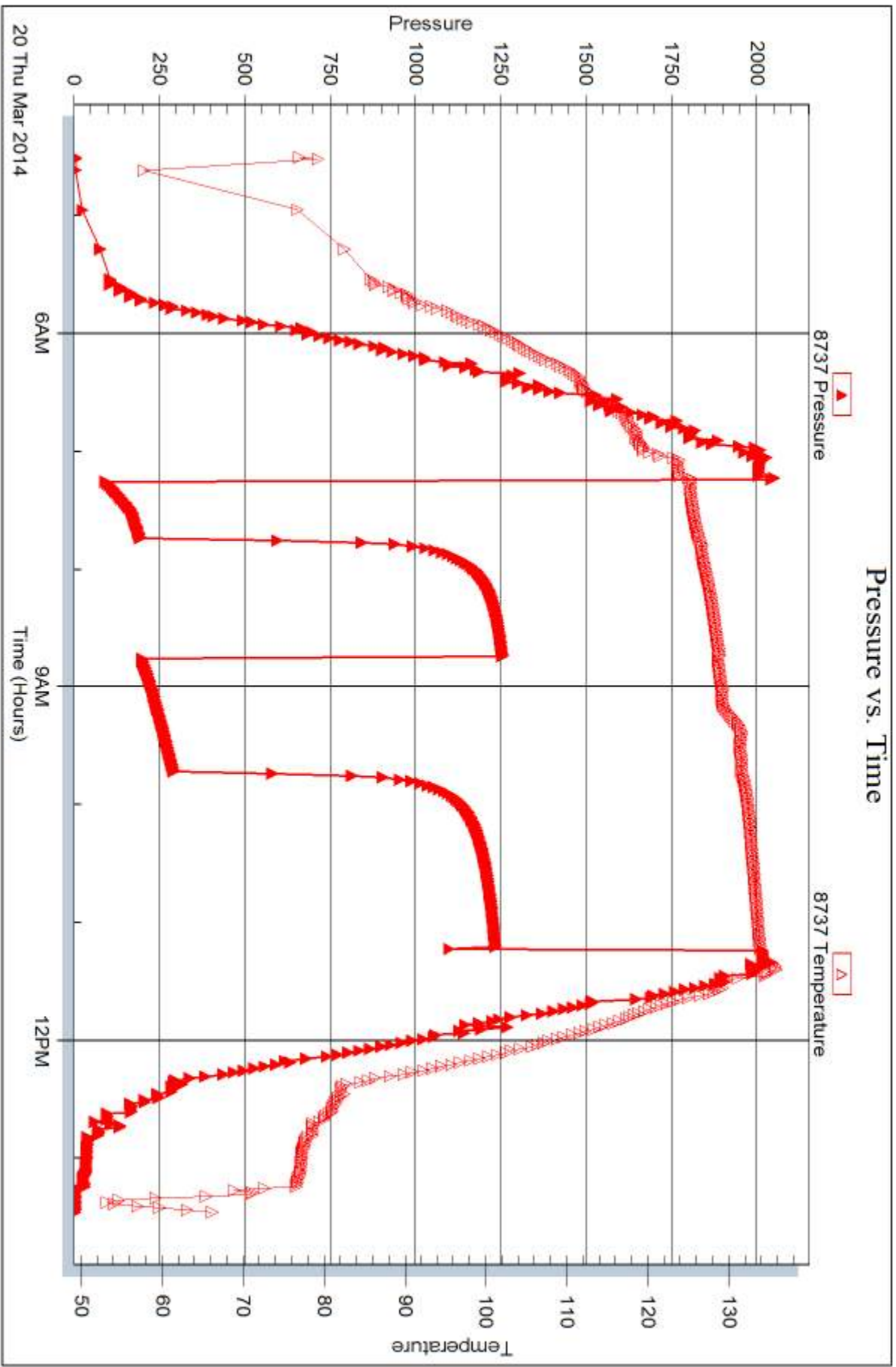
Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---|---------------|
| 186.00 | w cm 1%w 99%m w ith oil spots (Collars) | 0.915 |
| 124.00 | w cm 1%w 99%m w ith oil spots | 1.739 |
| 144.00 | m 100% mud w ith oil spots | 2.020 |

Total Length: 454.00 ft Total Volume: 4.674 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

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

250 N Water STE 300
Wichita KS 67202

ATTN: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.20 @ 21:56:00

End Date: 2014.03.21 @ 07:14:15

Job Ticket #: 56917 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.25 @ 16:28:36



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56917

DST#: 4

ATTN: Rocky Milford

Test Start: 2014.03.20 @ 21:56:00

GENERAL INFORMATION:

Formation: **LKC 'A' sd - 'D'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:30:30

Time Test Ended: 07:14:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: #54

Interval: 4255.00 ft (KB) To 4313.00 ft (KB) (TVD)

Reference Elevations: 3314.00 ft (KB)

Total Depth: 4313.00 ft (KB) (TVD)

3309.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8368

Inside

Press@RunDepth: 49.38 psig @ 4256.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.20

End Date:

2014.03.21

Last Calib.:

2014.03.21

Start Time: 21:56:05

End Time:

07:14:15

Time On Btm:

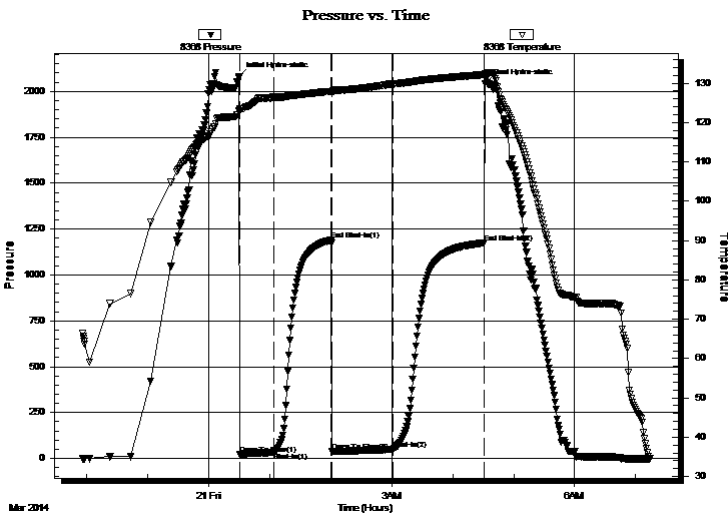
2014.03.21 @ 00:30:00

Time Off Btm:

2014.03.21 @ 04:31:45

TEST COMMENT: 30 - IF - Surface blow built to 1"
60 - ISI - No Return
60 - FF - Weak surface started in 13 min. built up to 1/4"
90 - FSI - No Return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2082.48 | 123.09 | Initial Hydro-static |
| 1 | 22.01 | 122.94 | Open To Flow (1) |
| 35 | 32.91 | 126.42 | Shut-In(1) |
| 91 | 1189.05 | 127.94 | End Shut-In(1) |
| 91 | 36.34 | 127.49 | Open To Flow (2) |
| 152 | 49.38 | 129.74 | Shut-In(2) |
| 241 | 1175.82 | 132.16 | End Shut-In(2) |
| 242 | 2044.41 | 132.41 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 64.00 | OCM - 65M - 35o | 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.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56917

