



DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water Ste. 300
Wichita, KS 67202-1216

ATTN: Chuck Schmaltz

Pound #1-34

34-22s-12w Stafford,KS

Start Date: 2014.08.10 @ 23:21:37

End Date: 2014.08.11 @ 05:52:07

Job Ticket #: 54167 DST #: 1

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

Printed: 2014.08.14 @ 10:14:46



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.
250 N. Water Ste. 300
Wichita, KS 67202-1216
ATTN: Chuck Schmaltz

34-22s-12w Stafford,KS

Pound #1-34

Job Ticket: 54167

DST#: 1

Test Start: 2014.08.10 @ 23:21:37

GENERAL INFORMATION:

Formation: **LKC D-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:09:52
 Time Test Ended: 05:52:07
 Interval: **3351.00 ft (KB) To 3425.00 ft (KB) (TVD)**
 Total Depth: 3425.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1842.00 ft (KB)
 1831.00 ft (CF)
 KB to GR/CF: 11.00 ft

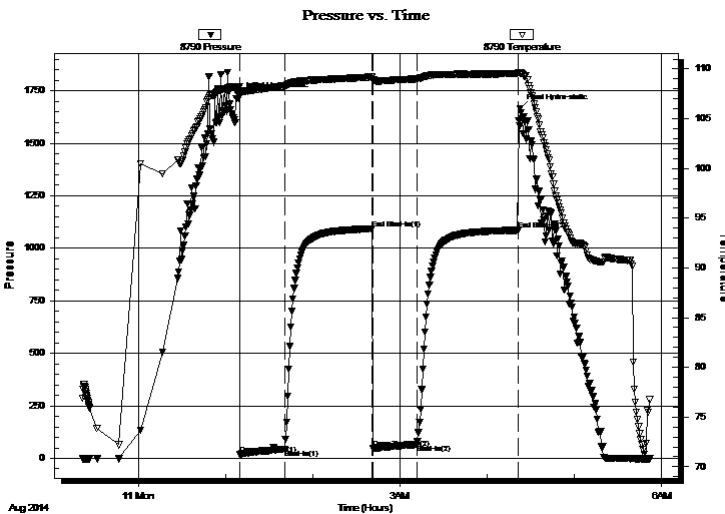
Serial #: 8790

Inside

Press@RunDepth: 65.81 psig @ 3358.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.10 End Date: 2014.08.11 Last Calib.: 2014.08.11
 Start Time: 23:21:42 End Time: 05:52:06 Time On Btm: 2014.08.11 @ 01:09:37
 Time Off Btm: 2014.08.11 @ 04:22:37

TEST COMMENT: 30 IF: Weak blow . surf. - 1"
 60 IS: No blow
 30 FF: Weak blow . No blow - surf.
 60 FSI: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1721.02	108.26	Initial Hydro-static
1	19.74	107.69	Open To Flow (1)
31	43.55	108.28	Shut-In(1)
91	1092.86	109.19	End Shut-In(1)
92	47.31	108.85	Open To Flow (2)
122	65.81	109.00	Shut-In(2)
192	1085.67	109.52	End Shut-In(2)
193	1663.89	109.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Drig Mud 100% m	0.44
0.00	VSLI OsptdM in hyd. tool	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (m ³ /d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54167

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.08.10 @ 23:21:37

Tool Information

Drill Pipe:	Length: 3078.00 ft	Diameter: 3.80 inches	Volume: 43.18 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 69000.00 lb
			<u>Total Volume: 44.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	3351.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	101.00 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			3325.00	
Shut In Tool	5.00			3330.00	
Hydraulic tool	5.00			3335.00	
Jars	5.00			3340.00	
Safety Joint	2.00			3342.00	
Packer	5.00			3347.00	27.00 Bottom Of Top Packer
Packer	4.00			3351.00	
Stubb	1.00			3352.00	
Perforations	5.00			3357.00	
Change Over Sub	1.00			3358.00	
Recorder	0.00	8790	Inside	3358.00	
Recorder	0.00	8792	Outside	3358.00	
Drill Pipe	62.00			3420.00	
Change Over Sub	1.00			3421.00	
Perforations	1.00			3422.00	
Bullnose	3.00			3425.00	74.00 Bottom Packers & Anchor
Total Tool Length:	101.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54167

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.08.10 @ 23:21:37

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:

16200 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 16200.00 ppm

Filter Cake: 0.04 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Drlg Mud 100%m	0.443
0.00	VSLI OsptdM in hyd. tool	0.000

Total Length: 90.00 ft Total Volume: 0.443 bbl

Num Fluid Samples: 0

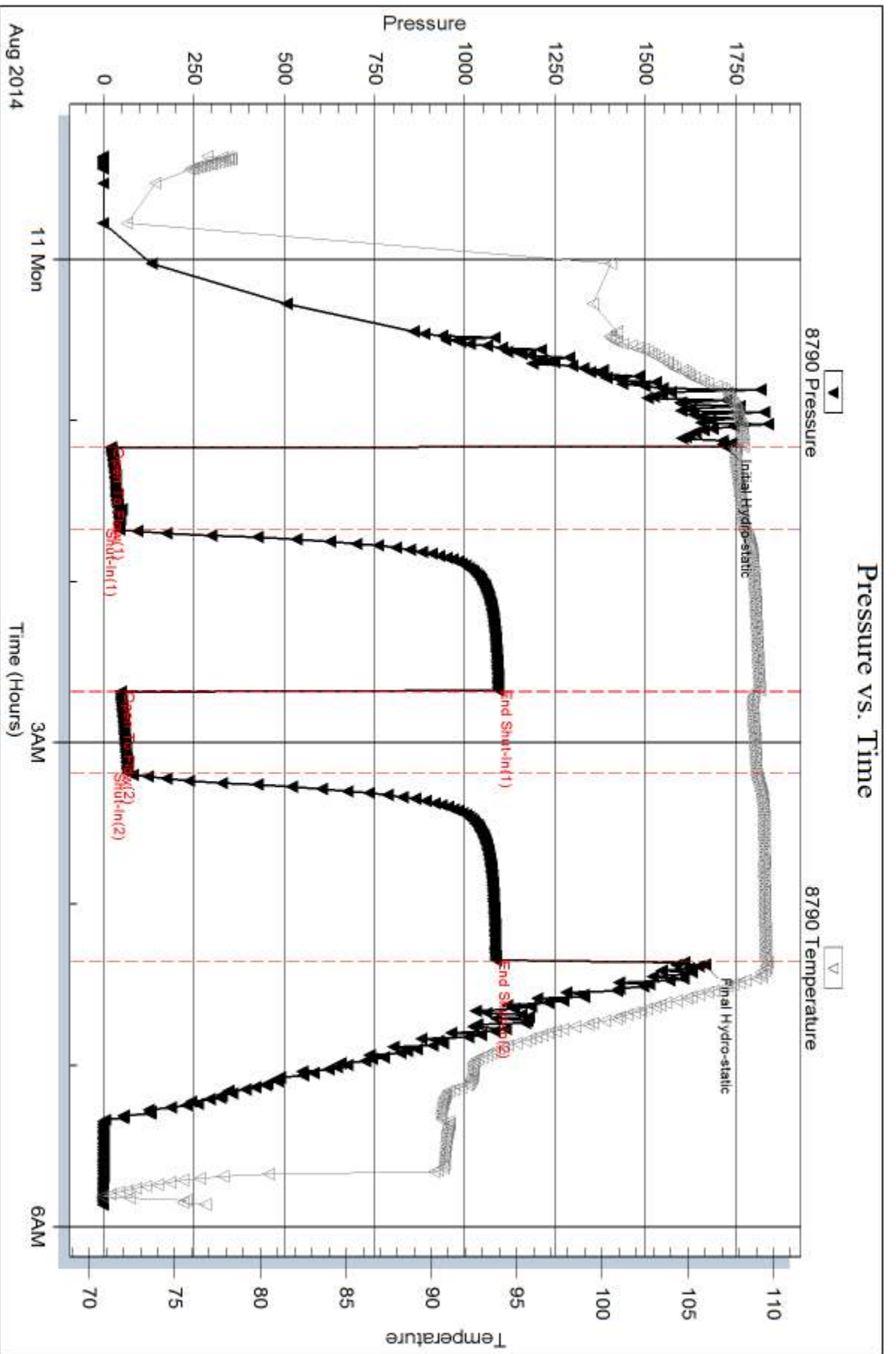
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water Ste. 300
Wichita, KS 67202-1216

