



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

McElvain Energy Inc
 1050 17th st.
 STE 2500
 Denver Co 80265-2080
 ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham

Walz 31-8

Job Ticket: 55456

DST#: 1

Test Start: 2013.12.11 @ 21:06:03

GENERAL INFORMATION:

Formation: **LKC C-upper G**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:40:58
 Time Test Ended: 05:46:43
 Interval: **3572.00 ft (KB) To 3644.00 ft (KB) (TVD)**
 Total Depth: 3644.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 2231.00 ft (KB)
 2221.00 ft (CF)
 KB to GR/CF: 10.00 ft

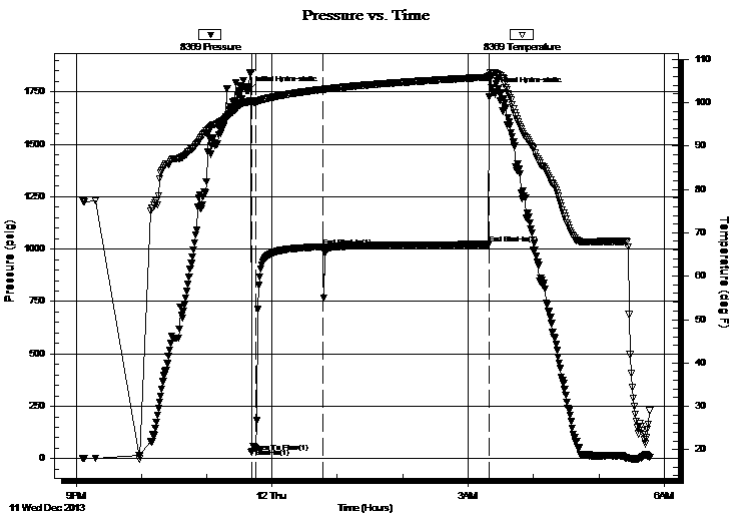
Serial #: 8369

Inside

Press@RunDepth: 47.82 psig @ 3579.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.12.11 End Date: 2013.12.12 Last Calib.: 2013.12.12
 Start Time: 21:06:03 End Time: 05:46:43 Time On Btm: 2013.12.11 @ 23:38:28
 Time Off Btm: 2013.12.12 @ 03:23:27

TEST COMMENT: 5-IFP-wk to a fr bl 1/2"to 4"bl
 60-ISIP-no bl
 30-FFP-no bl 1st 5min then surface bl
 120-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.44	100.15	Initial Hydro-static
3	29.98	99.90	Open To Flow (1)
7	47.82	100.09	Shut-In(1)
68	1011.10	103.02	End Shut-In(1)
221	1022.68	105.88	End Shut-In(2)
225	1751.34	106.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SOCM 1%O99%M	0.56

Gas Rates

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



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Walz 31-8
 Job Ticket: 55456 **DST#: 1**
 Test Start: 2013.12.11 @ 21:06:03

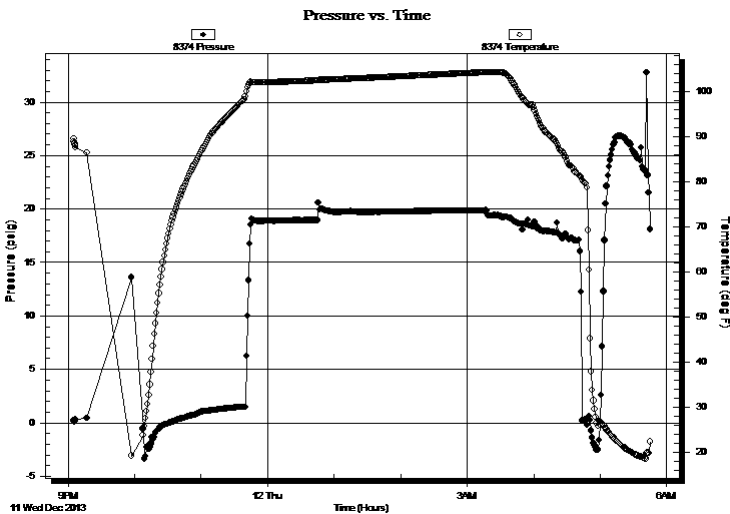
GENERAL INFORMATION:

Formation: **LKC C-upper G**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:40:58
 Time Test Ended: 05:46:43
Interval: 3572.00 ft (KB) To 3644.00 ft (KB) (TVD)
 Total Depth: 3644.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 2231.00 ft (KB)
 2221.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8374 Fluid

Press@RunDepth: psig @ 3536.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.12.11 End Date: 2013.12.12 Last Calib.: 2013.12.12
 Start Time: 21:05:17 End Time: 05:45:27 Time On Btm:
 Time Off Btm:

TEST COMMENT: 5-IFP-wk to a fr bl 1/2"to 4"bl
 60-ISIP-no bl
 30-FFP-no bl 1st 5min then surface bl
 120-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SOCM 1%O99%M	0.56

Gas Rates

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



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FLUID SUMMARY

McElvain Energy Inc
1050 17th st.
STE 2500
Denver Co 80265-2080
ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham
Walz 31-8
Job Ticket: 55456 **DST#: 1**
Test Start: 2013.12.11 @ 21:06:03

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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.75 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