DST#: 4

ATTN: Rocky Milford

Test Start: 2014.03.20 @ 21:56:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4071.00 ft | Diameter: 3.80 inches | Volume: 57.11 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: 25000.00 lb |
| Drill Collar: | Length: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: 72000.00 lb |
| | | | <u>Total Volume: 58.02 bbl</u> | Tool Chased 7.00 ft |
| Drill Pipe Above KB: | 29.00 ft | | | String Weight: Initial 66000.00 lb |
| Depth to Top Packer: | 4255.00 ft | | | Final 66000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 58.00 ft | | | |
| Tool Length: | 85.00 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 | |
| Jars | 5.00 | | | 4243.00 | |
| Safety Joint | 3.00 | | | 4246.00 | |
| Packer | 4.00 | | | 4250.00 | 27.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4255.00 | |
| Stubb | 1.00 | | | 4256.00 | |
| Recorder | 0.00 | 6741 | Inside | 4256.00 | |
| Recorder | 0.00 | 8368 | Inside | 4256.00 | |
| Perforations | 20.00 | | | 4276.00 | |
| Change Over Sub | 1.00 | | | 4277.00 | |
| Drill Pipe | 31.00 | | | 4308.00 | |
| Change Over Sub | 1.00 | | | 4309.00 | |
| Bullnose | 4.00 | | | 4313.00 | 58.00 Bottom Packers & Anchor |

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56917

DST#: 4

ATTN: Rocky Milford

Test Start: 2014.03.20 @ 21:56:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------|---------------|
| 64.00 | OCM - 65M - 35o | 0.315 |

Total Length: 64.00 ft Total Volume: 0.315 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: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.21 @ 17:00:00

End Date: 2014.03.22 @ 01:22:45

Job Ticket #: 56918 DST #: 5

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

Printed: 2014.03.25 @ 16:28:03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
 250 N Water STE 300
 Wichita KS 67202
 ATTN: Rocky Milford

23-2s-36w Rawlins,KS

Frisbie #3-23

Job Ticket: 56918

DST#: 5

Test Start: 2014.03.21 @ 17:00:00

GENERAL INFORMATION:

Formation: **D' - G**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 19:02:30 Tester: Royal Fisher
 Time Test Ended: 01:22:45 Unit No: #54
 Interval: **4305.00 ft (KB) To 4373.00 ft (KB) (TVD)** Reference Elevations: 3314.00 ft (KB)
 Total Depth: 4373.00 ft (KB) (TVD) 3309.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

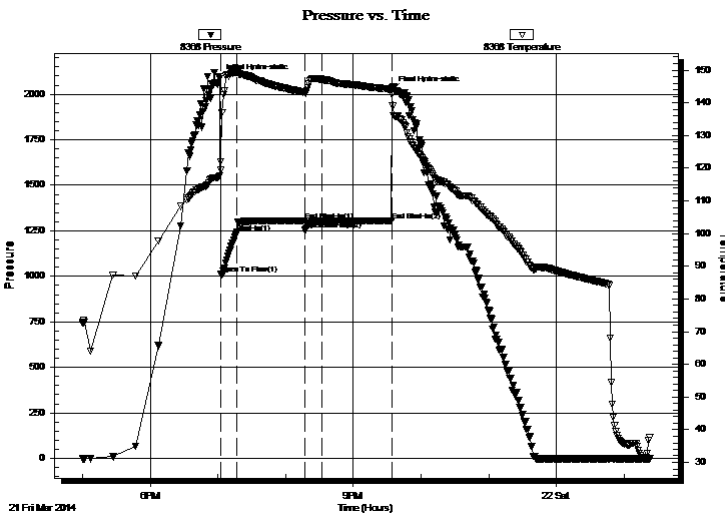
Serial #: 8368

Inside

Press@RunDepth: 1303.70 psig @ 4306.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.03.21 End Date: 2014.03.22 Last Calib.: 2014.03.21
 Start Time: 17:00:05 End Time: 01:22:44 Time On Btm: 2014.03.21 @ 19:01:45
 Time Off Btm: 2014.03.21 @ 21:34:15

TEST COMMENT: 15 - IF - Surface blow built to bottom of bucket in 1 min.
 60 - ISI - No Return
 15 - FF - Surface blow built to bottom of bucket in 1 min.
 60 - FSI - No Return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2085.16 | 117.77 | Initial Hydro-static |
| 1 | 1014.44 | 119.33 | Open To Flow (1) |
| 16 | 1241.12 | 149.28 | Shut-In(1) |
| 75 | 1304.10 | 143.26 | End Shut-In(1) |
| 76 | 1253.91 | 143.09 | Open To Flow (2) |
| 91 | 1303.70 | 147.02 | Shut-In(2) |
| 153 | 1304.10 | 144.09 | End Shut-In(2) |
| 153 | 2020.90 | 142.56 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 2394.00 | MW - 15M - 85W | 31.89 |
| 481.00 | WM - 60M - 40W | 6.75 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56918

DST#: 5

ATTN: Rocky Milford

Test Start: 2014.03.21 @ 17:00:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4103.00 ft | Diameter: 3.80 inches | Volume: 57.55 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: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: 86000.00 lb |
| | | | <u>Total Volume: 58.46 bbl</u> | Tool Chased 4.00 ft |
| Drill Pipe Above KB: | 11.00 ft | | | String Weight: Initial 68000.00 lb |
| Depth to Top Packer: | 4305.00 ft | | | Final 78000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 68.00 ft | | | |
| Tool Length: | 95.00 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 | | | 4283.00 | |
| Hydraulic tool | 5.00 | | | 4288.00 | |
| Jars | 5.00 | | | 4293.00 | |
| Safety Joint | 3.00 | | | 4296.00 | |
| Packer | 4.00 | | | 4300.00 | 27.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4305.00 | |
| Stubb | 1.00 | | | 4306.00 | |
| Recorder | 0.00 | 6741 | Inside | 4306.00 | |
| Recorder | 0.00 | 8368 | Inside | 4306.00 | |
| Perforations | 30.00 | | | 4336.00 | |
| Change Over Sub | 1.00 | | | 4337.00 | |
| Drill Pipe | 31.00 | | | 4368.00 | |
| Change Over Sub | 1.00 | | | 4369.00 | |
| Bullnose | 4.00 | | | 4373.00 | 68.00 Bottom Packers & Anchor |

