



DRILL STEM TEST REPORT

Prepared For: **McElvain Energy Inc**

1050 17th St Ste 2500
Denver CO 80265

ATTN: Chris Mitchell

Justus #12-9

12-10s-22w Graham,KS

Start Date: 2013.10.28 @ 17:45:00

End Date: 2013.10.29 @ 02:31:30

Job Ticket #: 52546 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.05 @ 15:15:32

McElvain Energy Inc
12-10s-22w Graham,KS
Justus #12-9
DST # 1
LKC -A-C
2013.10.28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

McElvain Energy Inc
 1050 17th St Ste 2500
 Denver CO 80265
 ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
 Job Ticket: 52546 **DST#: 1**
 Test Start: 2013.10.28 @ 17:45:00

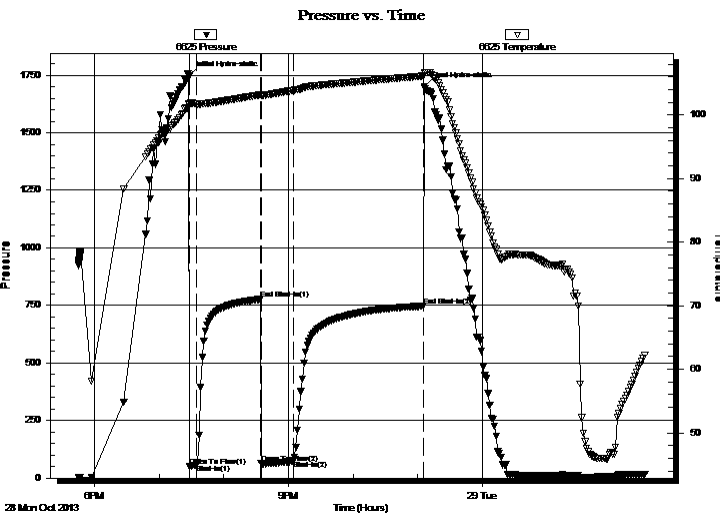
GENERAL INFORMATION:

Formation: **LKC -A-C**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 19:28:00 Tester: Jeff Brown
 Time Test Ended: 02:31:30 Unit No: 67
 Interval: **3542.00 ft (KB) To 3600.00 ft (KB) (TVD)** Reference Elevations: 2312.00 ft (KB)
 Total Depth: 3600.00 ft (KB) (TVD) 2302.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 6625 Inside

Press @ Run Depth: 76.96 psig @ 3581.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.28 End Date: 2013.10.29 Last Calib.: 2013.10.29
 Start Time: 17:45:01 End Time: 02:31:30 Time On Btm: 2013.10.28 @ 19:27:30
 Time Off Btm: 2013.10.28 @ 23:06:30

TEST COMMENT: IFP-5-min-Weak blow built to 2-3/4"
 ISI-60-min-Dead no blow back
 FFP-30-min-Good blow BOB in 30 min
 FSI-120-min-Dead no blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1746.63 | 101.84 | Initial Hydro-static |
| 1 | 50.22 | 101.66 | Open To Flow (1) |
| 7 | 58.64 | 101.75 | Shut-In(1) |
| 67 | 776.84 | 103.18 | End Shut-In(1) |
| 67 | 64.40 | 103.11 | Open To Flow (2) |
| 97 | 76.96 | 103.90 | Shut-In(2) |
| 218 | 746.43 | 106.14 | End Shut-In(2) |
| 219 | 1699.24 | 106.60 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 63.00 | GOCM 10%G 20%O 70%M | 0.88 |
| 15.00 | HOCM 30%O 70%M | 0.21 |
| 0.00 | 115-GIP | 0.00 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

McElvain Energy Inc
1050 17th St Ste 2500
Denver CO 80265
ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
Job Ticket: 52546 **DST#: 1**
Test Start: 2013.10.28 @ 17:45:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------------------|
| Drill Pipe: | Length: 3533.00 ft | Diameter: 3.80 inches | Volume: 49.56 bbl | Tool Weight: 2200.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.70 inches | Volume: 0.00 bbl | Weight set on Packer: 22000.00 lb |
| Drill Collar: | Length: 0.00 ft | Diameter: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 65000.00 lb |
| | | | Total Volume: 49.56 bbl | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 21.00 ft | | | String Weight: Initial 60000.00 lb |
| Depth to Top Packer: | 3542.00 ft | | | Final 60000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 58.00 ft | | | |
| Tool Length: | 88.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.88 inches | | |

Tool Comments:

Tool Description

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

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Recorder | 0.00 | 8167 | Fluid | 3512.00 | |
| Change Over Sub | 1.00 | | | 3513.00 | |
| Shut In Tool | 5.00 | | | 3518.00 | |
| Sampler | 2.00 | | | 3520.00 | |
| Hydraulic tool | 5.00 | | | 3525.00 | |
| Jars | 5.00 | | | 3530.00 | |
| Safety Joint | 3.00 | | | 3533.00 | |
| Packer | 4.00 | | | 3537.00 | 30.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3542.00 | |
| Stubb | 1.00 | | | 3543.00 | |
| Perforations | 4.00 | | | 3547.00 | |
| Change Over Sub | 1.00 | | | 3548.00 | |
| Drill Pipe | 32.00 | | | 3580.00 | |
| Change Over Sub | 1.00 | | | 3581.00 | |
| Recorder | 0.00 | 6625 | Inside | 3581.00 | |
| Recorder | 0.00 | 8679 | Outside | 3581.00 | |
| Perforations | 15.00 | | | 3596.00 | |
| Bullnose | 4.00 | | | 3600.00 | 58.00 Bottom Packers & Anchor |

Total Tool Length: 88.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

McElvain Energy Inc

12-10s-22w Graham,KS

1050 17th St Ste 2500
Denver CO 80265

Justus #12-9

Job Ticket: 52546

DST#: 1

ATTN: Chris Mitchell

Test Start: 2013.10.28 @ 17:45:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|---------------------|----------------|
| 63.00 | GOCM 10%G 20%O 70%M | 0.884 |
| 15.00 | HOCM 30%O 70%M | 0.210 |
| 0.00 | 115-GIP | 0.000 |

Total Length: 78.00 ft Total Volume: 1.094 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 150 mL of gas. 150 mL of Water.900 mL of oil. 1800 mL of mud 50 PSI

