



DRILL STEM TEST REPORT

Prepared For: **Miller-Becker Interprises LLC**

100 S Main St
Russell KS 67665

ATTN: Jeff Lawler

Herber #1

29-14s-11w Russell KS

Start Date: 2013.10.31 @ 03:13:46

End Date: 2013.10.31 @ 08:33:55

Job Ticket #: 54848 DST #: 1

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

Printed: 2013.11.06 @ 14:26:53



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54848

DST#: 1

ATTN: Jeff Lawler

Test Start: 2013.10.31 @ 03:13:46

GENERAL INFORMATION:

Formation: **Tarkio**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:33:46

Time Test Ended: 08:33:55

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 49

Interval: 2140.00 ft (KB) To 2245.00 ft (KB) (TVD)

Reference Elevations: 1665.00 ft (KB)

Total Depth: 2245.00 ft (KB) (TVD)

1658.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8898 Outside

Press @ Run Depth: 53.28 psig @ 2146.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.31

End Date:

2013.10.31

Last Calib.:

2013.10.31

Start Time: 03:13:47

End Time:

08:33:56

Time On Btm:

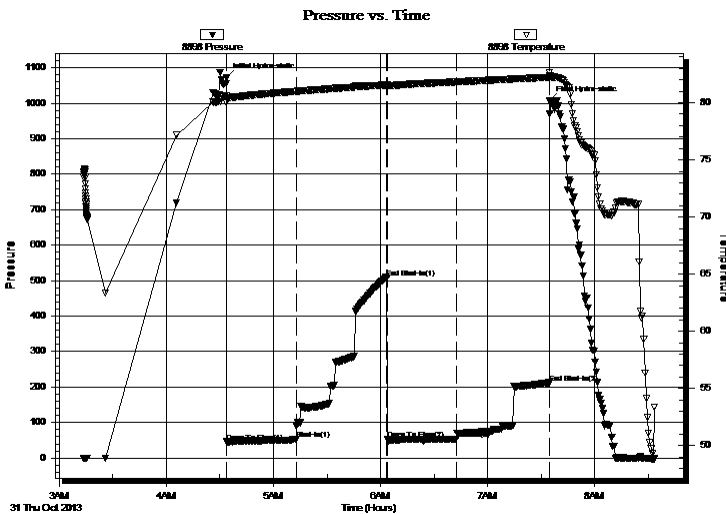
2013.10.31 @ 04:33:36

Time Off Btm:

2013.10.31 @ 07:34:36

TEST COMMENT: Weak surface blow built to 1 1/4"
Dead no blow back
Weak surface blow built to 2"
Dead no blow back

PRESSURE SUMMARY



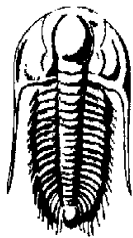
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1070.61	80.59	Initial Hydro-static
1	45.46	80.00	Open To Flow (1)
39	52.93	80.98	Shut-In(1)
90	506.87	81.54	End Shut-In(1)
91	52.10	81.38	Open To Flow (2)
129	53.28	81.82	Shut-In(2)
181	212.26	82.21	End Shut-In(2)
181	1007.63	82.65	Final Hydro-static

Recovery

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

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Miller-Becker Interprises LLC

100 S Main St
Russell KS 67665

ATTN: Jeff Lawler

29-14s-11w Russell KS

Herber #1

Job Ticket: 54848

DST#: 1

Test Start: 2013.10.31 @ 03:13:46

GENERAL INFORMATION:

Formation: **Tarkio**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:33:46

Time Test Ended: 08:33:55

Interval: 2140.00 ft (KB) To 2245.00 ft (KB) (TVD)

Total Depth: 2245.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 49

Reference Elevations: 1665.00 ft (KB)

1658.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8897

Inside

Press @ Run Depth: psig @ 2146.00 ft (KB)

Start Date: 2013.10.31 End Date: 2013.10.31

Start Time: 03:13:56 End Time: 08:34:05

Capacity: 8000.00 psig

Last Calib.: 2013.10.31

Time On Btm:

Time Off Btm:

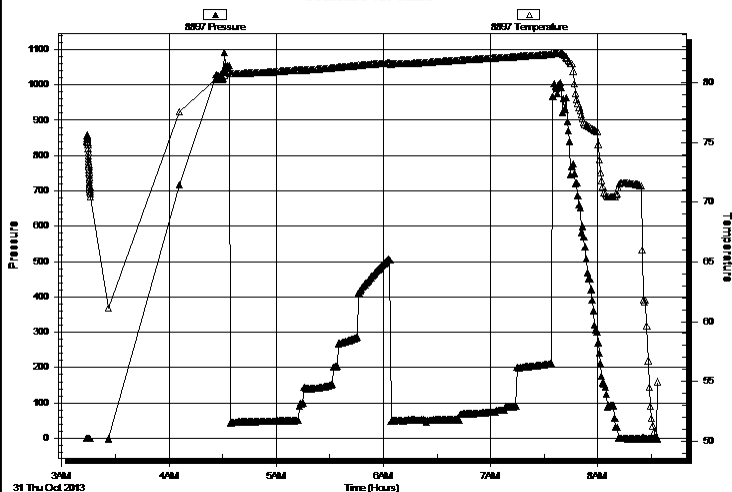
TEST COMMENT: Weak surface blow built to 1 1/4"

Dead no blow back

Weak surface blow built to 2"

Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

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

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54848

DST#: 1

ATTN: Jeff Lawler

Test Start: 2013.10.31 @ 03:13:46

Tool Information

Drill Pipe:	Length: 2002.00 ft	Diameter: 3.80 inches	Volume: 28.08 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 28.68 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	2140.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	105.00 ft			
Tool Length:	125.00 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			2125.00	
Hydraulic tool	5.00			2130.00	
Packer	5.00			2135.00	20.00 Bottom Of Top Packer
Packer	5.00			2140.00	
Stubb	1.00			2141.00	
Perforations	5.00			2146.00	
Recorder	0.00	8897	Inside	2146.00	
Recorder	0.00	8898	Outside	2146.00	
Change Over Sub	1.00			2147.00	
Blank Spacing	62.00			2209.00	
Drill Pipe	31.00			2240.00	
Change Over Sub	1.00			2241.00	
Perforations	1.00			2242.00	
Bullnose	3.00			2245.00	105.00 Bottom Packers & Anchor

Total Tool Length: 125.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54848

DST#: 1

ATTN: Jeff Lawler

Test Start: 2013.10.31 @ 03:13:46

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	100%M	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