Total Tool Length: 95.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56918

DST#: 5

ATTN: Rocky Milford

Test Start: 2014.03.21 @ 17:00:00

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: 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: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------|---------------|
| 2394.00 | MW - 15M - 85W | 31.887 |
| 481.00 | WM - 60M - 40W | 6.747 |

Total Length: 2875.00 ft Total Volume: 38.634 bbl

Num Fluid Samples: 0

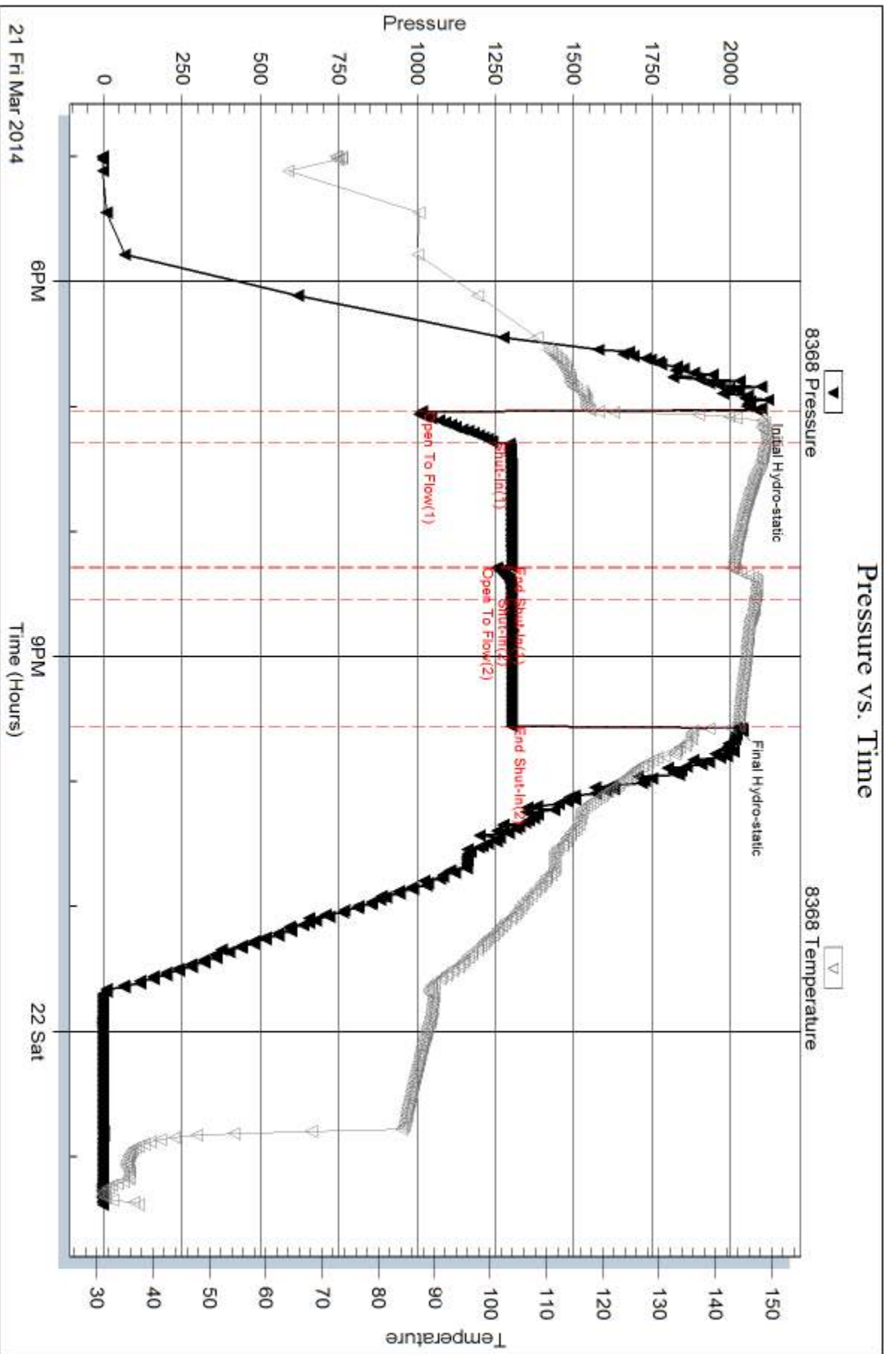
Num Gas Bombs: 0

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: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.22 @ 16:44:00

End Date: 2014.03.23 @ 02:20:45

Job Ticket #: 56919 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.25 @ 16:27:33



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
 250 N Water STE 300
 Wichita KS 67202
 ATTN: Rocky Milford

23-2s-36w Rawlins,KS

Frisbie #3-23

Job Ticket: 56919

DST#: 6

Test Start: 2014.03.22 @ 16:44:00

GENERAL INFORMATION:

Formation: **LKC G' - K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:33:15
 Time Test Ended: 02:20:45
 Interval: **4373.00 ft (KB) To 4490.00 ft (KB) (TVD)**
 Total Depth: 4490.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Reference Elevations: 3314.00 ft (KB)
 3309.00 ft (CF)
 KB to GR/CF: 5.00 ft

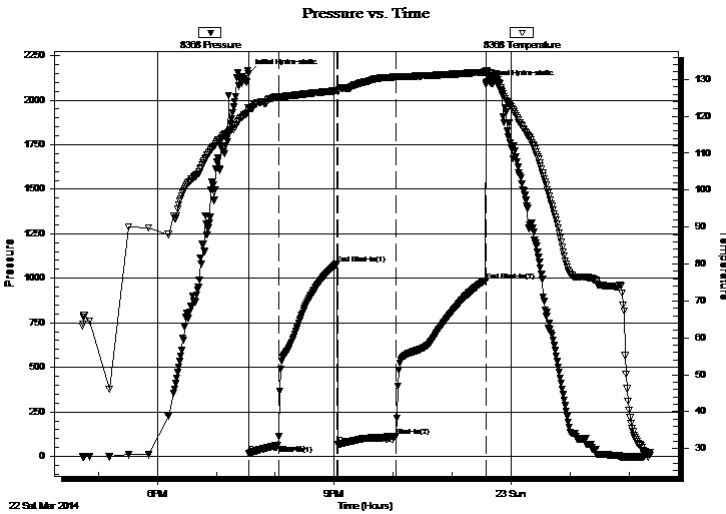
Serial #: 8368

Inside

Press@RunDepth: 113.54 psig @ 4374.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.03.22 End Date: 2014.03.23 Last Calib.: 2014.03.23
 Start Time: 16:44:05 End Time: 02:20:45 Time On Btm: 2014.03.22 @ 19:33:00
 Time Off Btm: 2014.03.22 @ 23:34:30