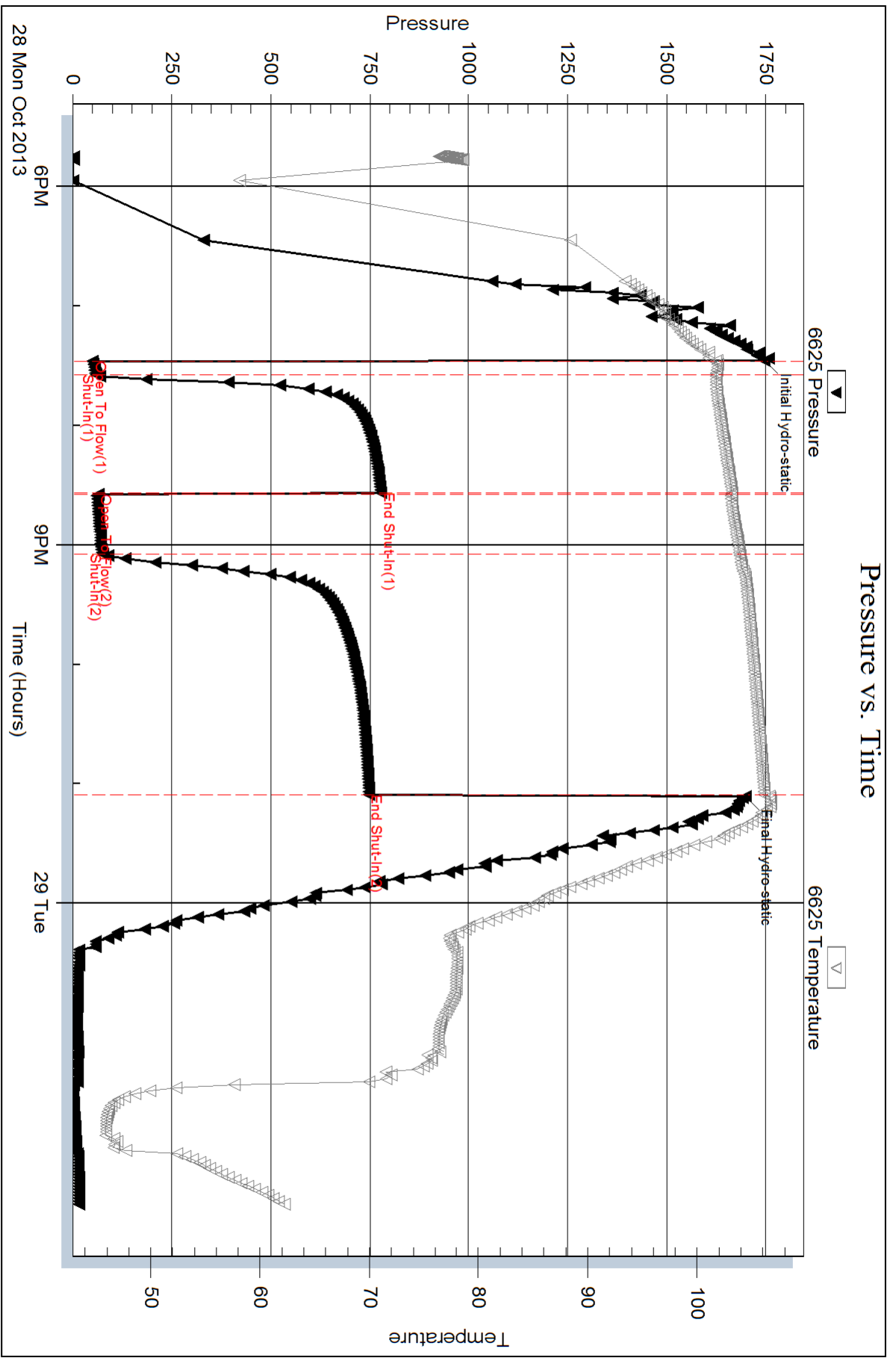
Serial #: 6625

Inside

McElvain Energy Inc

Justus #12-9

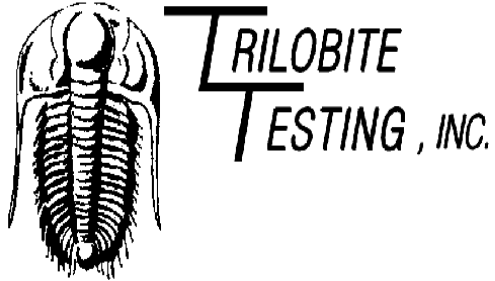
DST Test Number: 1



Triobite Testing, Inc

Ref. No: 52546

Printed: 2013.11.05 @ 15:15:34



DRILL STEM TEST REPORT

Prepared For: **McElvain Energy Inc**

1050 17th St Ste 2500
Denver CO 80265

ATTN: Chris Mitchell

Justus #12-9

12-10s-22w Graham,KS

Start Date: 2013.10.29 @ 19:11:48

End Date: 2013.10.30 @ 03:35:18

Job Ticket #: 52547 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.05 @ 15:15:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

McElvain Energy Inc
 1050 17th St Ste 2500
 Denver CO 80265
 ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
 Job Ticket: 52547 **DST#: 2**
 Test Start: 2013.10.29 @ 19:11:48

GENERAL INFORMATION:

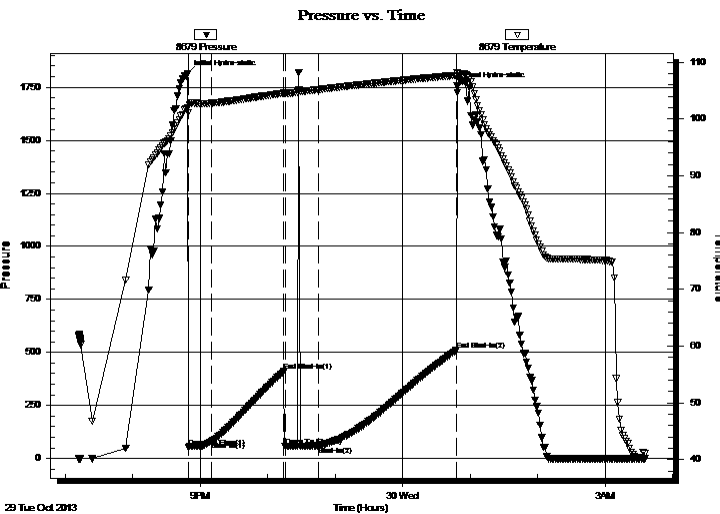
Formation: **LKC H-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:49:18
 Time Test Ended: 03:35:18
 Interval: **3670.00 ft (KB) To 3736.00 ft (KB) (TVD)**
 Total Depth: 3736.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jeff Brown
 Unit No: 67
 Reference Elevations: 2312.00 ft (KB)
 2302.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8679

Outside

Press @ Run Depth: 58.74 psig @ 3708.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.29 End Date: 2013.10.30 Last Calib.: 2013.10.30
 Start Time: 19:11:49 End Time: 03:35:18 Time On Btm: 2013.10.29 @ 20:48:48
 Time Off Btm: 2013.10.30 @ 00:48:18

TEST COMMENT: IFI-5-min-Weak surface blow built to 1/8":
 ISI-75-min-Dead no blow back
 FFP-30-min-Dead- Flushed tool surged then died
 FSI-120 min-Dead no blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1812.03 | 101.98 | Initial Hydro-static |
| 1 | 54.14 | 101.11 | Open To Flow (1) |
| 22 | 81.42 | 102.78 | Shut-In(1) |
| 86 | 410.49 | 104.55 | End Shut-In(1) |
| 87 | 57.10 | 104.45 | Open To Flow (2) |
| 117 | 58.74 | 105.18 | Shut-In(2) |
| 239 | 510.32 | 107.69 | End Shut-In(2) |
| 240 | 1755.36 | 108.21 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 53.00 | Mud w ith oil spots | 0.74 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