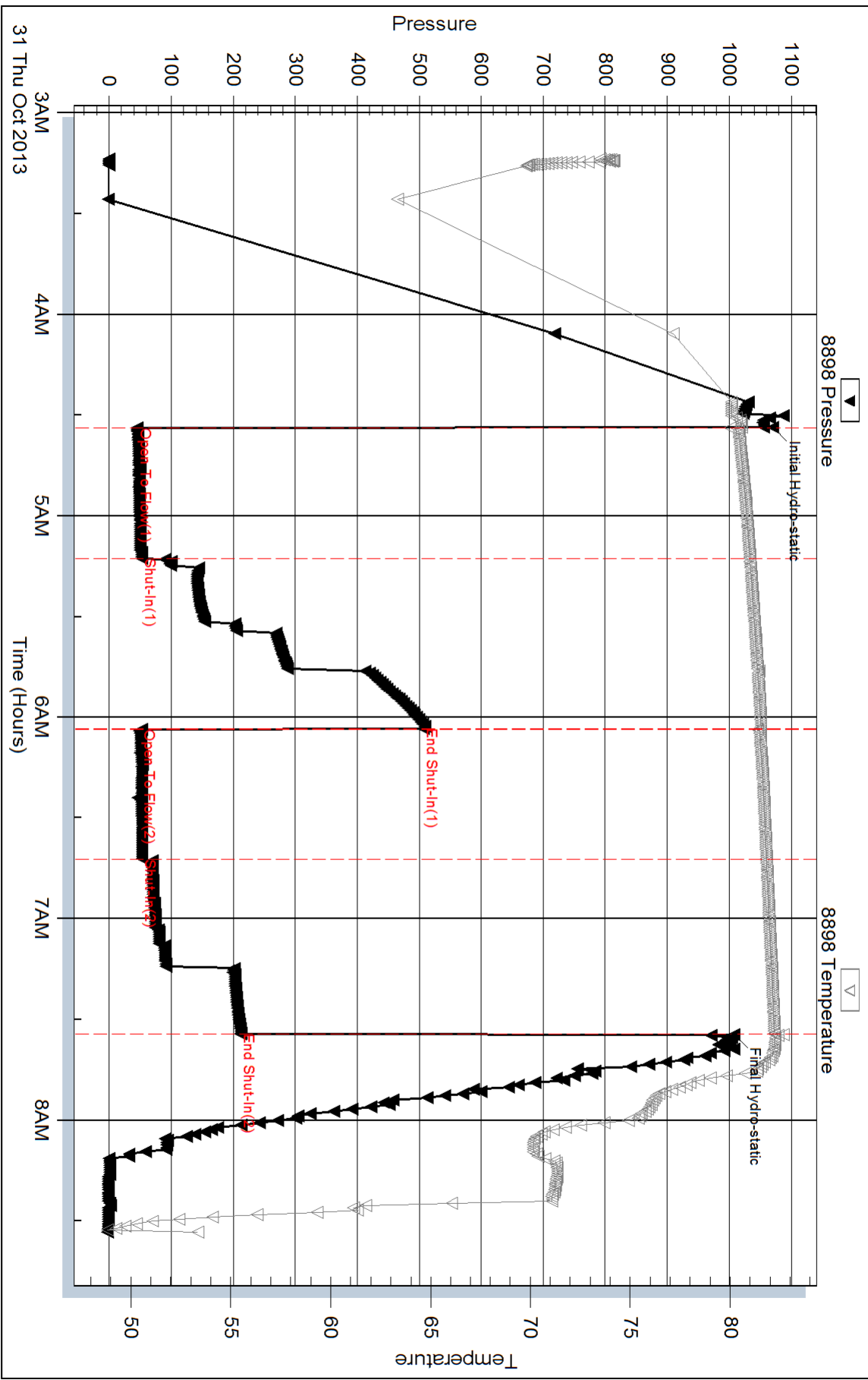
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