TEST COMMENT: 30 - IF - Surface blow built to 3 1/4"
 60 - ISI - No Return
 60 - FF - Surface blow started 5 min. in and built to 3 1/4"
 90 - FSI - No Return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2150.45 | 122.35 | Initial Hydro-static |
| 1 | 18.54 | 121.60 | Open To Flow (1) |
| 31 | 63.54 | 125.45 | Shut-In(1) |
| 90 | 1082.77 | 126.96 | End Shut-In(1) |
| 91 | 67.83 | 126.64 | Open To Flow (2) |
| 150 | 113.54 | 130.75 | Shut-In(2) |
| 241 | 987.11 | 131.98 | End Shut-In(2) |
| 242 | 2089.18 | 132.44 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------------|--------------|
| 219.00 | OSWM - 90M - 10W - Oil Spots | 1.38 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56919

DST#: 6

ATTN: Rocky Milford

Test Start: 2014.03.22 @ 16:44:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4166.00 ft | Diameter: 3.80 inches | Volume: 58.44 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: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: 70000.00 lb |
| | | | <u>Total Volume: 59.35 bbl</u> | Tool Chased 4.00 ft |
| Drill Pipe Above KB: | 6.00 ft | | | String Weight: Initial 64000.00 lb |
| Depth to Top Packer: | 4373.00 ft | | | Final 65000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 117.00 ft | | | |
| Tool Length: | 144.00 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 | | | 4351.00 | |
| Hydraulic tool | 5.00 | | | 4356.00 | |
| Jars | 5.00 | | | 4361.00 | |
| Safety Joint | 3.00 | | | 4364.00 | |
| Packer | 4.00 | | | 4368.00 | 27.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4373.00 | |
| Stubb | 1.00 | | | 4374.00 | |
| Recorder | 0.00 | 6741 | Inside | 4374.00 | |
| Recorder | 0.00 | 8368 | Inside | 4374.00 | |
| Perforations | 16.00 | | | 4390.00 | |
| Change Over Sub | 1.00 | | | 4391.00 | |
| Drill Pipe | 94.00 | | | 4485.00 | |
| Change Over Sub | 1.00 | | | 4486.00 | |
| Bullnose | 4.00 | | | 4490.00 | 117.00 Bottom Packers & Anchor |

Total Tool Length: 144.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56919

DST#: 6

ATTN: Rocky Milford

Test Start: 2014.03.22 @ 16:44:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|------------------------------|---------------|
| 219.00 | OSWM - 90M - 10W - Oil Spots | 1.378 |

Total Length: 219.00 ft Total Volume: 1.378 bbl

Num Fluid Samples: 0

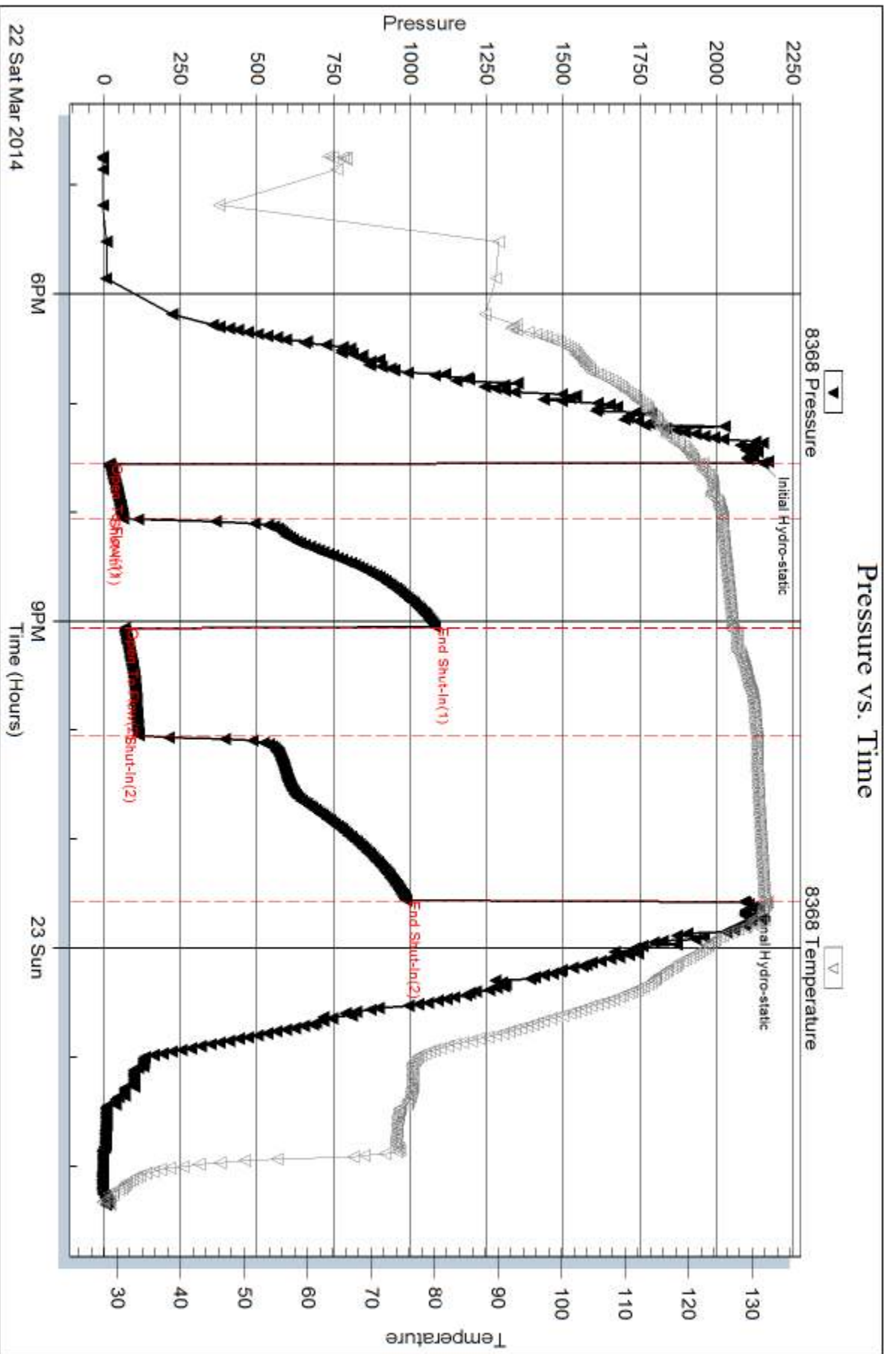
Num Gas Bombs: 0

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: Rocky Milford

Frisbie #3-23

23-2s-36w Rawlins,KS

Start Date: 2014.03.24 @ 03:49:00

End Date: 2014.03.24 @ 12:47:00

Job Ticket #: 56920 DST #: 7

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

Printed: 2014.03.25 @ 16:26:55



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Rocky Milford

23-2s-36w Rawlins,KS

Frisbie #3-23

Job Ticket: 56920

DST#: 7

Test Start: 2014.03.24 @ 03:49:00

GENERAL INFORMATION:

Formation: **Pawnee - Verdigris**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:21:45