McElvain Energy Inc
1050 17th St Ste 2500
Denver CO 80265
ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
Job Ticket: 52547 **DST#: 2**
Test Start: 2013.10.29 @ 19:11:48

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3659.00 ft | Diameter: 3.80 inches | Volume: 51.33 bbl | Tool Weight: 2200.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.70 inches | Volume: 0.00 bbl | Weight set on Packer: 22000.00 lb |
| Drill Collar: | Length: 0.00 ft | Diameter: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 69000.00 lb |
| | | | <u>Total Volume: 51.33 bbl</u> | Tool Chased 6.00 ft |
| Drill Pipe Above KB: | 19.00 ft | | | String Weight: Initial 60000.00 lb |
| Depth to Top Packer: | 3670.00 ft | | | Final 60000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 66.00 ft | | | |
| Tool Length: | 96.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.88 inches | | |

Tool Comments:

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

| | | | | | |
|-----------------|-------|------|---------|---------|-------------------------------|
| Recorder | 0.00 | 8167 | Fluid | 3640.00 | |
| Change Over Sub | 1.00 | | | 3641.00 | |
| Shut In Tool | 5.00 | | | 3646.00 | |
| Sampler | 2.00 | | | 3648.00 | |
| Hydraulic tool | 5.00 | | | 3653.00 | |
| Jars | 5.00 | | | 3658.00 | |
| Safety Joint | 3.00 | | | 3661.00 | |
| Packer | 4.00 | | | 3665.00 | 30.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3670.00 | |
| Stubb | 1.00 | | | 3671.00 | |
| Perforations | 4.00 | | | 3675.00 | |
| Change Over Sub | 1.00 | | | 3676.00 | |
| Drill Pipe | 31.00 | | | 3707.00 | |
| Change Over Sub | 1.00 | | | 3708.00 | |
| Recorder | 0.00 | 6625 | Inside | 3708.00 | |
| Recorder | 0.00 | 8679 | Outside | 3708.00 | |
| Perforations | 24.00 | | | 3732.00 | |
| Bullnose | 4.00 | | | 3736.00 | 66.00 Bottom Packers & Anchor |

Total Tool Length: 96.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

McElvain Energy Inc

12-10s-22w Graham,KS

1050 17th St Ste 2500
Denver CO 80265

Justus #12-9

Job Ticket: 52547

DST#: 2

ATTN: Chris Mitchell

Test Start: 2013.10.29 @ 19:11:48

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: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|---------------------|----------------|
| 53.00 | Mud w ith oil spots | 0.743 |

Total Length: 53.00 ft Total Volume: 0.743 bbl

Num Fluid Samples: 0

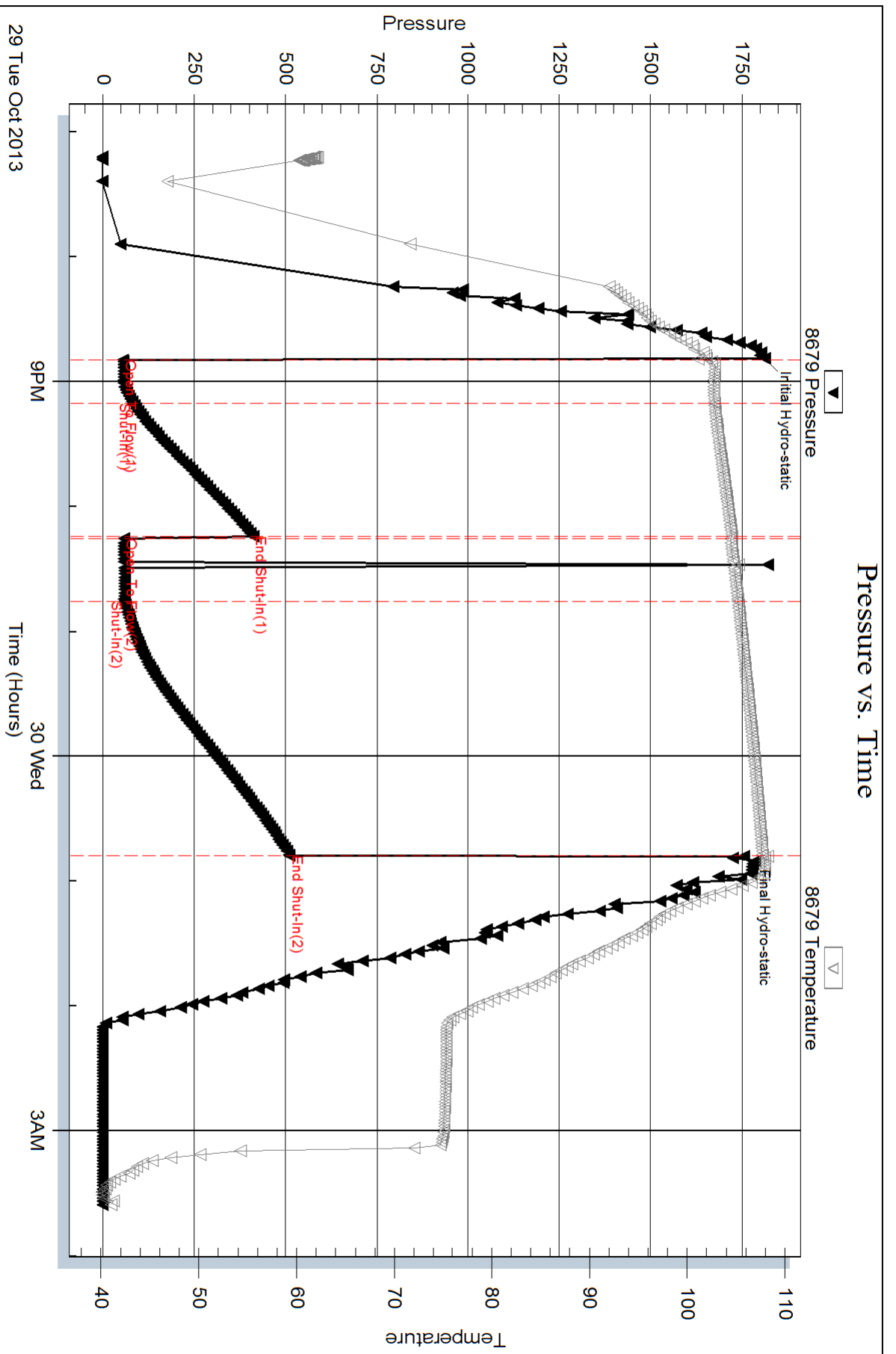
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2500 ML of Mud w ith oil spots. 50 PSI