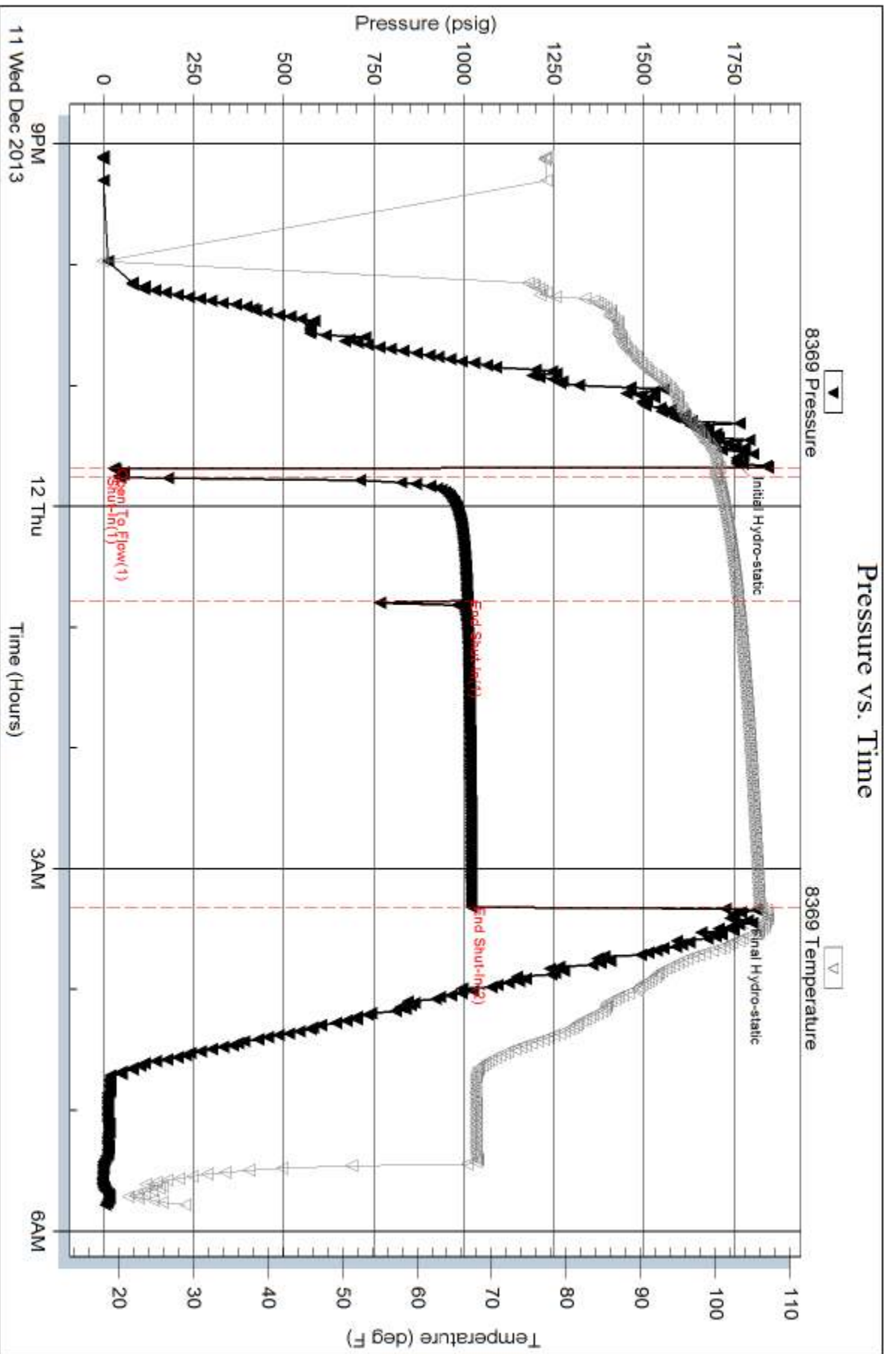
Length ft	Description	Volume bbl
40.00	SOCM 1%O99%M	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data: PSI : 50# 20MLoil 1880ML Mud