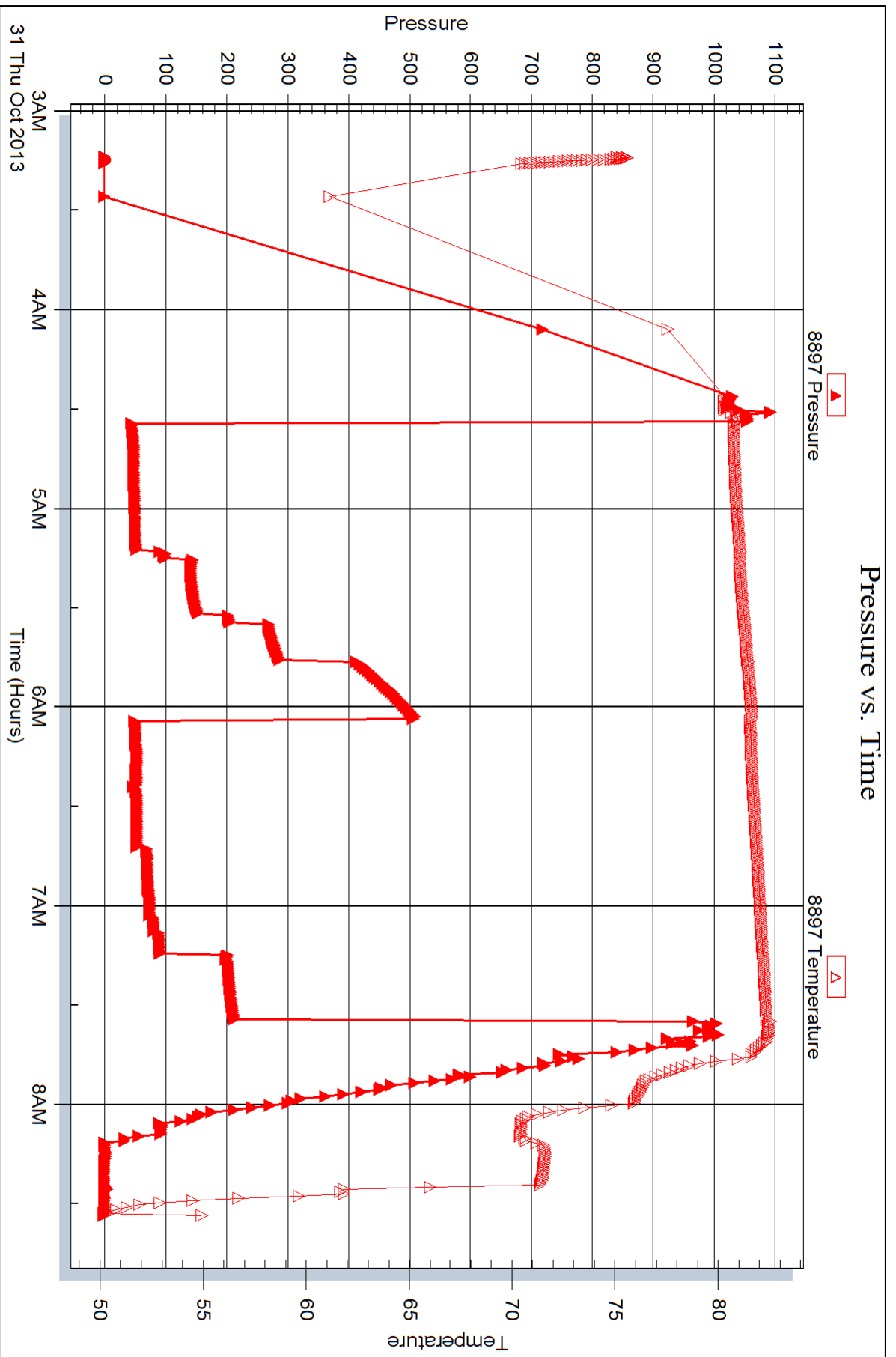
Serial #: 8897

Inside

Miller-Becker Interprises LLC

Herber #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Miller-Becker Interprises LLC**

100 S Main St
Russell KS 67665

ATTN: Jeff Lawler

Herber #1

29-14s-11w Russell KS

Start Date: 2013.11.01 @ 20:52:17

End Date: 2013.11.02 @ 01:44:17

Job Ticket #: 54849 DST #: 2

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

Printed: 2013.11.06 @ 14:26:13

Miller-Becker Interprises LLC
29-14s-11w Russell KS
Herber #1
DST # 2
LKC A-C
2013.11.01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54849

DST#: 2

ATTN: Jeff Lawler

Test Start: 2013.11.01 @ 20:52:17

GENERAL INFORMATION:

Formation: **LKC A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:17:47

Time Test Ended: 01:44:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 2793.00 ft (KB) To 2855.00 ft (KB) (TVD)

Reference Elevations: 1665.00 ft (KB)

Total Depth: 2855.00 ft (KB) (TVD)

1658.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8898 Outside

Press @ Run Depth: 38.65 psig @ 2799.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.01

End Date:

2013.11.02

Last Calib.:

2013.11.02

Start Time: 20:52:18

End Time:

01:44:17

Time On Btm:

2013.11.01 @ 22:17:37

Time Off Btm:

2013.11.02 @ 00:22:17

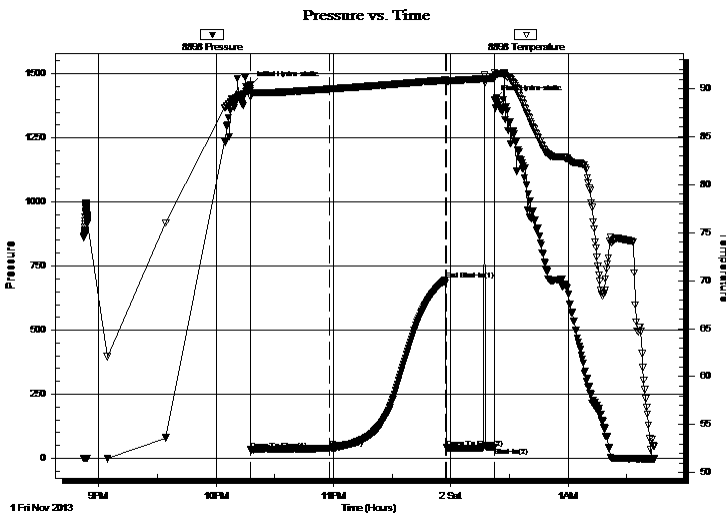
TEST COMMENT: Weak surface blow built to 2"

Dead no blow back

Dead no blow flushed tool surged blow, blew for 2 mins then died

Pulled tool

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1454.96	89.78	Initial Hydro-static
1	33.56	89.20	Open To Flow (1)
41	38.65	89.98	Shut-In(1)
100	695.18	90.89	End Shut-In(1)
101	40.60	90.74	Open To Flow (2)
125	42.99	91.10	Shut-In(2)
125	1398.59	91.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100%M	0.28

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Miller-Becker Enterprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54849

DST#: 2

ATTN: Jeff Lawler

Test Start: 2013.11.01 @ 20:52:17

GENERAL INFORMATION:

Formation: **LKC A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:17:47

Time Test Ended: 01:44:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 2793.00 ft (KB) To 2855.00 ft (KB) (TVD)

Reference Elevations: 1665.00 ft (KB)

Total Depth: 2855.00 ft (KB) (TVD)

1658.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8897 **Inside**

Press @ Run Depth: psig @ 2799.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.01

End Date:

2013.11.02

Last Calib.:

2013.11.02

Start Time: 20:52:02

End Time:

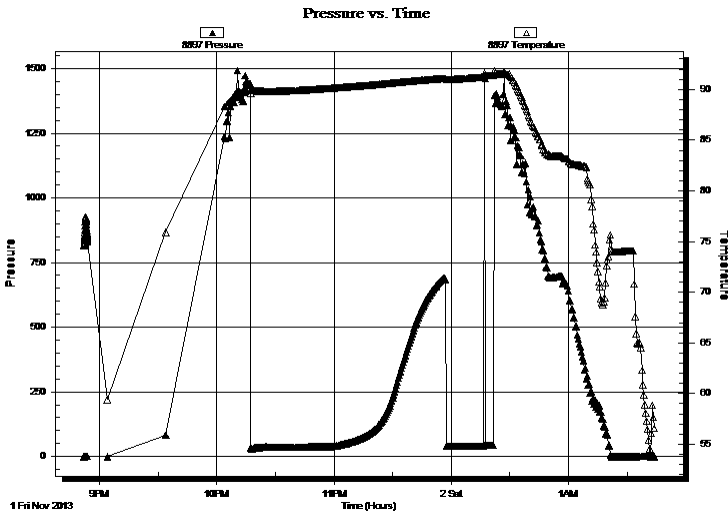
01:44:01

Time On Btm:

Time Off Btm:

TEST COMMENT: Weak surface blow built to 2"
Dead no blow back
Dead no blow flushed tool surged blow, blew for 2 mins then died
Pulled tool

PRESSURE SUMMARY



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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
20.00	100%M	0.28