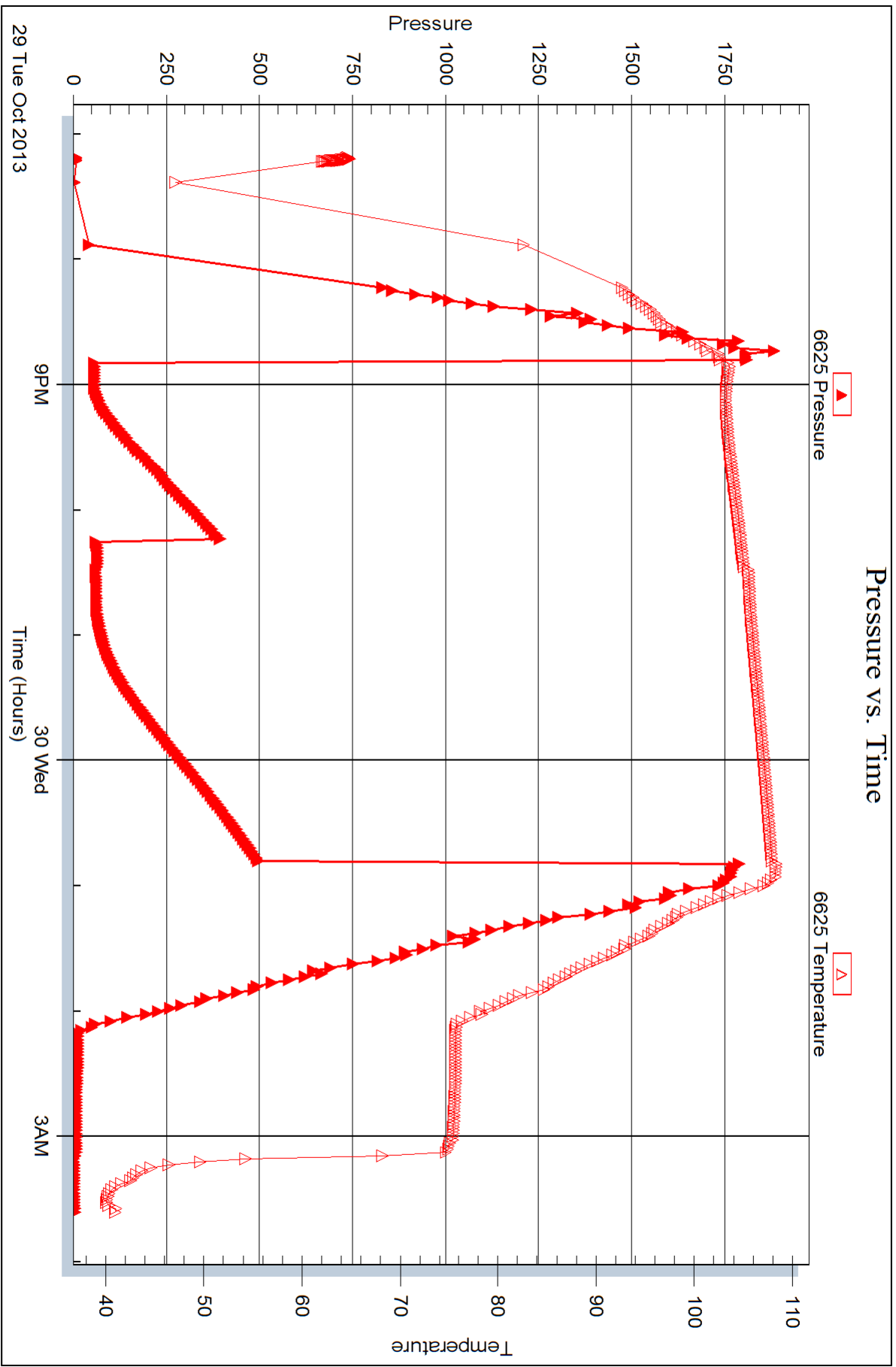
Serial #: 6625

Inside

McElvain Energy Inc

Justus #12-9

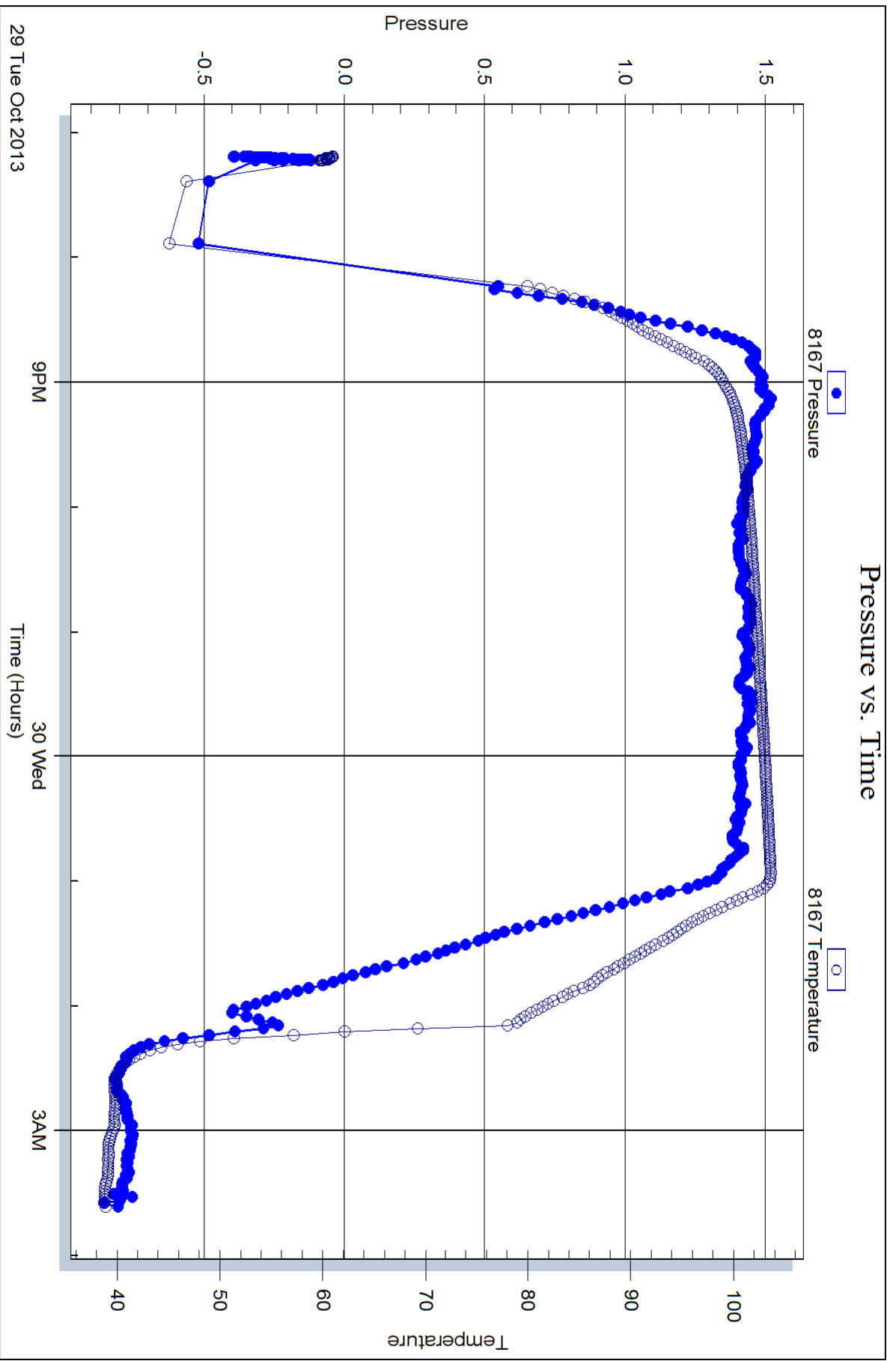
DST Test Number: 2

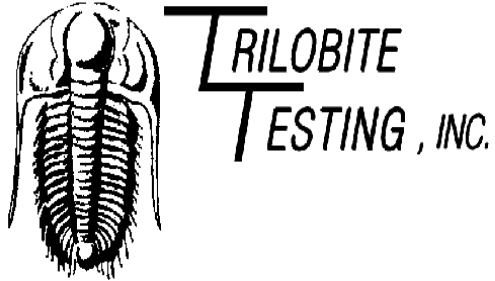


Triobite Testing, Inc

Ref. No: 52547

Printed: 2013.11.05 @ 15:15:02





DRILL STEM TEST REPORT

Prepared For: **McElvain Energy Inc**

1050 17th St Ste 2500
Denver CO 80265

ATTN: Chris Mitchell

Justus #12-9

12-10s-22w Graham,KS

Start Date: 2013.10.30 @ 21:17:59

End Date: 2013.10.31 @ 06:06:59

Job Ticket #: 52548 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.05 @ 15:14:29



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

McElvain Energy Inc
1050 17th St Ste 2500
Denver CO 80265
ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
Job Ticket: 52548 **DST#: 3**
Test Start: 2013.10.30 @ 21:17:59

GENERAL INFORMATION:

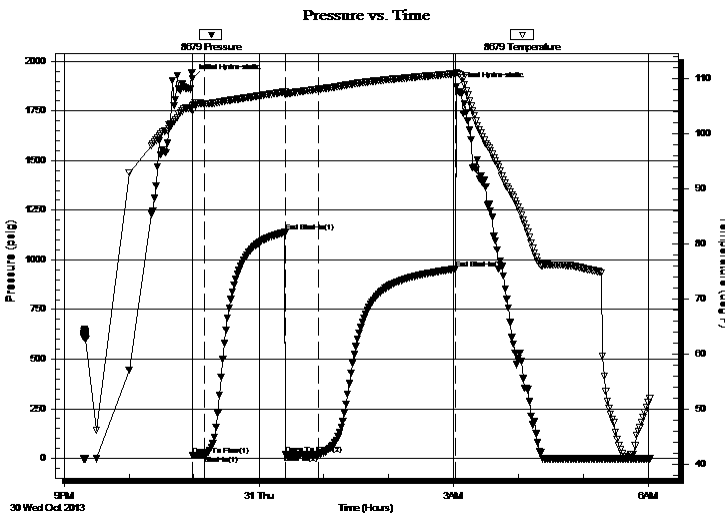
Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:58:59
Time Test Ended: 06:06:59
Interval: **3843.00 ft (KB) To 3865.00 ft (KB) (TVD)**
Total Depth: 3865.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 67
Reference Elevations: 2312.00 ft (KB)
2302.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8679 Outside

Press @ Run Depth: 18.14 psig @ 3844.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.30 End Date: 2013.10.31 Last Calib.: 2013.10.31
Start Time: 21:18:00 End Time: 06:01:59 Time On Btm: 2013.10.30 @ 22:58:29
Time Off Btm: 2013.10.31 @ 03:02:29

TEST COMMENT: IFP-10-min-Weak surface blow built to 1/4"
ISI-75-min-Dead no blow back
FFP-30-min-Dead no blow
FSI-120-min-Dead no blow back

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1912.17 | 105.01 | Initial Hydro-static |
| 1 | 15.62 | 104.24 | Open To Flow (1) |
| 12 | 17.82 | 105.50 | Shut-In(1) |
| 86 | 1138.52 | 107.57 | End Shut-In(1) |
| 86 | 18.58 | 107.16 | Open To Flow (2) |
| 117 | 18.14 | 108.07 | Shut-In(2) |
| 243 | 953.41 | 110.87 | End Shut-In(2) |
| 244 | 1873.81 | 111.13 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 5.00 | HOCM 25%O 75%M | 0.07 |
| 1.00 | Free Oil | 0.01 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

McElvain Energy Inc