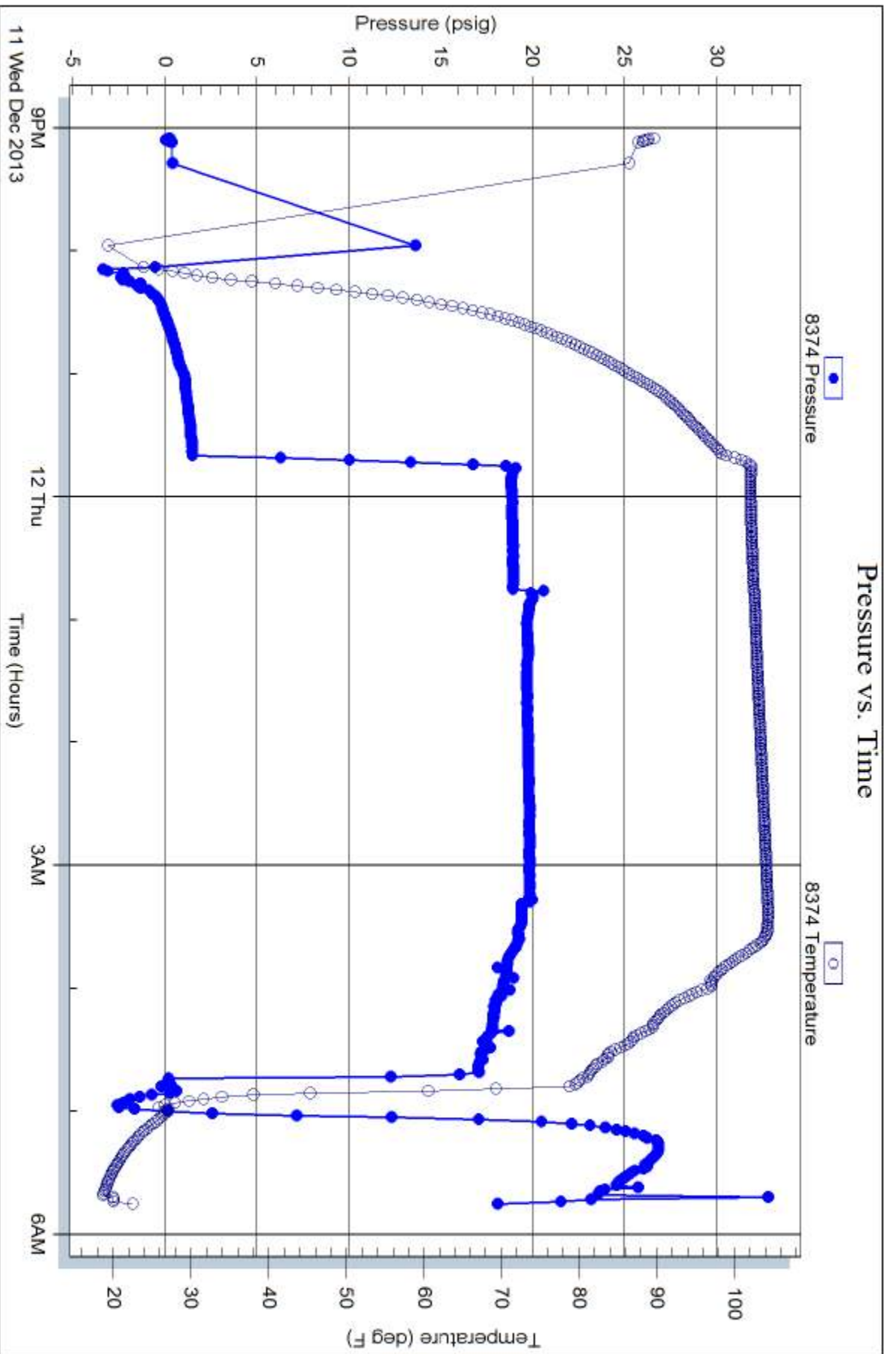
Serial #: 8374

Fluid

McEvain Energy Inc

Walz 31-8

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 55456

Printed: 2013.12.12 @ 08:04:48



**TRILOBITE
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DRILL STEM TEST REPORT

McElvain Energy Inc
1050 17th st.
STE 2500
Denver Co 80265-2080
ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham

Walz 31-8

Job Ticket: 55457

DST#: 2

Test Start: 2013.12.12 @ 10:50:12

GENERAL INFORMATION:

Formation: **LKC C-upper G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:12:52

Time Test Ended: 19:10:21

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3572.00 ft (KB) To 3644.00 ft (KB) (TVD)

Reference Elevations: 2231.00 ft (KB)

Total Depth: 3644.00 ft (KB) (TVD)

2221.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 116.75 psig @ 3579.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.12.12

End Date:

2013.12.12

Last Calib.:

2013.12.12

Start Time: 10:50:12

End Time:

19:10:21

Time On Btm:

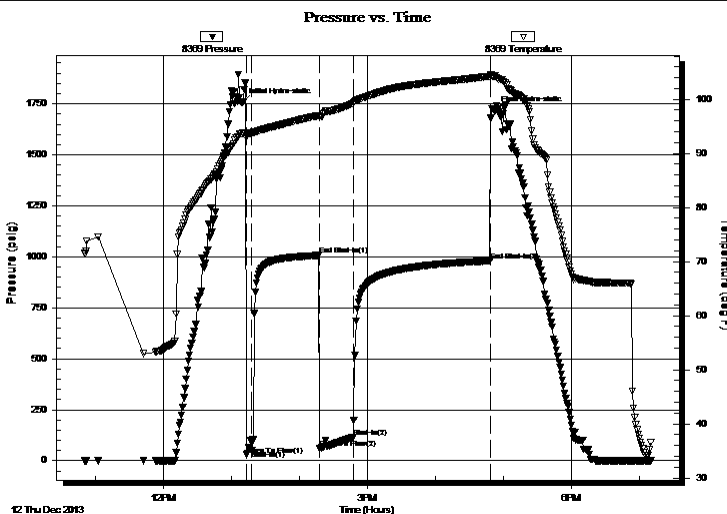
2013.12.12 @ 13:09:52

Time Off Btm:

2013.12.12 @ 16:52:21

TEST COMMENT: 5-IFP-w k to a fr bl 1/2" to 4 1/4" bl
60-ISIP-no bl
30-FFP-w k to strg in 20 min
120-FSIP-1/4" bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.40	93.74	Initial Hydro-static
3	28.42	92.96	Open To Flow (1)
8	49.80	93.72	Shut-In(1)
68	1006.78	97.00	End Shut-In(1)
68	59.80	96.75	Open To Flow (2)
98	116.75	99.28	Shut-In(2)
219	980.22	104.26	End Shut-In(2)
223	1718.77	104.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	175'GIP	0.00
15.00	CO	0.21
115.00	O&GCM 5%G10%O85%M	1.61
65.00	O&GCM 5%G15%O80%M	0.91

Gas Rates

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

* Recovery from multiple tests



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ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham
Walz 31-8
Job Ticket: 55457 **DST#: 2**
Test Start: 2013.12.12 @ 10:50:12

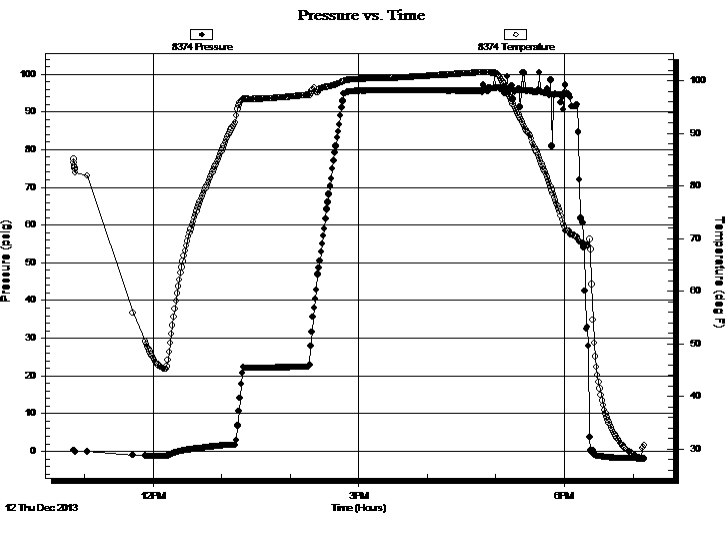
GENERAL INFORMATION:

Formation: **LKC C-upper G**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 13:12:52 Tester: Ray Schwager
Time Test Ended: 19:10:21 Unit No: 70