Time Test Ended: 12:47:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: \$54

Interval: 4603.00 ft (KB) To 4744.00 ft (KB) (TVD)

Reference Elevations: 3314.00 ft (KB)

Total Depth: 4744.00 ft (KB) (TVD)

3309.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8368

Inside

Press@RunDepth: 30.22 psig @ 4604.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.24

End Date:

2014.03.24

Last Calib.:

2014.03.24

Start Time: 03:49:05

End Time:

12:47:00

Time On Btm:

2014.03.24 @ 07:21:30

Time Off Btm:

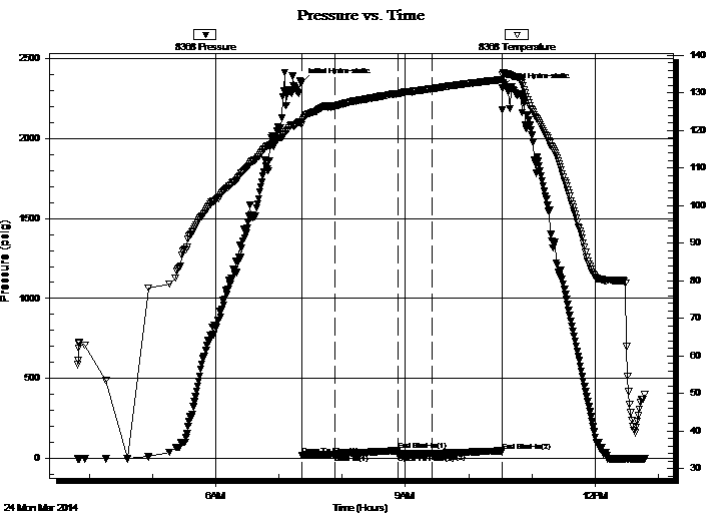
2014.03.24 @ 10:32:00

TEST COMMENT: 30 - IF - Surface blow slowly built to 1"

60 - ISI - No Return

30 - FF - No Surface blow

60 - FSI - No Rrtun



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2349.89 | 122.25 | Initial Hydro-static |
| 1 | 20.67 | 121.41 | Open To Flow (1) |
| 32 | 26.23 | 126.42 | Shut-In(1) |
| 92 | 49.07 | 129.76 | End Shut-In(1) |
| 92 | 27.34 | 129.86 | Open To Flow (2) |
| 124 | 30.22 | 131.08 | Shut-In(2) |
| 190 | 42.60 | 133.49 | End Shut-In(2) |
| 191 | 2315.74 | 134.85 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 3.00 | Mud - 100M | 0.01 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56920

DST#: 7

ATTN: Rocky Milford

Test Start: 2014.03.24 @ 03:49:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4417.00 ft | Diameter: 3.80 inches | Volume: 61.96 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: 186.00 ft | Diameter: 2.25 inches | Volume: 0.91 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | <u>Total Volume: 62.87 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 27.00 ft | | | String Weight: Initial 70000.00 lb |
| Depth to Top Packer: | 4603.00 ft | | | Final 70000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 141.00 ft | | | |
| Tool Length: | 168.00 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 | | | 4581.00 | |
| Hydraulic tool | 5.00 | | | 4586.00 | |
| Jars | 5.00 | | | 4591.00 | |
| Safety Joint | 3.00 | | | 4594.00 | |
| Packer | 4.00 | | | 4598.00 | 27.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4603.00 | |
| Stubb | 1.00 | | | 4604.00 | |
| Recorder | 0.00 | 6741 | Inside | 4604.00 | |
| Recorder | 0.00 | 8368 | Inside | 4604.00 | |
| Perforations | 8.00 | | | 4612.00 | |
| Change Over Sub | 1.00 | | | 4613.00 | |
| Drill Pipe | 126.00 | | | 4739.00 | |
| Change Over Sub | 1.00 | | | 4740.00 | |
| Bullnose | 4.00 | | | 4744.00 | 141.00 Bottom Packers & Anchor |

Total Tool Length: 168.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

23-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Frisbie #3-23

Job Ticket: 56920

DST#: 7

ATTN: Rocky Milford

Test Start: 2014.03.24 @ 03:49:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 3.00 | Mud - 100M | 0.015 |

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

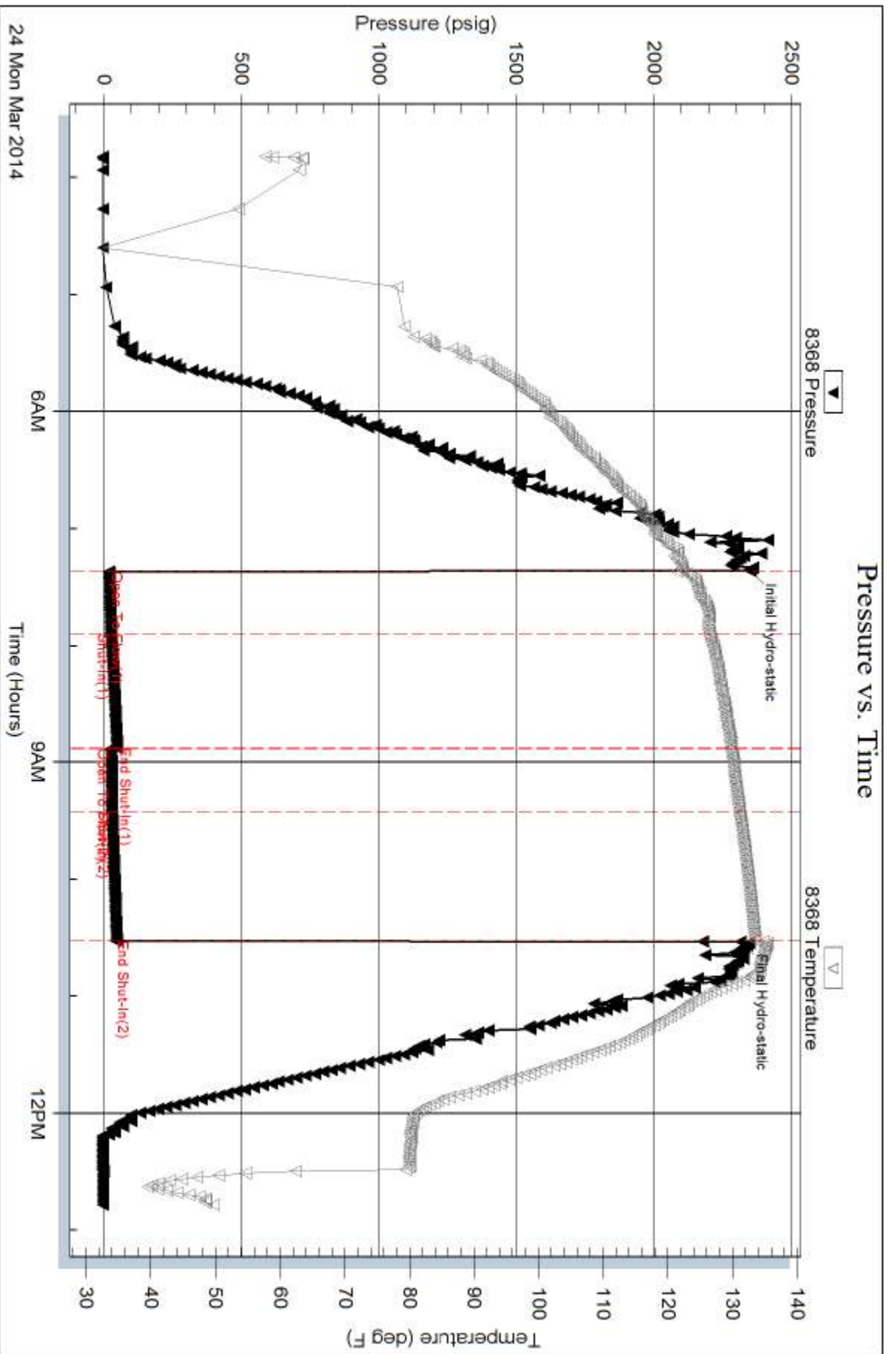
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