1050 17th St Ste 2500
Denver CO 80265
ATTN: Chris Mitchell

12-10s-22w Graham,KS
Justus #12-9
Job Ticket: 52548 **DST#: 3**
Test Start: 2013.10.30 @ 21:17:59

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3843.00 ft | Diameter: 3.80 inches | Volume: 53.91 bbl | Tool Weight: 2200.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.70 inches | Volume: 0.00 bbl | Weight set on Packer: 22000.00 lb |
| Drill Collar: | Length: 0.00 ft | Diameter: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 64000.00 lb |
| | | | <u>Total Volume: 53.91 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 30.00 ft | | | String Weight: Initial 60000.00 lb |
| Depth to Top Packer: | 3843.00 ft | | | Final 60000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 22.00 ft | | | |
| Tool Length: | 52.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.88 inches | | |

Tool Comments:

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

| | | | | | |
|-----------------|-------|------|---------|---------|-------------------------------|
| Recorder | 0.00 | 8167 | Fluid | 3813.00 | |
| Change Over Sub | 1.00 | | | 3814.00 | |
| Shut In Tool | 5.00 | | | 3819.00 | |
| Sampler | 2.00 | | | 3821.00 | |
| Hydraulic tool | 5.00 | | | 3826.00 | |
| Jars | 5.00 | | | 3831.00 | |
| Safety Joint | 3.00 | | | 3834.00 | |
| Packer | 4.00 | | | 3838.00 | 30.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3843.00 | |
| Stubb | 1.00 | | | 3844.00 | |
| Recorder | 0.00 | 6625 | Inside | 3844.00 | |
| Recorder | 0.00 | 8679 | Outside | 3844.00 | |
| Perforations | 17.00 | | | 3861.00 | |
| Bullnose | 4.00 | | | 3865.00 | 22.00 Bottom Packers & Anchor |

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

McElvain Energy Inc

12-10s-22w Graham,KS

1050 17th St Ste 2500
Denver CO 80265

Justus #12-9

Job Ticket: 52548

DST#: 3

ATTN: Chris Mitchell

Test Start: 2013.10.30 @ 21:17:59

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|----------------|----------------|
| 5.00 | HOCM 25%O 75%M | 0.070 |
| 1.00 | Free Oil | 0.014 |

Total Length: 6.00 ft Total Volume: 0.084 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