Interval: **3572.00 ft (KB) To 3644.00 ft (KB) (TVD)** Reference Elevations: 2231.00 ft (KB)
Total Depth: 3644.00 ft (KB) (TVD) 2221.00 ft (CF)
Hole Diameter: 7.85 inchesHole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8374 Fluid
Press @RunDepth: psig @ 3536.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.12.12 End Date: 2013.12.12 Last Calib.: 2013.12.12
Start Time: 10:50:20 End Time: 19:09:59 Time On Btm:
Time Off Btm:

TEST COMMENT: 5-IFP-w k to a fr bl 1/2"to 4 1/4"bl
60-ISIP-no bl
30-FFP-w k to strg in 20 min
120-FSIP-1/4"bl bk



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	175'GIP	0.00
15.00	CO	0.21
115.00	O&GCM 5%G10%O85%M	1.61
65.00	O&GCM 5%G15%O80%M	0.91

* Recovery from multiple tests

Gas Rates

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



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ATTN: Chris Mitchell/ Jeff

Walz 31-8

Job Ticket: 55457

DST#: 2

Test Start: 2013.12.12 @ 10:50:12

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 10.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.70 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 33 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

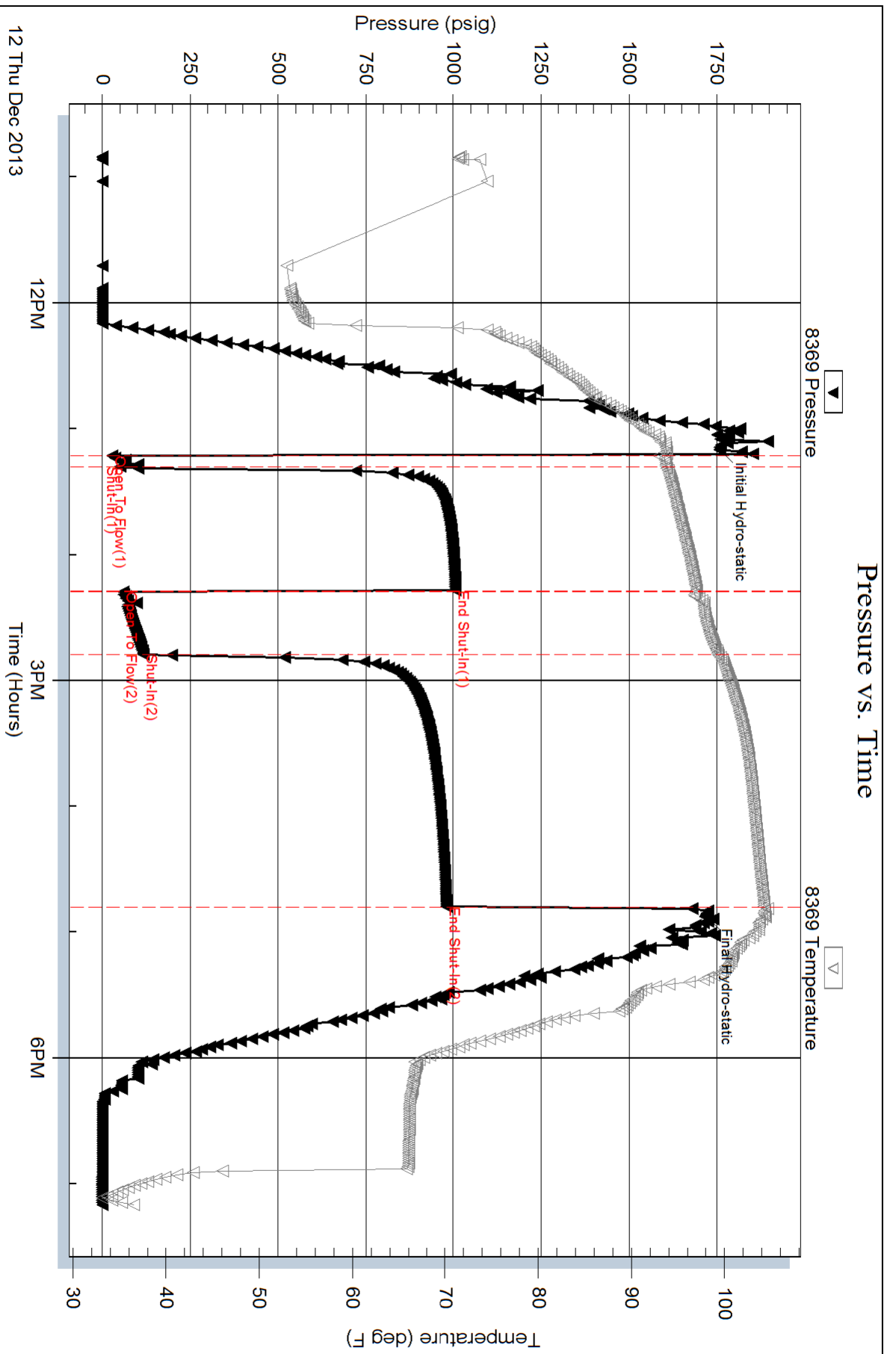
Length ft	Description	Volume bbl
0.00	175'GIP	0.000
15.00	CO	0.210
115.00	O&GCM 5%G10%O85%M	1.613
65.00	O&GCM 5%G15%O80%M	0.912

Total Length: 195.00 ft Total Volume: 2.735 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data: PSI:250 # 100ML Gas 300ML oil 1600MLMud
Gravity :33