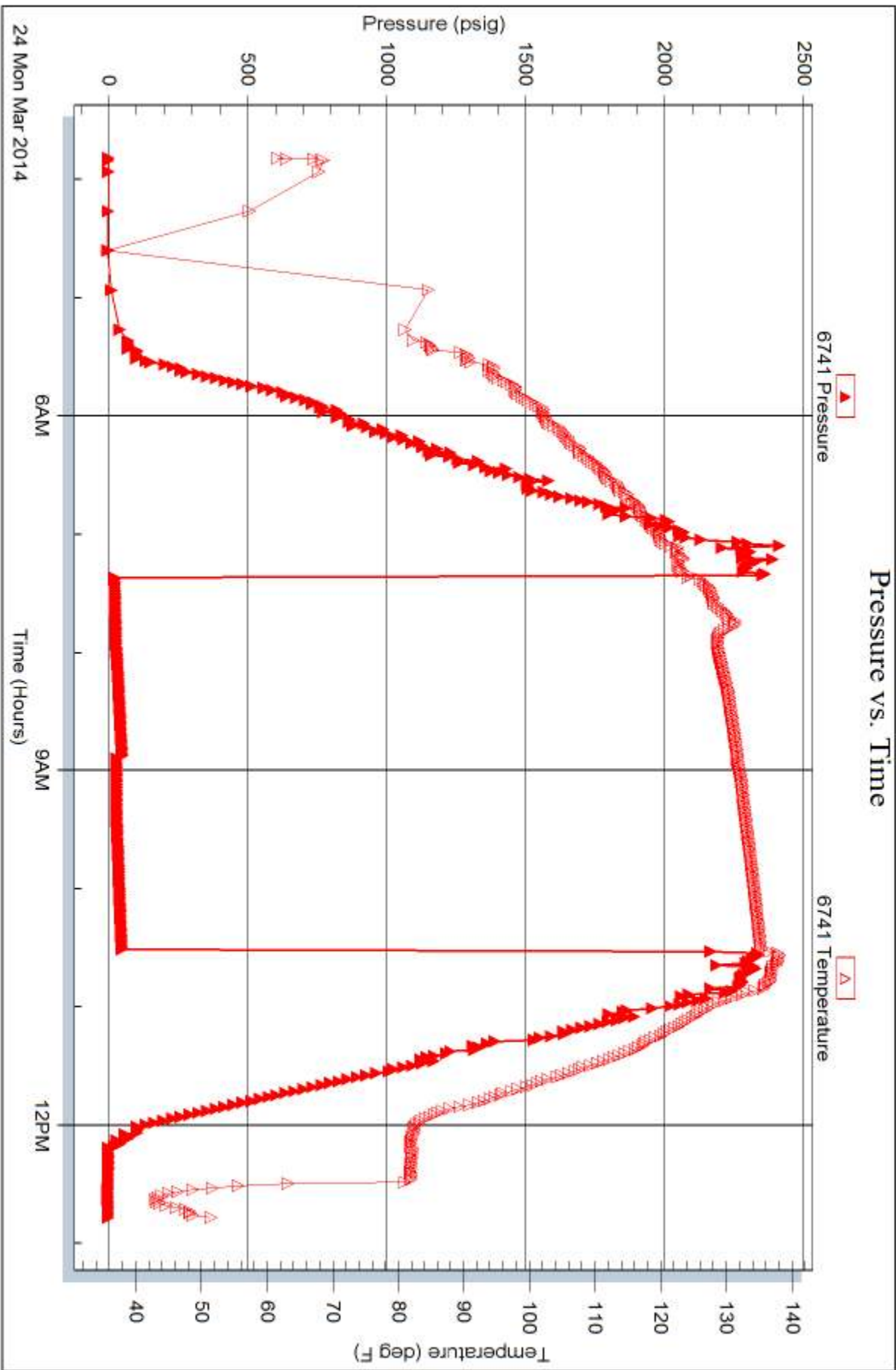
Serial #: 6741

Inside

Murfin Drilling Co. Inc.

Frisbie #3-23

DST Test Number: 7





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56415

Well Name & No. Frisbie #3-23 Test No. 1 Date 3-18-14
 Company Murkin Drilling Co Inc. Elevation 3314 KB 3309 GL
 Address 250 N Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murkin 8
 Location: Sec. 23 Twp. 25 Rge. 36W Co. Rawlins State KS

Interval Tested 4010-4050 Zone Tested Topeka
 Anchor Length 40 Drill Pipe Run 3819 Mud Wt. 8.5
 Top Packer Depth 4005 Drill Collars Run 186 Vis 62
 Bottom Packer Depth 4010 Wt. Pipe Run Ø WL Ø
 Total Depth 4050 Chlorides Ø ppm System LCM Ø
 Blow Description IF: Built to 2" Blow
IS: No Return Blow
FF: Built to 1/4" Blow
FS: No Return Blow