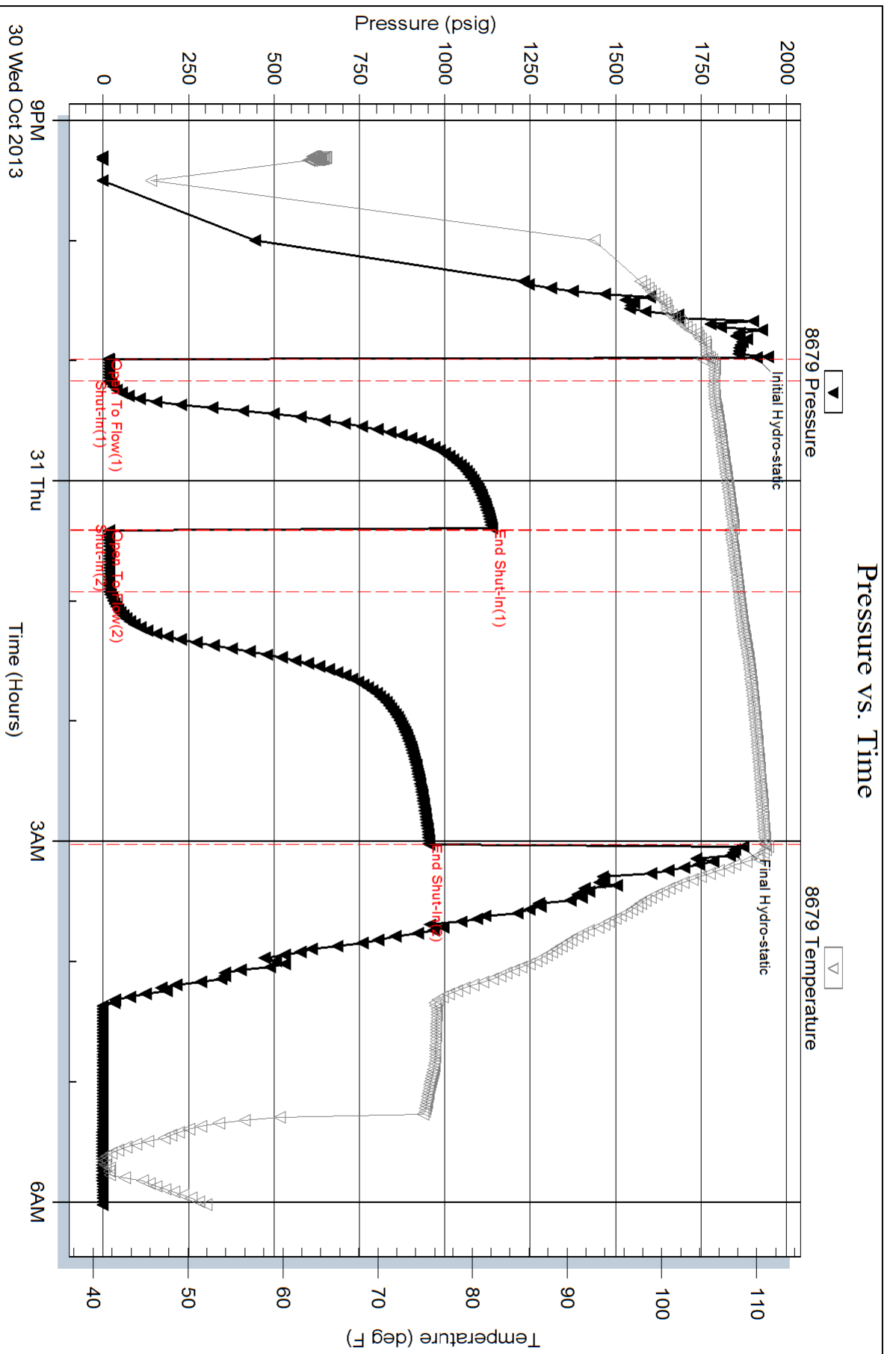
Recovery Comments: 2500 ML of total fluid. 750 ML of oil 1750 ML of mud 75 PSI