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54849

DST#: 2

ATTN: Jeff Lawler

Test Start: 2013.11.01 @ 20:52:17

Tool Information

Drill Pipe:	Length: 2781.00 ft	Diameter: 3.80 inches	Volume: 39.01 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 39.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2793.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	82.00 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			2778.00	
Hydraulic tool	5.00			2783.00	
Packer	5.00			2788.00	20.00 Bottom Of Top Packer
Packer	5.00			2793.00	
Stubb	1.00			2794.00	
Perforations	5.00			2799.00	
Recorder	0.00	8897	Inside	2799.00	
Recorder	0.00	8898	Outside	2799.00	
Change Over Sub	1.00			2800.00	
Drill Pipe	32.00			2832.00	
Change Over Sub	1.00			2833.00	
Perforations	19.00			2852.00	
Bullnose	3.00			2855.00	62.00 Bottom Packers & Anchor

Total Tool Length: 82.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54849

DST#: 2

ATTN: Jeff Lawler

Test Start: 2013.11.01 @ 20:52:17

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: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100%M	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

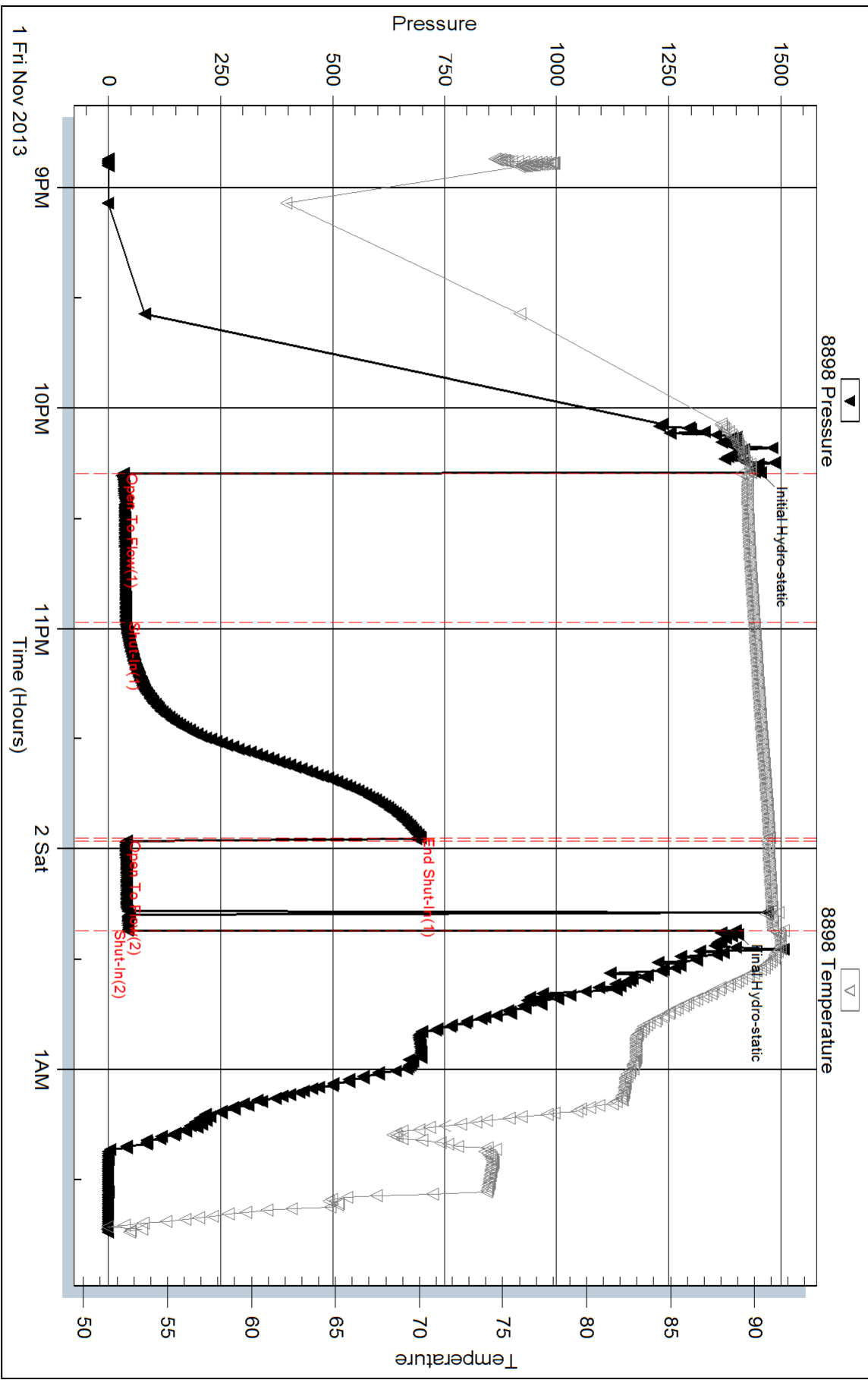
Serial #: 8898

Outside Miller-Becker Enterprises LLC

Herber #1

DST Test Number: 2

Pressure vs. Time



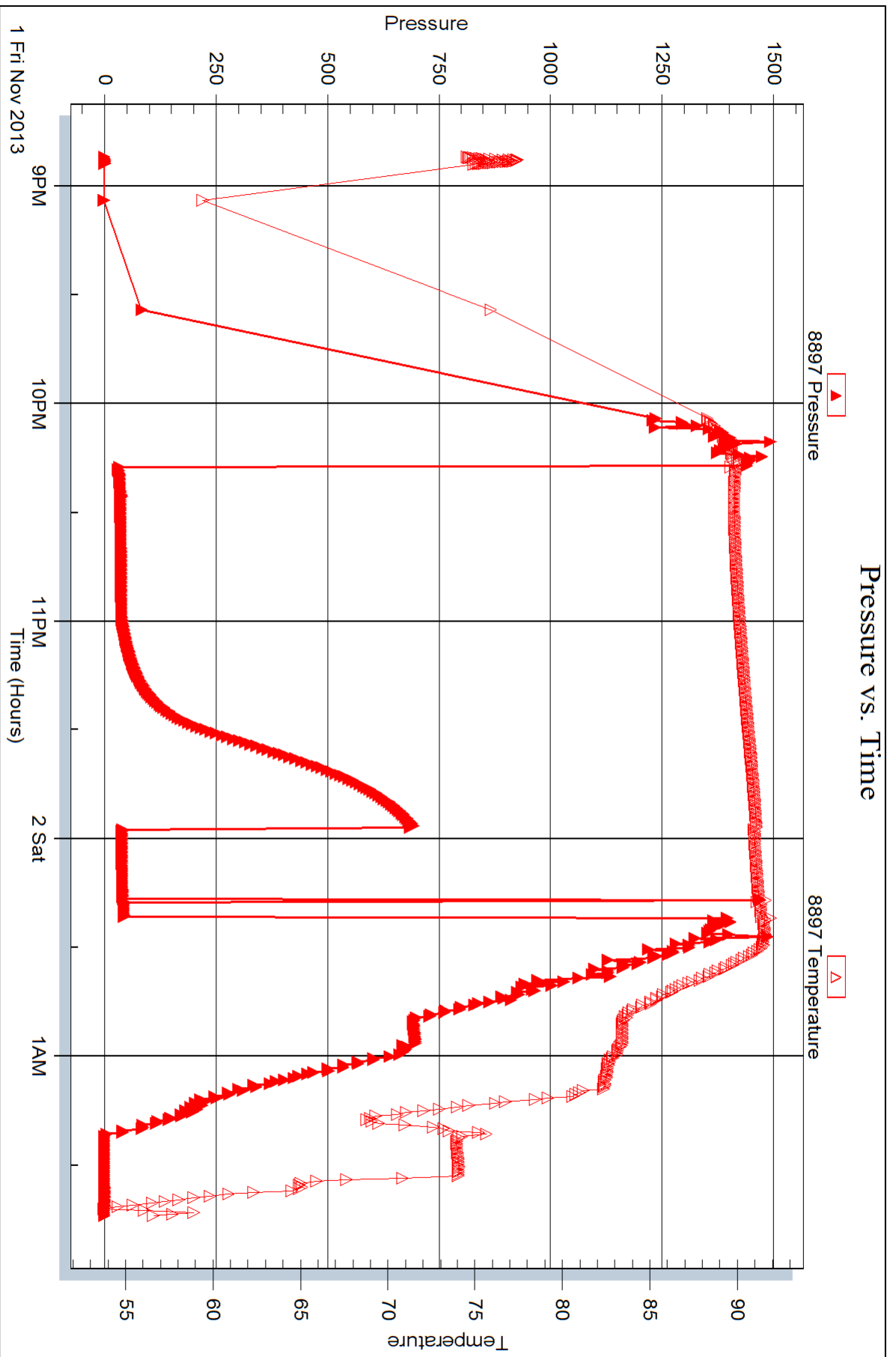
Serial #: 8897

Inside

Miller-Becker Enterprises LLC

Herber #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Miller-Becker Interprises LLC**

100 S Main St
Russell KS 67665

ATTN: Jeff Lawler

Herber #1

29-14s-11w Russell KS

Start Date: 2013.11.03 @ 15:12:19

End Date: 2013.11.03 @ 19:42:49

Job Ticket #: 54850 DST #: 3

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

Printed: 2013.11.06 @ 14:23:30

Miller-Becker Interprises LLC
29-14s-11w Russell KS
Herber #1
DST # 3
KC J
2013.11.03



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54850

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.11.03 @ 15:12:19