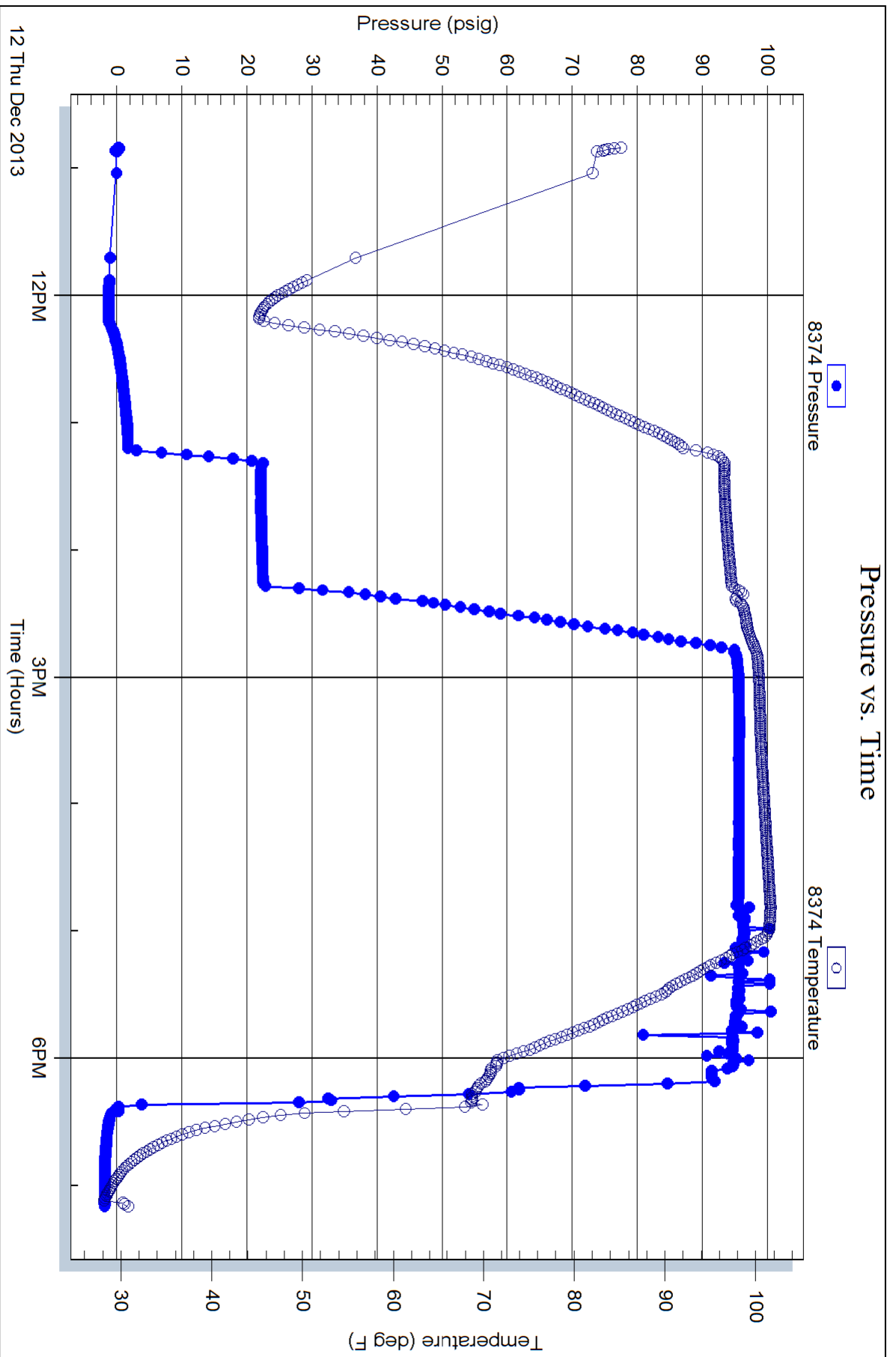
Serial #: 8374

Fluid

McElvain Energy Inc

Walz 31-8

DST Test Number: 2





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DRILL STEM TEST REPORT

McElvain Energy Inc
 1050 17th st.
 STE 2500
 Denver Co 80265-2080
 ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham

Walz 31-8

Job Ticket: 55458

DST#: 3

Test Start: 2013.12.13 @ 10:35:40

GENERAL INFORMATION:

Formation: **LKC I-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:09:05
 Time Test Ended: 19:09:50
 Interval: **3685.00 ft (KB) To 3750.00 ft (KB) (TVD)**
 Total Depth: 3750.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 2231.00 ft (KB)
 2221.00 ft (CF)
 KB to GR/CF: 10.00 ft

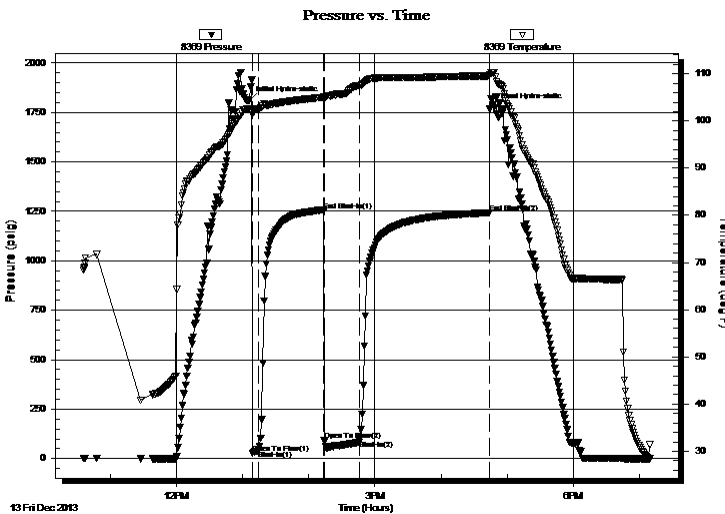
Serial #: 8369

Inside

Press @ Run Depth: 92.75 psig @ 3691.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.12.13 End Date: 2013.12.13 Last Calib.: 2013.12.13
 Start Time: 10:35:40 End Time: 19:09:50 Time On Btm: 2013.12.13 @ 13:06:20
 Time Off Btm: 2013.12.13 @ 16:48:19

TEST COMMENT: 5-IFP-w k to a fr bl 1/2" to 4 1/2" bl
 60-ISIP-no bl
 30-FFP-w k to strg in 12min
 120-FSIP-1/4" bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1810.73	102.59	Initial Hydro-static
3	26.24	101.31	Open To Flow (1)
9	39.99	102.58	Shut-In(1)
68	1252.04	105.05	End Shut-In(1)
68	91.97	104.51	Open To Flow (2)
100	92.75	107.45	Shut-In(2)
218	1243.10	109.57	End Shut-In(2)
222	1774.24	110.30	Final Hydro-static