Serial #: 8679

Outside McElvain Energy Inc

Justus #12-9

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 52548

Printed: 2013.11.05 @ 15:14:31

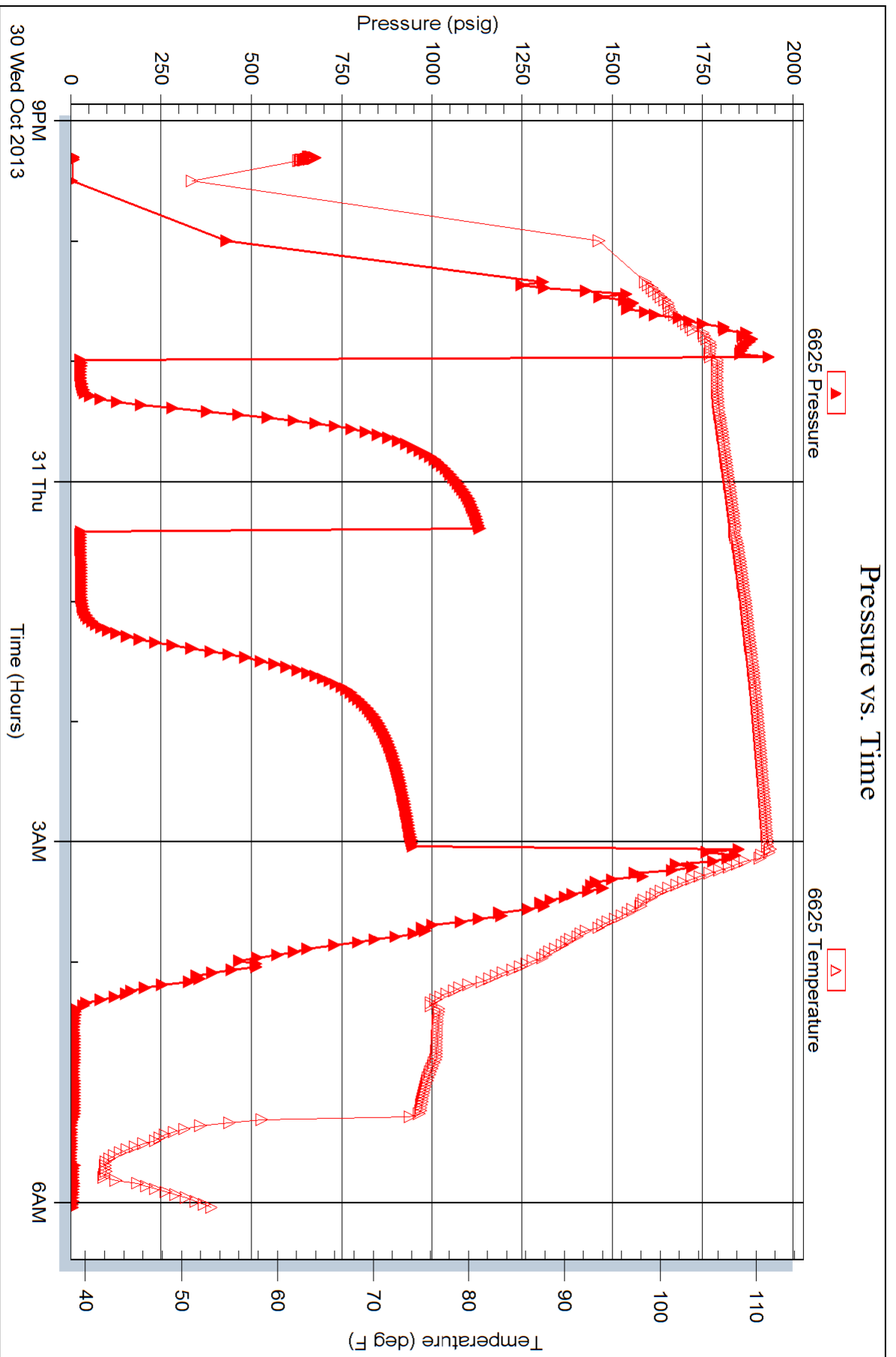
Serial #: 6625

Inside

McElvain Energy Inc

Justus #12-9

DST Test Number: 3



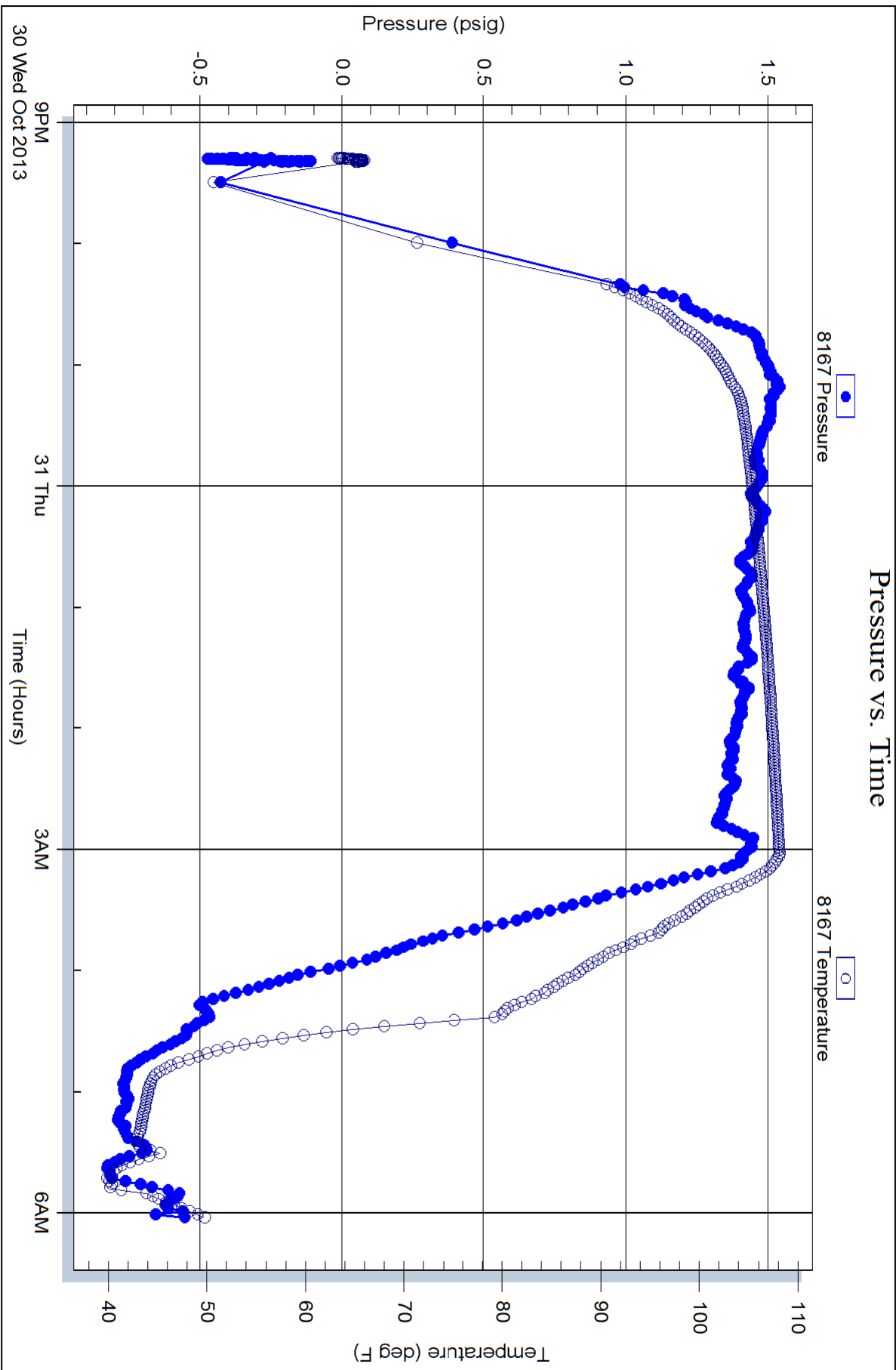
Serial #: 8167

Fluid

McElvain Energy Inc

Justus #12-9

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52546

Well Name & No. JUSTUS 12-15 #1 Test No. 1 Date 10-28-13
 Company McElvain Energy INC Elevation 2312 KB 2302 GL
 Address 1050 17TH ST STE 2500 DENVER CO 80265 + 2080
 Co. Rep / Geo. Chris Mitchell Rig Val #4
 Location: Sec. 12 Twp. 10 S Rge. 22 W Co. Graham State KS

Interval Tested 3542-3600 Zone Tested Lansing - A - C
 Anchor Length 58 Drill Pipe Run 3533 Mud Wt. 8.9
 Top Packer Depth 3537 Drill Collars Run 0 Vis 57
 Bottom Packer Depth 3542 Wt. Pipe Run 0 WL 6.0
 Total Depth 3600 Chlorides 2000 ppm System LCM 1

Blow Description FFP-5 min = Weak Blow Built To 2 3/4 IN
ISI-60 min = Dead No Blow Back
FFP-30 min = Good Blow BOB IN 30 min
FBI-120 min = Dead No Blow Back

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------------|----------|-----------|-----------|------|
| <u>63</u> | <u>600 m</u> | <u>5</u> | <u>20</u> | <u>70</u> | |
| <u>15</u> | <u>HOC m</u> | | <u>30</u> | <u>70</u> | |
| | <u>115 - GIP</u> | | | | |
| | | | | | |
| | | | | | |