GENERAL INFORMATION:

Formation: **KC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:35:59

Time Test Ended: 19:42:49

Test Type: Conventional Straddle (Reset)

Tester: Tate Lang/ Brannan L

Unit No: 49

Interval: 2972.00 ft (KB) To 3002.00 ft (KB) (TVD)

Reference Elevations: 1665.00 ft (KB)

Total Depth: 3240.00 ft (KB) (TVD)

1658.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8898 Outside

Press @ Run Depth: 16.69 psig @ 2998.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.03

End Date:

2013.11.03

Last Calib.: 2013.11.03

Start Time: 15:12:20

End Time:

19:42:49

Time On Btm: 2013.11.03 @ 16:35:49

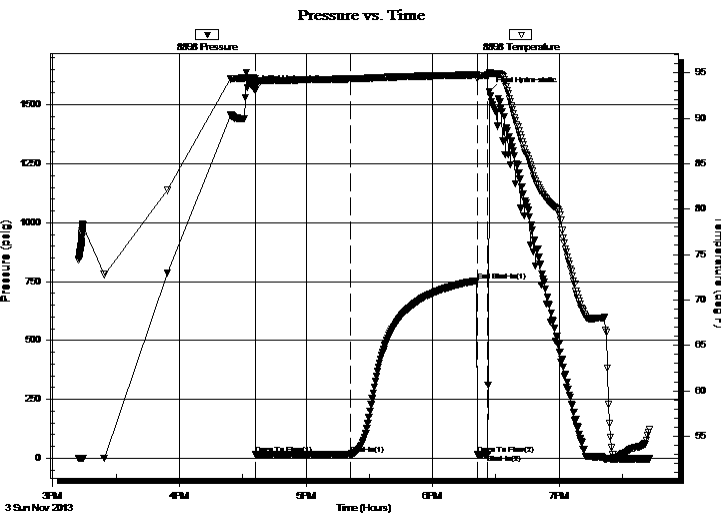
Time Off Btm: 2013.11.03 @ 18:26:49

TEST COMMENT: Weak surface blow died in 35 mins

Dead no blow back

Dead no blow

Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1563.28	94.40	Initial Hydro-static
1	16.94	93.41	Open To Flow (1)
46	16.69	94.33	Shut-In(1)
106	754.14	94.78	End Shut-In(1)
106	17.48	94.35	Open To Flow (2)
111	17.98	94.70	Shut-In(2)
111	1556.73	95.04	Final Hydro-static

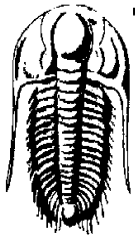
Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.14

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54850

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.11.03 @ 15:12:19

GENERAL INFORMATION:

Formation: **KC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:35:59

Time Test Ended: 19:42:49

Test Type: Conventional Straddle (Reset)

Tester: Tate Lang/ Brannan L

Unit No: 49

Interval: 2972.00 ft (KB) To 3002.00 ft (KB) (TVD)

Total Depth: 3240.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1665.00 ft (KB)

1658.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8354 Below (Straddle)

Press @ Run Depth: psig @ 3004.00 ft (KB)

Start Date: 2013.11.03

End Date: 2013.11.03

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Start Time: 15:12:26

End Time: 19:41:55

Time On Btm:

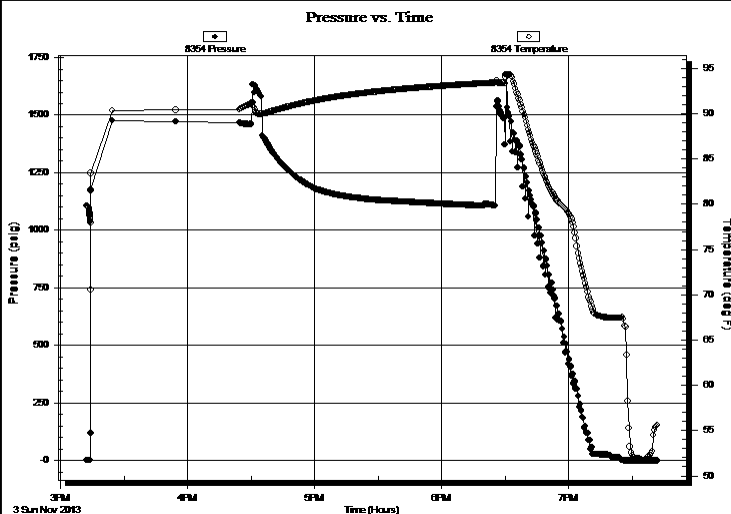
Time Off Btm:

TEST COMMENT: Weak surface blow died in 35 mins

Dead no blow back

Dead no blow

Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.14

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54850

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.11.03 @ 15:12:19

Tool Information

Drill Pipe:	Length: 2970.00 ft	Diameter: 3.80 inches	Volume: 41.66 bbl	Tool Weight:	2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 41.66 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	2972.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	3002.00 ft				
Interval between Packers:	30.00 ft				
Tool Length:	290.00 ft				
Number of Packers:	3	Diameter: 6.75 inches			

Tool Comments:

Tool Description

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

Change Over Sub	1.00			2953.00	
Shut In Tool	5.00			2958.00	
Hydraulic tool	5.00			2963.00	
Packer	5.00			2968.00	20.00 Bottom Of Top Packer
Packer	4.00			2972.00	
Stubb	1.00			2973.00	
Perforations	25.00			2998.00	
Recorder	0.00	8897	Inside	2998.00	
Recorder	0.00	8898	Outside	2998.00	
Blank Off Sub	1.00			2999.00	
Blank Spacing	3.00			3002.00	30.00 Tool Interval
Packer	1.00			3003.00	
Stubb	1.00			3004.00	
Recorder	0.00	8354	Below	3004.00	
Perforations	11.00			3015.00	
Change Over Sub	1.00			3016.00	
Drill Pipe	222.00			3238.00	
Change Over Sub	1.00			3239.00	
Bullnose	3.00			3242.00	240.00 Bottom Packers & Anchor

Total Tool Length: 290.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Miller-Becker Interprises LLC

29-14s-11w Russell KS

100 S Main St
Russell KS 67665

Herber #1

Job Ticket: 54850

DST#: 3

ATTN: Jeff Lawler

Test Start: 2013.11.03 @ 15:12:19

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	Mud	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