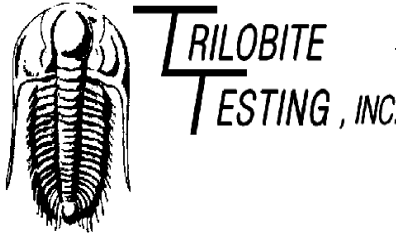
Recovery

Length (ft)	Description	Volume (bbl)
0.00	275'GIP	0.00
65.00	CO	0.91
85.00	O&GCM 10%G25%O65%M	1.19

* Recovery from multiple tests

Gas Rates

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



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ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham
Walz 31-8
Job Ticket: 55458 **DST#: 3**
Test Start: 2013.12.13 @ 10:35:40

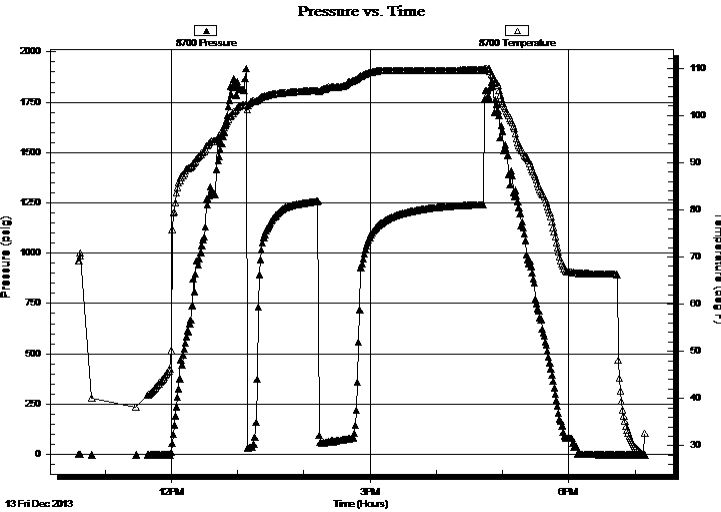
GENERAL INFORMATION:

Formation: **LKC I-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:09:05
Time Test Ended: 19:09:50
Interval: **3685.00 ft (KB) To 3750.00 ft (KB) (TVD)**
Total Depth: 3750.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 70
Reference Elevations: 2231.00 ft (KB)
2221.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8700 Outside

Press @ Run Depth: psig @ 3691.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.12.13 End Date: 2013.12.13 Last Calib.: 2013.12.13
Start Time: 10:35:59 End Time: 19:08:39 Time On Btm:
Time Off Btm:

TEST COMMENT: 5-IFP-w k to a fr bl 1/2" to 4 1/2" bl
60-ISIP-no bl
30-FFP-w k to strg in 12min
120-FSIP-1/4" bl bk



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	275' GIP	0.00
65.00	CO	0.91
85.00	O&GCM 10%G25%O65%M	1.19

* Recovery from multiple tests

Gas Rates

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



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McElvain Energy Inc

1050 17th st.
STE 2500
Denver Co 80265-2080
ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham

Walz 31-8

Job Ticket: 55458

DST#: 3

Test Start: 2013.12.13 @ 10:35:40

GENERAL INFORMATION:

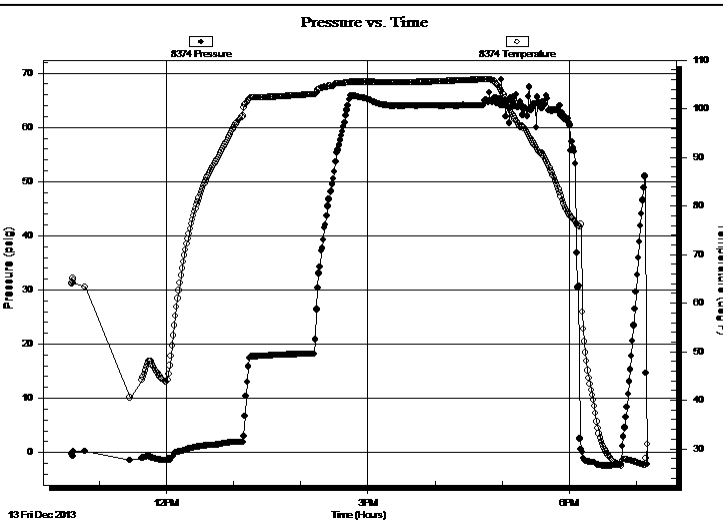
Formation: **LKC I-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:09:05
 Time Test Ended: 19:09:50
 Interval: **3685.00 ft (KB) To 3750.00 ft (KB) (TVD)**
 Total Depth: 3750.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 2231.00 ft (KB)
 2221.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8374

Fluid

Press@RunDepth: psig @ 3649.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.12.13 End Date: 2013.12.13 Last Calib.: 2013.12.13
 Start Time: 10:35:34 End Time: 19:09:29 Time On Btm:
 Time Off Btm:

TEST COMMENT: 5-IFP-w k to a fr bl 1/2" to 4 1/2" bl
 60-ISIP-no bl
 30-FFP-w k to strg in 12min
 120-FSIP-1/4" bl bk



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	275'GIP	0.00
65.00	CO	0.91
85.00	O&GCM 10%G25%O65%M	1.19

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

McElvain Energy Inc
1050 17th st.
STE 2500
Denver Co 80265-2080
ATTN: Chris Mitchell/ Jeff

31-10s-21w Graham
Walz 31-8
Job Ticket: 55458 **DST#: 3**
Test Start: 2013.12.13 @ 10:35:40