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|------------|-----------|------|-----------|------|
| <u>124</u> | <u>OCM</u> | <u>10</u> | | <u>90</u> | |
| <u>62</u> | <u>mco</u> | <u>60</u> | | <u>40</u> | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 186 BHT 117 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>1893</u> | <input checked="" type="checkbox"/> Test <u>1250.00</u> | T-On Location <u>09:30</u> |
| (B) First Initial Flow <u>70</u> | <input checked="" type="checkbox"/> Jars <u>250.00</u> | T-Started <u>12:41 09:50</u> |
| (C) First Final Flow <u>90</u> | <input checked="" type="checkbox"/> Safety Joint <u>75.00</u> | T-Open <u>12:41 12:41</u> |
| (D) Initial Shut-In <u>1179</u> | <input checked="" type="checkbox"/> Circ Sub <u>NL</u> | T-Pulled <u>15:41</u> |
| (E) Second Initial Flow <u>96</u> | <input type="checkbox"/> Hourly Standby <u>100rt 155</u> | T-Out <u>18:12</u> |
| (F) Second Final Flow <u>105</u> | <input checked="" type="checkbox"/> Mileage <u>200RT 310.00</u> | Comments _____ |
| (G) Final Shut-In <u>1064</u> | <input type="checkbox"/> Sampler _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| (H) Final Hydrostatic <u>1882</u> | <input checked="" type="checkbox"/> Shale Packer <u>250.00</u> | <input type="checkbox"/> Ruined Packer _____ |
| Initial Open <u>30</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Initial Shut-In <u>60</u> | <input type="checkbox"/> Extra Recorder _____ | Sub Total <u>0</u> |
| Final Flow <u>30</u> | <input type="checkbox"/> Day Standby _____ | Total <u>1980</u> |
| Final Shut-In <u>60</u> | <input type="checkbox"/> Accessibility <u>1980</u> | MP/DST Disc't _____ |
| | Sub Total <u>\$2135.00</u> | |

Approved By Rocky Milford Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **56416**

Well Name & No. Frisbie #3-23 Test No. 2 Date 3-19-14
 Company Murfin Drilling Co Inc. Elevation 3314 KB 3309 GL
 Address 250 N Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin 8
 Location: Sec. 23 Twp. 25 Rge. 36W Co. Rawlins State KS

Interval Tested 4094-4164 Zone Tested Oread
 Anchor Length 70' Drill Pipe Run 3914 Mud Wt. 8.9
 Top Packer Depth 4089 Drill Collars Run 186 Vis 57
 Bottom Packer Depth 4094 Wt. Pipe Run 16 WL 6.4
 Total Depth 4164 Chlorides 700 ppm System LCM 4
 Blow Description IF: Built to 5" Blow (Diesel)
IS: No Return Blow
FF: Built to 8" Blow (Diesel)
FS: No Return Blow

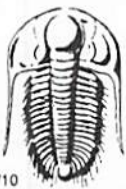
| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|--------------------------------|------|------|------------|------|
| <u>392</u> | <u>MUD - Oil Spots in tool</u> | | | <u>100</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 392 BHT 136 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|--|---|
| (A) Initial Hydrostatic <u>1966</u> | <input checked="" type="checkbox"/> Test <u>1250</u> | T-On Location <u>05:00</u> |
| (B) First Initial Flow <u>137</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>06:17</u> |
| (C) First Final Flow <u>169</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>08:31</u> |
| (D) Initial Shut-In <u>1222</u> | <input checked="" type="checkbox"/> Circ Sub <u>NC</u> | T-Pulled <u>12:31</u> |
| (E) Second Initial Flow <u>172</u> | <input type="checkbox"/> Hourly Standby | T-Out <u>15:37</u> |
| (F) Second Final Flow <u>216</u> | <input checked="" type="checkbox"/> Mileage <u>200 RT</u> <u>155</u> | Comments <u>Slid 10' tool on weight slid another 10' tool opened.</u> |
| (G) Final Shut-In <u>1199</u> | <input type="checkbox"/> Sampler | <input type="checkbox"/> Ruined Shale Packer |
| (H) Final Hydrostatic <u>1986</u> | <input type="checkbox"/> Straddle | <input type="checkbox"/> Ruined Packer |
| Initial Open <u>30</u> | <input type="checkbox"/> Shale Packer | <input type="checkbox"/> Extra Copies |
| Initial Shut-In <u>60</u> | <input type="checkbox"/> Extra Packer | Sub Total <u>0</u> |
| Final Flow <u>60</u> | <input type="checkbox"/> Extra Recorder | Total <u>1730</u> |
| Final Shut-In <u>90</u> | <input type="checkbox"/> Day Standby | MP/DST Disc't |
| | <input type="checkbox"/> Accessibility | |
| | Sub Total <u>1730</u> | |

Approved By Rocky Milford Our Representative Mike Robert

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56417

4/10

Well Name & No. Frisbie #3-23 Test No. 3 Date 3-20-14
 Company Murfin Drilling Co Inc. Elevation 3314 KB 3309 GL
 Address 250 N. Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin 8
 Location: Sec. 23 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4093-4257 Zone Tested Dread-LKC A
 Anchor Length 164 Drill Pipe Run 3910 Mud Wt. 9.0
 Top Packer Depth 4086 Drill Collars Run 186 Vis 55
 Bottom Packer Depth 4093 Wt. Pipe Run Ø WL 6.4
 Total Depth 4257 Chlorides 700 ppm System LCM 2
 Blow Description IF: BOB IN 22 Min
IS: NO Return Blow
FF: BOB IN 32 Min
FS: No Return Blow

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|-------------------------------------|------|----------|------------|------|
| <u>144</u> | <u>MUD with oil spots</u> | | | <u>100</u> | |
| <u>124</u> | <u>WCM with oil spots</u> | | <u>1</u> | <u>99</u> | |
| <u>186</u> | <u>WCM with oil spots (collars)</u> | | <u>1</u> | <u>99</u> | |
| | | | | | |
| | | | | | |

Rec Total 454 BHT 132 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2036 Test 1250 T-On Location 02:30
 (B) First Initial Flow 84 Jars 250 T-Started ~~03:30~~ 04:30
 (C) First Final Flow 189 Safety Joint 75 T-Open 06:50
 (D) Initial Shut-In 1249 Circ Sub NC T-Pulled 10:50
 (E) Second Initial Flow 192 Hourly Standby _____ T-Out 13:27
 (F) Second Final Flow 286 Mileage 200 RT 155 Comments _____
 (G) Final Shut-In 1229 Sampler _____
 (H) Final Hydrostatic 2012 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 1730
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1730

Approved By Rocky Milford Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56917

Well Name & No. Frisbie # 3-23 Test No. 4 Date 3-20-14
 Company Murfin Drilling Co., Inc. Elevation 3314 KB 3309 GL
 Address 250 N. Water Ste. 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 2S Rge. 36 W Co. Rawlins State KS

Interval Tested 4255-4313 Zone Tested LKC 'A'sd-D'
 Anchor Length 58' Drill Pipe Run 4071' Mud Wt. 9.1
 Top Packer Depth 4251 Drill Collars Run 186' Vis 52
 Bottom Packer Depth 4255 Wt. Pipe Run 0 WL 6.8
 Total Depth 4313 Chlorides 800 ppm System LCM 2#