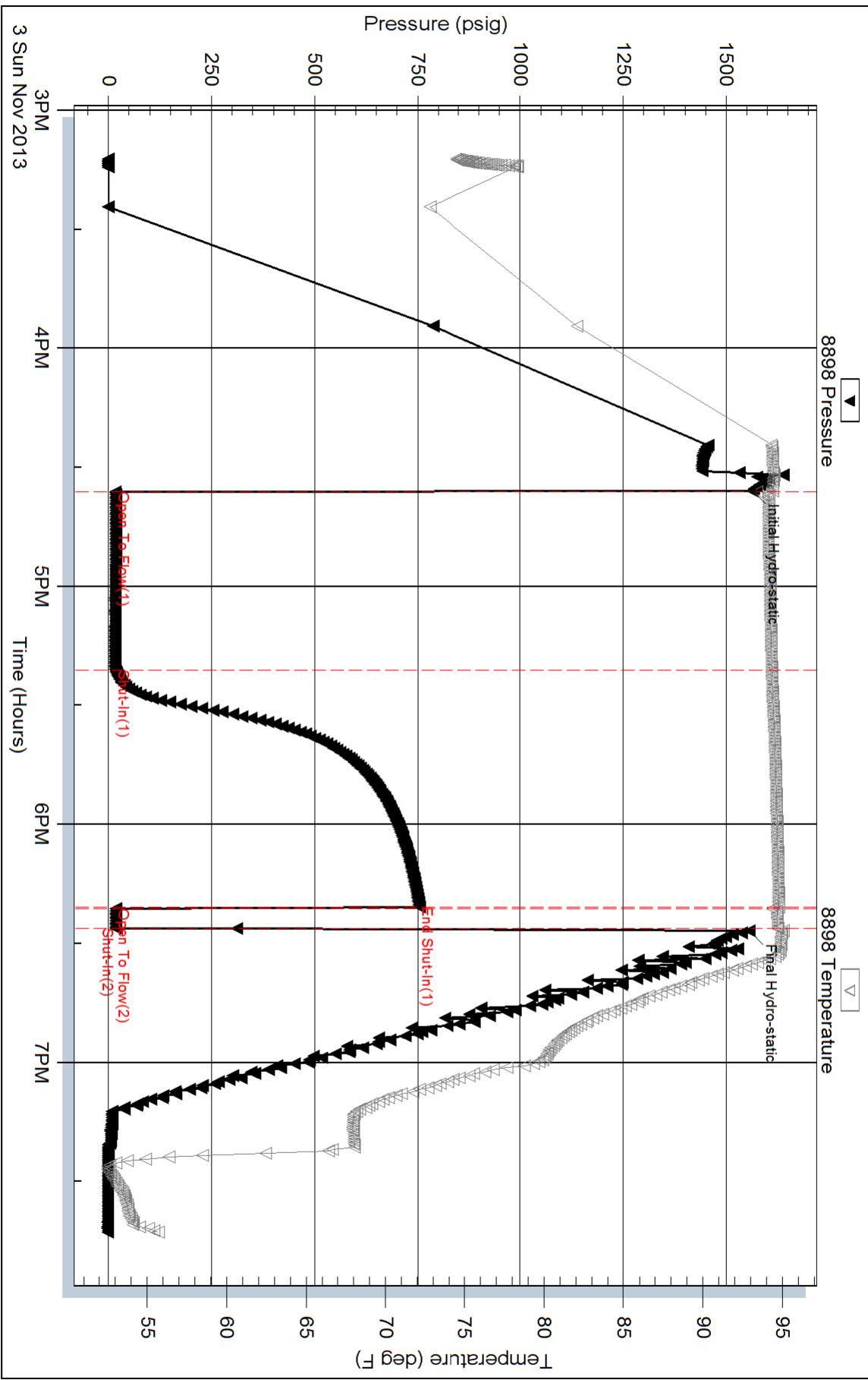
Serial #: 8898

Outside Miller-Becker Enterprises LLC

Herber #1

DST Test Number: 3

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 54850

Printed: 2013.11.06 @ 14:23:32

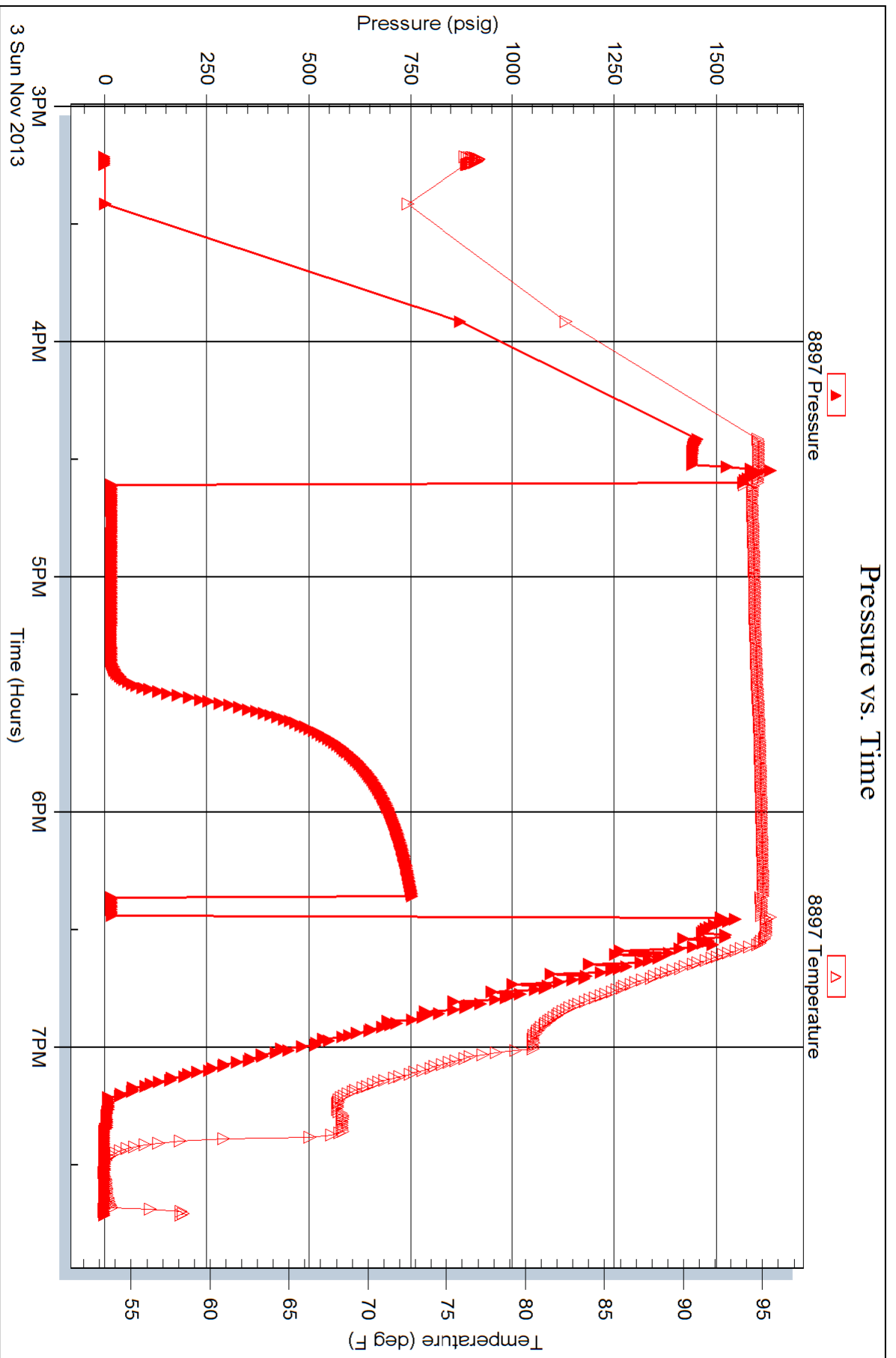
Serial #: 8897

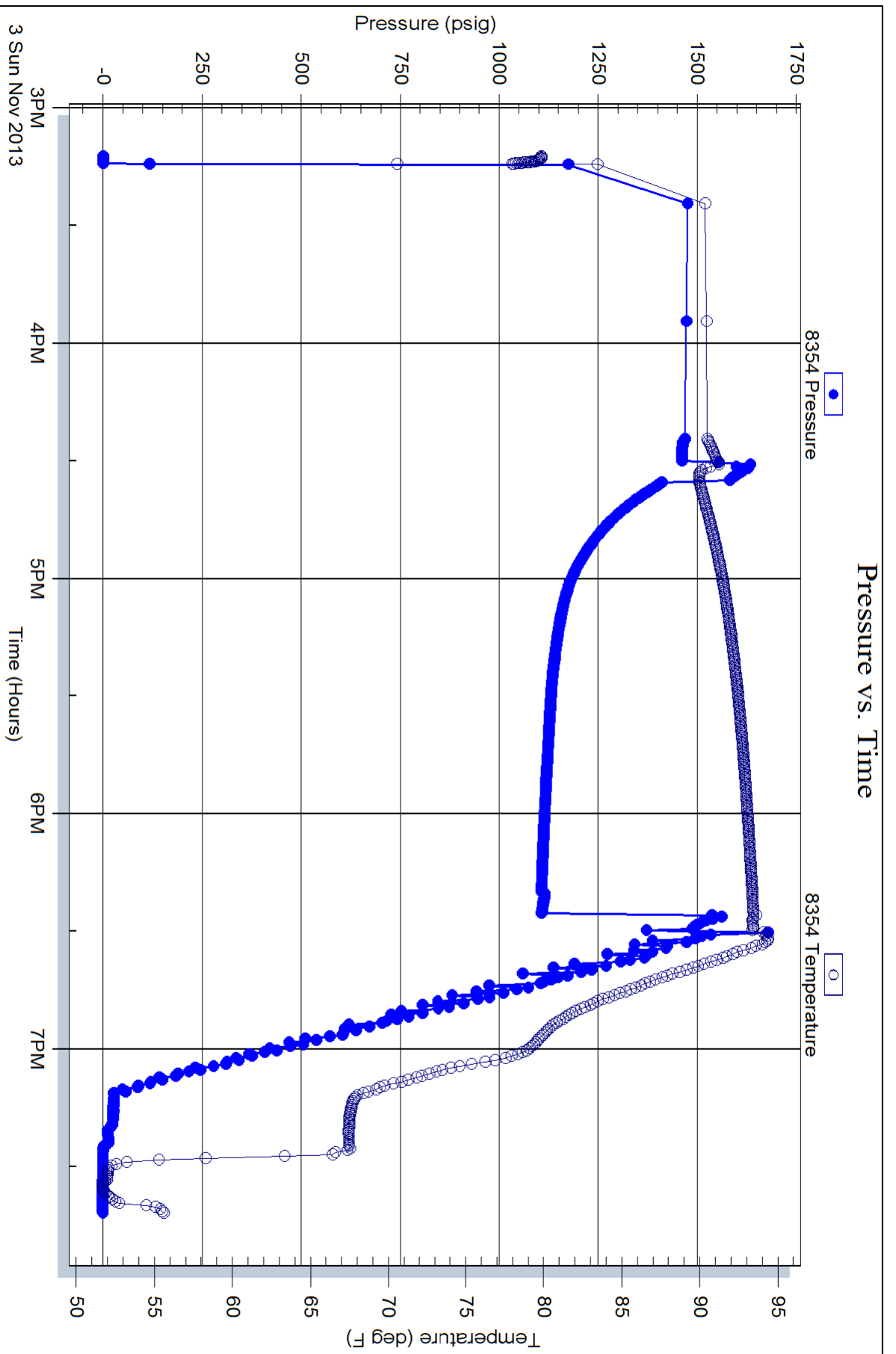
Inside

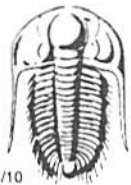
Miller-Becker Enterprises LLC

Herber #1

DST Test Number: 3







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54848

Well Name & No. Herber #1 Test No. 1 Date 10-31-13
 Company Miller-Becker Enterprises, LLC Elevation 1665 KB 1658 GL
 Address 100 S Main St Russell KS 67665
 Co. Rep / Geo. Jeff Lawler Rig Royal Rig #2
 Location: Sec. 29 Twp. 14 Rge. 11 Co. Russell State KS

Interval Tested 2140 2245 Zone Tested Turkio
 Anchor Length 105 Drill Pipe Run 2002 Mud Wt. 8.7
 Top Packer Depth 2136 Drill Collars Run 121 Vis 54
 Bottom Packer Depth 2140 Wt. Pipe Run 0 WL 610
 Total Depth 2245 Chlorides 1100 ppm System LCM 1#

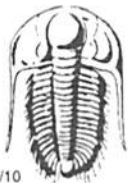
Blow Description Weak surface blow built to 1 1/4 in
Dead No Blow Back
Weak surface blow built to 2 in
Dead No blow back

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10</u>	Feet of <u>mud</u>	%gas	%oil	%water <u>10</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 83 Gravity - API RW - @ - ° F Chlorides - ppm
 (A) Initial Hydrostatic 1071 Test 1150 T-On Location 00:25
 (B) First Initial Flow 115 Jars T-Started 03:13
 (C) First Final Flow 53 Safety Joint T-Open 04:33
 (D) Initial Shut-In 507 Circ Sub T-Pulled 07:53
 (E) Second Initial Flow 52 Hourly Standby T-Out 08:33
 (F) Second Final Flow 53 Mileage 84 R/T 130.20 Comments
 (G) Final Shut-In 212 Sampler
 (H) Final Hydrostatic 1008 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1280.20
 Accessibility MP/DST Disc't X
 Sub Total 1280.20

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

Approved By _____ Our Representative Jeff Lawler
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54849

Well Name & No. Herber #1 Test No. 2 Date 11-1-13
 Company Miller-Becker Interpretive Elevation 1665 KB 1658 GL
 Address 100 S Main St Russell KS 67665
 Co. Rep / Geo. Jeff Lawler Rig Royal Rig #2
 Location: Sec. 29 Twp. 14 Rge. 11 Co. Russell State KS

Interval Tested 2793 2855 Zone Tested LKC A-C
 Anchor Length 62 Drill Pipe Run 2781 Mud Wt. 9.0
 Top Packer Depth 2789 Drill Collars Run 0 Vis SB
 Bottom Packer Depth 2793 Wt. Pipe Run 0 WL 8.8
 Total Depth 2855 Chlorides 5000 ppm System LCM 2"

Blow Description Weak surface blow built to 2 in
Dead air blow built