Mud and Cushion Information

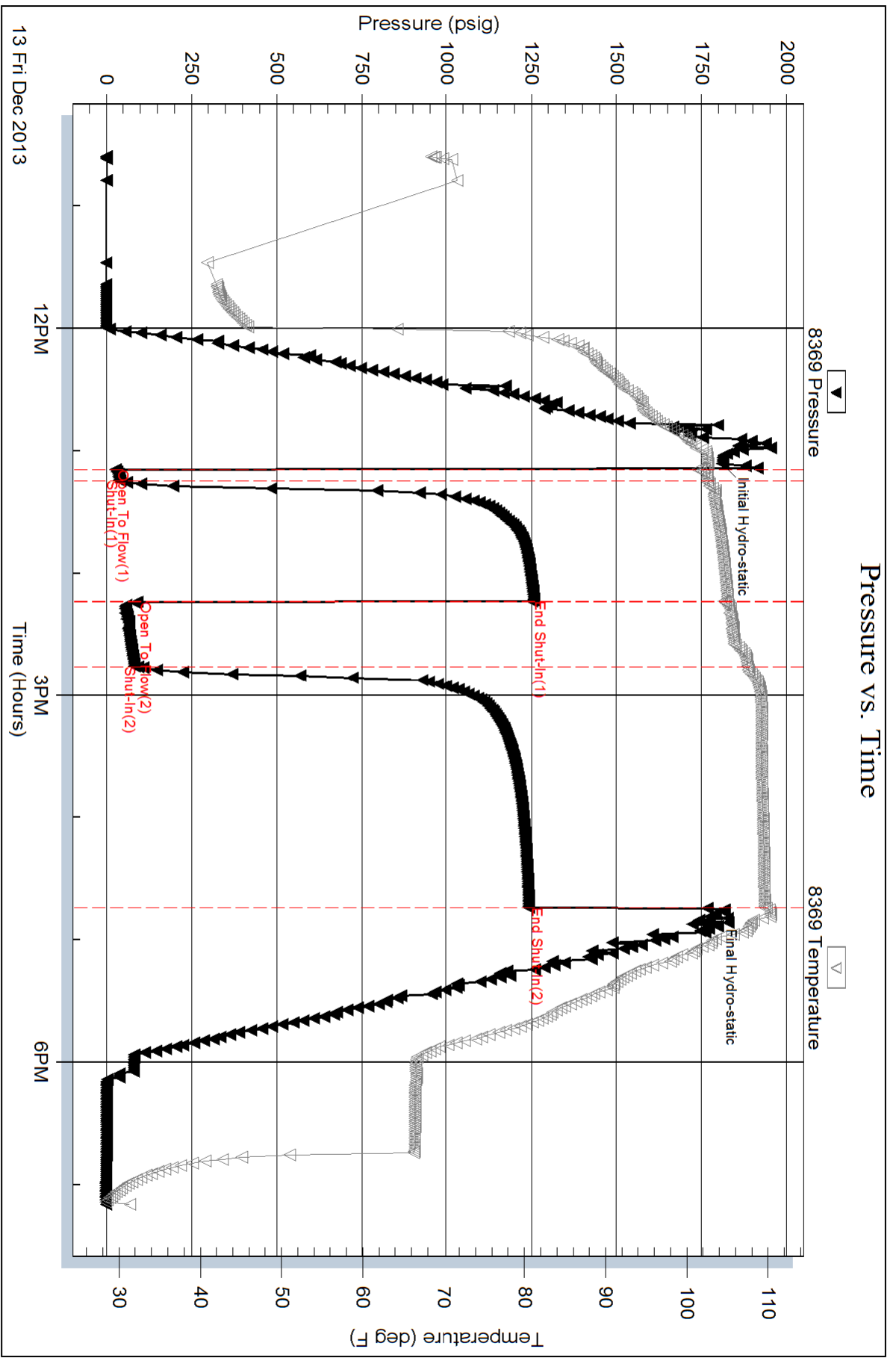
Mud Type: Gel Chem	Cushion Type:	Oil API: 35 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.69 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: 1.00 inches		

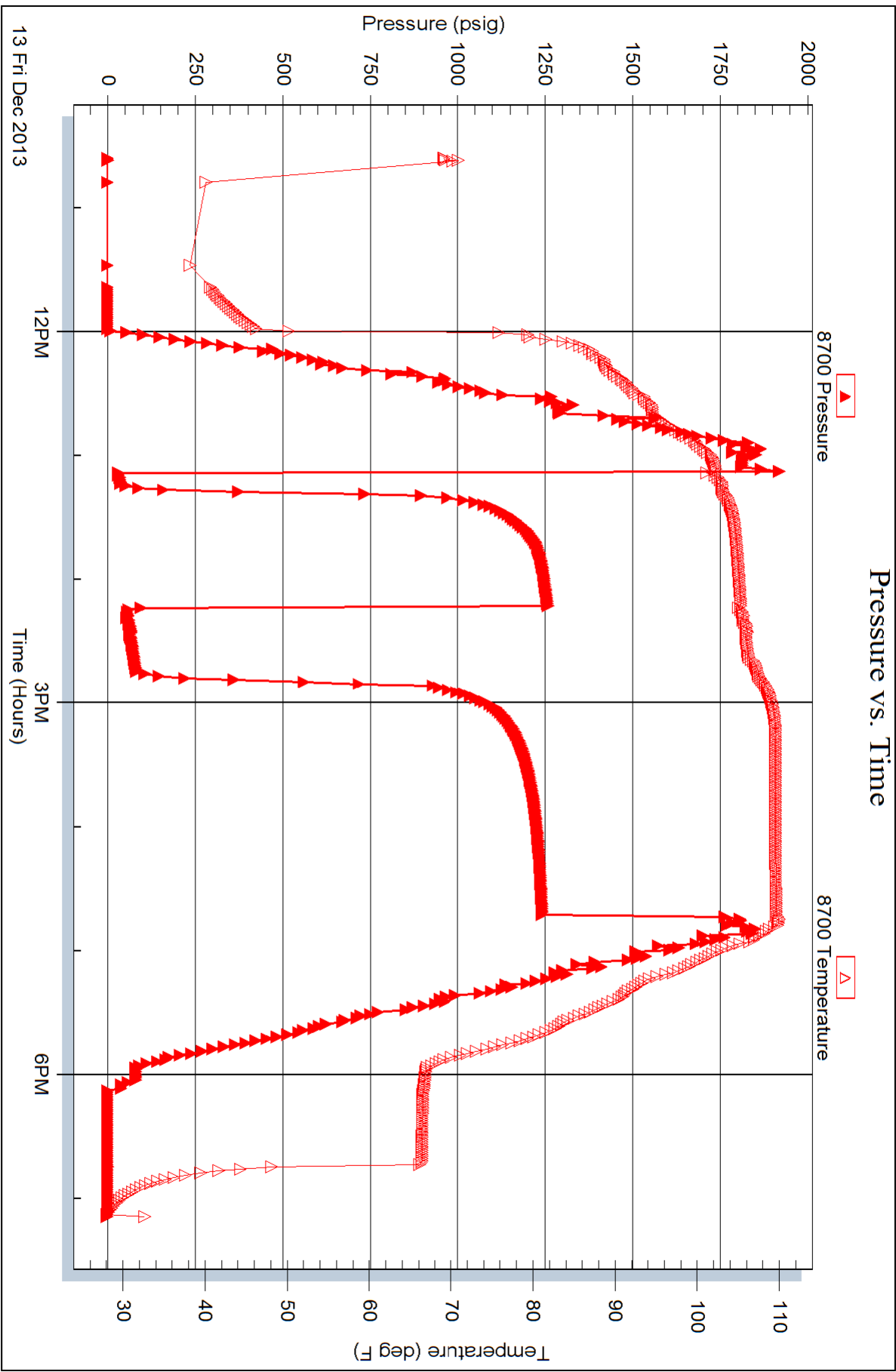
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	275'GIP	0.000
65.00	CO	0.912
85.00	O&GCM 10%G25%O65%M	1.192