Rec Total 78 BHT 106 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | | | | |
|-------------------------|-------------|--|---------------|--|--------------------------|
| (A) Initial Hydrostatic | <u>1747</u> | <input checked="" type="checkbox"/> Test | <u>1150</u> | T-On Location | <u>17:12</u> |
| (B) First Initial Flow | <u>50</u> | <input checked="" type="checkbox"/> Jars | <u>250</u> | T-Started | <u>17:45</u> |
| (C) First Final Flow | <u>59</u> | <input checked="" type="checkbox"/> Safety Joint | <u>75</u> | T-Open | <u>19:29</u> |
| (D) Initial Shut-In | <u>277</u> | <input type="checkbox"/> Circ Sub | | T-Pulled | <u>23:04</u> |
| (E) Second Initial Flow | <u>64</u> | <input type="checkbox"/> Hourly Standby | | T-Out | <u>2:31</u> |
| (F) Second Final Flow | <u>77</u> | <input checked="" type="checkbox"/> Mileage | <u>108 RT</u> | Comments | <u>2000 mL HOC 6Wm</u> |
| (G) Final Shut-In | <u>746</u> | <input checked="" type="checkbox"/> Sampler | <u>250</u> | | <u>5%G 5%W 30%O 60%M</u> |
| (H) Final Hydrostatic | <u>1699</u> | <input type="checkbox"/> Straddle | | <input type="checkbox"/> Ruined Shale Packer | |
| | | <input type="checkbox"/> Shale Packer | | <input type="checkbox"/> Ruined Packer | |
| | | <input type="checkbox"/> Extra Packer | | <input type="checkbox"/> Extra Copies | |

Initial Open 5
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 120

Sub Total 2092.40

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 5254L Date 10-28-13
 Company Name McElvain Energy INC
 Lease Justus 12- Test No. 1
 County Graham Sec. 12 Twp. 10S Rng. 22W

SAMPLER RECOVERY

Gas 150 ML
 Oil 900 ML
 Mud 1800 ML
 Water 150 ML
 Other _____ ML
 Pressure 50 PSI ML
 Total 3000 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
HOCGWM 5%G 5%W 30%O
60%M

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52547

Well Name & No. JUSTUS 12-15 #1 Test No. 2 Date 10-29-13
 Company McElvain Energy INC Elevation 2312 KB 2302 GL
 Address 1050 17TH ST STE 2500 DENVER CO 80265 + 2080
 Co. Rep / Geo. Chris Mitchell Rig Val #6
 Location: Sec. 12 Twp. 10 S Rge. 22 W Co. Graham State KS

Interval Tested 3670-3736 Zone Tested LKC-H-K
 Anchor Length 66 Drill Pipe Run 3659 Mud Wt. 9.0
 Top Packer Depth 3665 Drill Collars Run 0 Vis 55
 Bottom Packer Depth 3670 Wt. Pipe Run 0 WL 6.8
 Total Depth 3736 Chlorides 2100 ppm System LCM 1

Blow Description FF-Weak surface Blow Built to 1/8 IN
FF-Dead NO Blow Back
FF-

FF-Dead NO Blow Back

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|---------------------------|------|------|--------|------|
| <u>53</u> | <u>mud with oil spots</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 53 BHT 108 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>1812</u> | <input checked="" type="checkbox"/> Test <u>1150</u> | T-On Location <u>18:56</u> |
| (B) First Initial Flow <u>54</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>19:11</u> |
| (C) First Final Flow <u>81</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>20:50</u> |
| (D) Initial Shut-In <u>410</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>00:45</u> |
| (E) Second Initial Flow <u>57</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>3:35</u> |
| (F) Second Final Flow <u>59</u> | <input checked="" type="checkbox"/> Mileage <u>167.40</u> | Comments _____ |
| (G) Final Shut-In <u>510</u> | <input checked="" type="checkbox"/> Sampler <u>250</u> | |
| (H) Final Hydrostatic <u>1755</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Open <u>10</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Initial Shut-In <u>75</u> | <input checked="" type="checkbox"/> Extra Recorder <u>200</u> | Sub Total <u>0</u> |
| Final Flow <u>30</u> | <input type="checkbox"/> Day Standby _____ | Total <u>2092.40</u> |
| Final Shut-In <u>120</u> | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>2092.40</u> | |

Approved By _____ Our Representative Jeff Brown
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TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 52547 Date 10-29-13
 Company Name MuElvain Energy INC
 Lease JUSTUS 12- #1 Test No. 2
 County Graham Sec. 12 Twp. 10 S Rng. 22 V

SAMPLER RECOVERY

Gas _____ ML
 Oil _____ ML
 Mud 2500 ML
 Water _____ ML
 Other _____ ML
 Pressure 50 PSI ML
 Total 2500 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
mud with oil spots

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52548

Well Name & No. Justus 12- #1 Test No. 3 Date 10-30-13
 Company McElvain Energy INC Elevation 2312 KB 2302 GL
 Address 1050 17th St Ste 2500 Denver Co 80265 + 2080
 Co. Rep / Geo. Chris Mitchell Rig VAL #6
 Location: Sec. 12 Twp. 10S Rge. 22W Co. Graham State KS

Interval Tested 3843-3865 Zone Tested Marmaton
 Anchor Length 22 Drill Pipe Run 3843 Mud Wt. 9.1
 Top Packer Depth 3838 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 3843 Wt. Pipe Run 0 WL 7.2
 Total Depth 3865 Chlorides 2100 ppm System LCM 1

Blow Description FP-10min = Weak Surface Blow Built To 1/4 IN
ISI-75-min = Dead No Blow Back
FP-20-min = Dead No Blow
ESI-60-min = Dead No Blow Back

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|-----------------|------------|-----------|--------|------|
| <u>5</u> | <u>HOCM</u> | <u>25</u> | <u>75</u> | | |
| <u>1</u> | <u>Free Oil</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 Total 60 BHT 111 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | |
|-------------------------------------|--|--|
| (A) Initial Hydrostatic <u>1912</u> | <input checked="" type="checkbox"/> Test 1150 | T-On Location <u>21:06</u> |
| (B) First Initial Flow <u>16</u> | <input checked="" type="checkbox"/> Jars 250 | T-Started <u>21:17</u> |
| (C) First Final Flow <u>18</u> | <input checked="" type="checkbox"/> Safety Joint 75 | T-Open <u>23:00</u> |
| (D) Initial Shut-In <u>1139</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>2:55</u> |
| (E) Second Initial Flow <u>19</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>6:06</u> |
| (F) Second Final Flow <u>18</u> | <input checked="" type="checkbox"/> Mileage 334.80 | Comments <u>Loaded Tools @ 6:00</u> |
| (G) Final Shut-In <u>953</u> | <input checked="" type="checkbox"/> Sampler 250 | <u>on 11-1-13</u> |
| (H) Final Hydrostatic <u>1874</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| Initial Open <u>10</u> | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Shut-In <u>75</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Final Flow <u>30</u> | <input checked="" type="checkbox"/> Extra Recorder 200 | Sub Total <u>0</u> |
| Final Shut-In <u>120</u> | <input type="checkbox"/> Day Standby _____ | Total <u>2259.80</u> |
| | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>2259.80</u> | |

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 52548 Date 10-30-13
 Company Name Mc Elvain Energy Inc
 Lease Justus 12- #1 Test No. 3
 County Graham Sec. 12 Twp. 10S Rng. 22W

SAMPLER RECOVERY

Gas _____ ML
 Oil 750 ML
 Mud 1750 ML
 Water _____ ML
 Other _____ ML
 Pressure 75 ML
 Total 2500 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
2500 ML - H₂O m 30% 70% m

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.