Dead air blow, flushed tool surge blow for 2 mins then died
Pulled tool

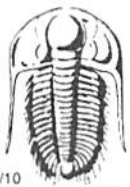
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>20</u>	Feet of <u>mud</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total BHT 91 Gravity 1150 API RW @ ° F Chlorides ppm
 (A) Initial Hydrostatic 1455 Test 1150 T-On Location 20:20
 (B) First Initial Flow 34 Jars T-Started 20:52
 (C) First Final Flow 39 Safety Joint T-Open 22:18
 (D) Initial Shut-In 695 Circ Sub T-Pulled 00:22
 (E) Second Initial Flow 41 Hourly Standby T-Out 01:44
 (F) Second Final Flow X Mileage 84 RTT 130.20 Comments
 (G) Final Shut-In X Sampler
 (H) Final Hydrostatic 1399 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder

Initial Open 30
 Initial Shut-In 60
 Final Flow 15 Flushed 5
 Final Shut-In pulled
 Day Standby + 1 3/4 hr
 Accessibility
 Sub Total 1280.20
 Sub Total 391.67
 Total 1671.87
 MP/DST Disc't X

Approved By _____ Our Representative John Law

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54850

Well Name & No. Herber #1 Test No. 3 Date 11/3/13
 Company Miller-Becker Enterprises, LLC Elevation 1665 KB 1658 GL
 Address 100 S. Main St. Russell, KS 67665
 Co. Rep / Geo. Steve Reed Rig Royal Rig 2
 Location: Sec. 29 Twp. 14s Rge. 11w Co. Russell State KS

Interval Tested 2972-3002 Zone Tested "J" KC
 Anchor Length 30' 240' Tail Drill Pipe Run 2970 Mud Wt. 8.7
 Top Packer Depth 2967-2972 Drill Collars Run --- Vis 54
 Bottom Packer Depth 3002 Wt. Pipe Run --- WL 6.0
 Total Depth 3240 Chlorides 1100 ppm System LCM 1#

Blow Description Weak surface blow died in 35 mins
Dead No Blow back
Dead No Dipw
pulled too

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10</u>	Feet of <u>Mud</u>	%gas	%oil	%water	<u>100</u> %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT _____ Gravity _____ API RW _____ @ _____ F Chlorides _____ ppm

(A) Initial Hydrostatic 1563 Test 1150 T-On Location 1400
 (B) First Initial Flow 17 Jars _____ T-Started 1512
 (C) First Final Flow 17 Safety Joint _____ T-Open 16:36
 (D) Initial Shut-In 754 Circ Sub _____ T-Pulled 18:28
 (E) Second Initial Flow 17 Hourly Standby _____ T-Out 19:43
 (F) Second Final Flow X Mileage 84 RT 130.20 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1557 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 408.33
 Initial Shut-In 60 Day Standby 10 3/4 hr 1d 12.25h Total 2288.53
 Final Flow 10 Accessibility _____ MP/DST Disc't _____
 Final Shut-In pulled too Sub Total 1880.20

Approved By Steve Reed Our Representative Brannan

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.