Total Length: 150.00 ft Total Volume: 2.104 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Sampler Data: PSI: 450# 800ML gas 1000ML Oil 200ML mud





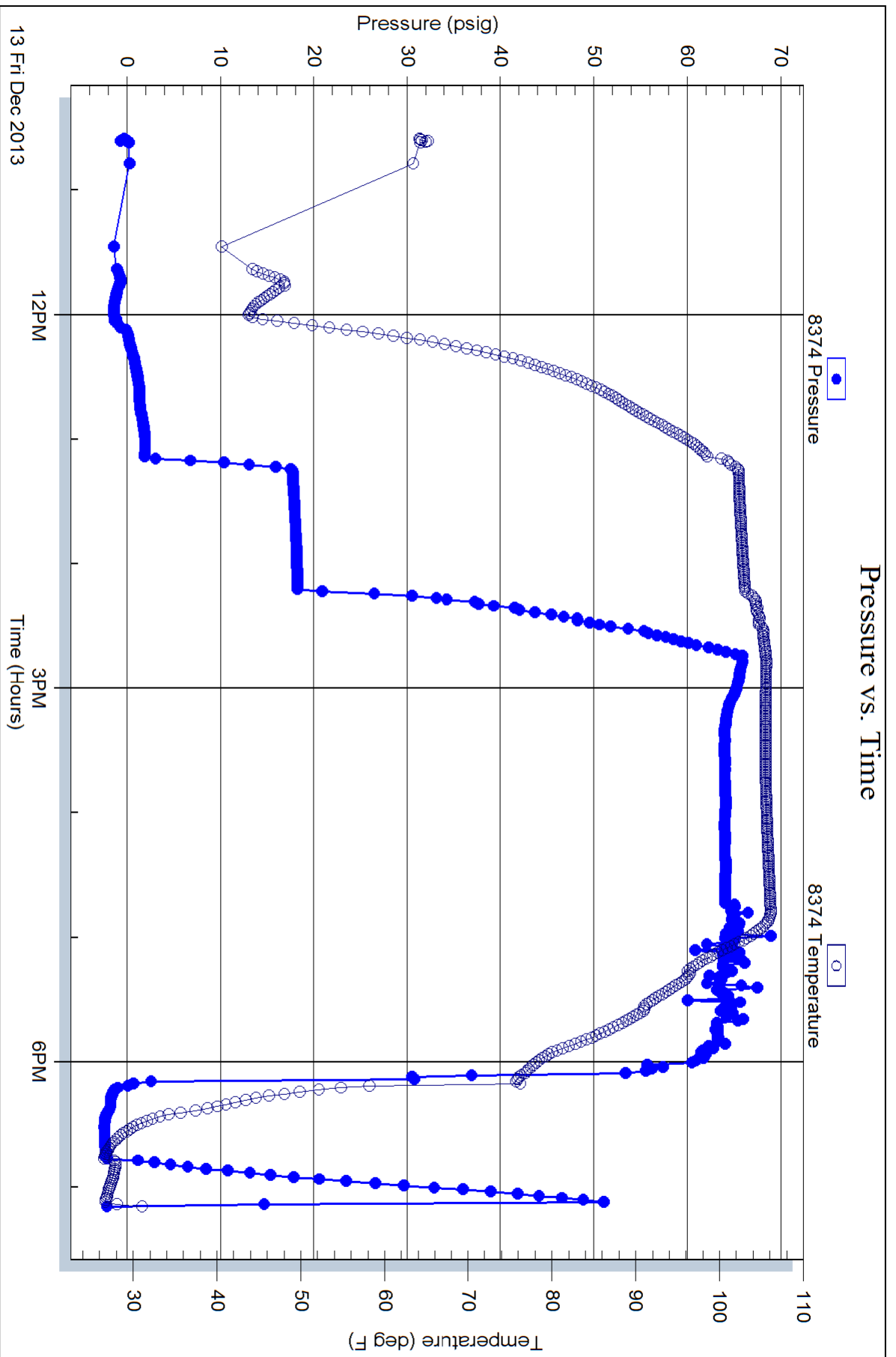
Serial #: 8374

Fluid

McElvain Energy Inc

Walz 31-8

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 55458

Printed: 2013.12.13 @ 23:03:46