Blow Description IF - Surface blow built to 1"
ISI - No Return
FF - Weak surface started in 13 min. built up to 1/4"
FSTI - No Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|------------|-----------|------|-----------|------|
| <u>64'</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 64' BHT 132°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2082 Test 1250 T-On Location 9:15 pm
 (B) First Initial Flow 22 Jars 250 T-Started 9:56 pm
 (C) First Final Flow 32 Safety Joint 75 T-Open 12:31 am
 (D) Initial Shut-In 1189 Circ Sub N/C T-Pulled 4:31 am
 (E) Second Initial Flow 36 Hourly Standby _____ T-Out 7:14 am
 (F) Second Final Flow 49 Mileage 100 R/T 155 Comments slide 7' to bottom
 (G) Final Shut-In 1175 Sampler _____
 (H) Final Hydrostatic 2044 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Sub Total 1730
 Total 1730
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56918

Well Name & No. Frisbie #3-23 Test No. 5 Date 3-21-14
 Company Murfin Drilling Co., Inc. Elevation 3314 KB 3309 GL
 Address 250 N. Water Ste 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 2S Rge. 36 W Co. Rawlins State KS

Interval Tested 4305-4373 Zone Tested D'-G
 Anchor Length 68' Drill Pipe Run 4103 Mud Wt. 9.0
 Top Packer Depth 4301 Drill Collars Run 186' Vis 53
 Bottom Packer Depth 4305 Wt. Pipe Run 0 WL 6.4
 Total Depth 4373 Chlorides 900 ppm System LCM 4#
 Blow Description IF - Surface blow built to bottom of bucket in 1 min.
ISI - No Return
FF - Surface blow built to bottom of bucket in 1 min.
FSI - No Return

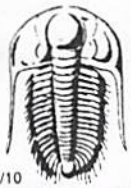
| Rec | Feet of | %gas | %oil | %water | %mud |
|--------------|-----------|------|-----------|-----------|------|
| <u>481'</u> | <u>WM</u> | | <u>40</u> | <u>60</u> | |
| <u>2394'</u> | <u>MW</u> | | <u>85</u> | <u>15</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 2,875' BHT 144°F Gravity _____ API RW 373 @ 35 °F Chlorides 40,000 ppm

| | | |
|-------------------------------------|--|--|
| (A) Initial Hydrostatic <u>2085</u> | <input checked="" type="checkbox"/> Test <u>1250</u> | T-On Location <u>4:45pm</u> |
| (B) First Initial Flow <u>1,014</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>5:00pm</u> |
| (C) First Final Flow <u>1241</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>7:02pm</u> |
| (D) Initial Shut-In <u>1304</u> | <input checked="" type="checkbox"/> Circ Sub <u>N/C</u> | T-Pulled <u>9:32pm</u> |
| (E) Second Initial Flow <u>1253</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>1:22am</u> |
| (F) Second Final Flow <u>1303</u> | <input checked="" type="checkbox"/> Mileage <u>100 R/T</u> 155 | Comments _____ |
| (G) Final Shut-In <u>1304</u> | <input type="checkbox"/> Sampler _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| (H) Final Hydrostatic <u>2020</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Open <u>15</u> | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Initial Shut-In <u>60</u> | <input type="checkbox"/> Extra Packer _____ | Sub Total <u>0</u> |
| Final Flow <u>15</u> | <input type="checkbox"/> Extra Recorder _____ | Total <u>1730</u> |
| Final Shut-In <u>60</u> | <input type="checkbox"/> Day Standby _____ | MP/DST Disc't _____ |
| | <input type="checkbox"/> Accessibility _____ | |
| | Sub Total <u>1730</u> | |

Approved By _____ Our Representative Rocky Milford

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56919

Well Name & No. Frisbie #~~3-23~~ #3-23 Test No. 6 Date 3-22-14
 Company Murfin Drilling Co., Inc. Elevation 3314 KB 3309 GL
 Address 250 W. Water Ste. 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4373 - 4490 Zone Tested LKC G'-K
 Anchor Length 117' Drill Pipe Run 4166' Mud Wt. 9.0
 Top Packer Depth 4369 Drill Collars Run 186' Vis 55
 Bottom Packer Depth 4373 Wt. Pipe Run 0 WL 5.6
 Total Depth 4490 Chlorides 1,400 ppm System LCM 4#

Blow Description IF - Surface blow built to 3 1/4"
ISI - No Return
FF - Surface blow started 5 min. in and built to 3 1/4"
FSI - No Return

| Rec | Feet of | %gas | spots | %oil | %water | %mud |
|-------------|-------------|------|-------|-----------|-----------|------|
| <u>219'</u> | <u>OSWM</u> | | | <u>10</u> | <u>90</u> | |
| Rec | Feet of | %gas | | %oil | %water | %mud |
| Rec | Feet of | %gas | | %oil | %water | %mud |
| Rec | Feet of | %gas | | %oil | %water | %mud |
| Rec | Feet of | %gas | | %oil | %water | %mud |

Rec Total 219' BHT 132°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2150 Test 1250 T-On Location 4:00 pm
 (B) First Initial Flow 18 Jars 250 T-Started 4:44 pm
 (C) First Final Flow 63 Safety Joint 75 T-Open 7:33 pm
 (D) Initial Shut-In 1083 Circ Sub N/C T-Pulled 11:33 pm
 (E) Second Initial Flow 67 Hourly Standby _____ T-Out 2:20 am
 (F) Second Final Flow 113 Mileage 100 R/T 155 Comments Chased tool
 (G) Final Shut-In 987 Sampler _____ 4A to bottom
 (H) Final Hydrostatic 2089 Straddle _____ Ruined Shale Packer _____
 Shale Packer 250 Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1980
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1980

Approved By _____ Our Representative [Signature]

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Well Name & No. Frisbie #3-23 Test No. 7 Date 3-24-14
 Company Murfin Drilling Co., Inc. Elevation 3314 KB 3309 GL
 Address 250 N. Water Ste 300 Wichita KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4603-4744 Zone Tested Pawnee - Verdigris
 Anchor Length 141' Drill Pipe Run 4147 Mud Wt. 9.0
 Top Packer Depth 4599 Drill Collars Run 186' Vis 57
 Bottom Packer Depth 4603 Wt. Pipe Run 0 WL 6.4
 Total Depth 4744 Chlorides 1200 ppm System LCM 3#
 Blow Description IF - Surface blow slowly built to 1"
ISI - No Return
FF - No Surface blow
FST - No Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----|---------|------|------|--------|------|
| 3' | Mud | | | 100% | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 3' BHT 133°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2349 Test 1250 T-On Location 3:15am
 (B) First Initial Flow 20 Jars 250 T-Started 3:49am
 (C) First Final Flow 26 Safety Joint 75 T-Open 7:22am
 (D) Initial Shut-In 49 Circ Sub N/C T-Pulled 10:30am
 (E) Second Initial Flow 27 Hourly Standby _____ T-Out 12:47pm
 (F) Second Final Flow 30 Mileage 100 R/T 155 Comments Loaded tool after test
 (G) Final Shut-In 42 Sampler _____
 (H) Final Hydrostatic 2315 Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1980
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1980