ATTN: Chuck Schmaltz

Pound #1-34

34-22s-12w Stafford,KS

Start Date: 2014.08.11 @ 19:12:53

End Date: 2014.08.12 @ 02:26:23

Job Ticket #: 54168 DST #: 2

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

Printed: 2014.08.14 @ 10:14:25



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.
 250 N. Water Ste. 300
 Wichita, KS 67202-1216
 ATTN: Chuck Schmalz

34-22s-12w Stafford,KS

Pound #1-34

Job Ticket: 54168 **DST#: 2**
 Test Start: 2014.08.11 @ 19:12:53

GENERAL INFORMATION:

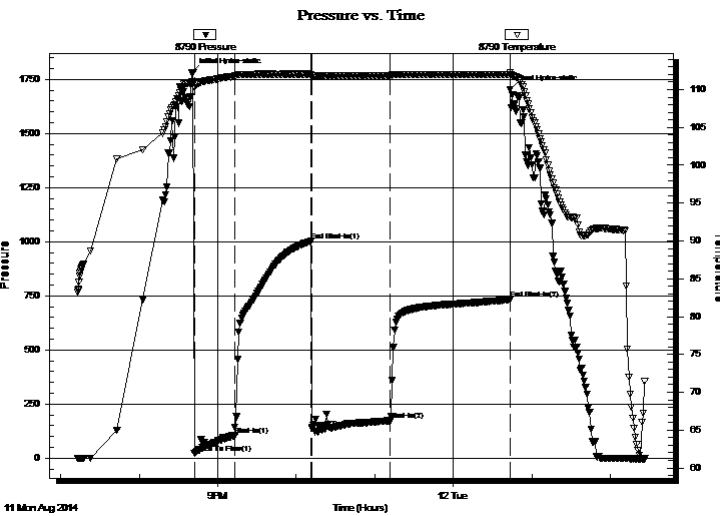
Formation: **LKC H-L**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:42:08
 Time Test Ended: 02:26:23
 Interval: **3458.00 ft (KB) To 3587.00 ft (KB) (TVD)**
 Total Depth: 3587.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1842.00 ft (KB)
 1831.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8790

Inside

Press@RunDepth: 173.71 psig @ 3466.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.11 End Date: 2014.08.12 Last Calib.: 2014.08.12
 Start Time: 19:12:58 End Time: 02:26:22 Time On Btm: 2014.08.11 @ 20:40:23
 Time Off Btm: 2014.08.12 @ 00:43:23

TEST COMMENT: IF: Weak blow . Surf. - 1"
 IS: No blow
 FF: Weak blow . Surf. - 1"
 FS: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1782.12	111.07	Initial Hydro-static
2	22.02	110.30	Open To Flow (1)
33	106.58	111.81	Shut-In(1)
91	1002.27	112.03	End Shut-In(1)
92	137.71	111.79	Open To Flow (2)
152	173.71	111.86	Shut-In(2)
243	733.95	111.94	End Shut-In(2)
243	1704.00	112.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
345.00	WCM 45%w , 55%m	2.33

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (m ³ /d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54168

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.08.11 @ 19:12:53

Tool Information

Drill Pipe:	Length: 3173.00 ft	Diameter: 3.80 inches	Volume: 44.51 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 73000.00 lb
			<u>Total Volume: 45.87 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 64500.00 lb
Depth to Top Packer:	3459.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	128.00 ft			
Tool Length:	155.00 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			3433.00	
Shut In Tool	5.00			3438.00	
Hydraulic tool	5.00			3443.00	
Jars	5.00			3448.00	
Safety Joint	2.00			3450.00	
Packer	5.00			3455.00	27.00 Bottom Of Top Packer
Packer	4.00			3459.00	
Stubb	1.00			3460.00	
Perforations	5.00			3465.00	
Change Over Sub	1.00			3466.00	
Recorder	0.00	8790	Inside	3466.00	
Recorder	0.00	8792	Outside	3466.00	
Drill Pipe	95.00			3561.00	
Change Over Sub	1.00			3562.00	
Perforations	22.00			3584.00	
Bullnose	3.00			3587.00	128.00 Bottom Packers & Anchor
Total Tool Length:	155.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54168

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.08.11 @ 19:12:53

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:

79000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 13800.00 ppm

Filter Cake: 0.04 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
345.00	WCM 45%w , 55%m	2.325

Total Length: 345.00 ft Total Volume: 2.325 bbl

Num Fluid Samples: 0

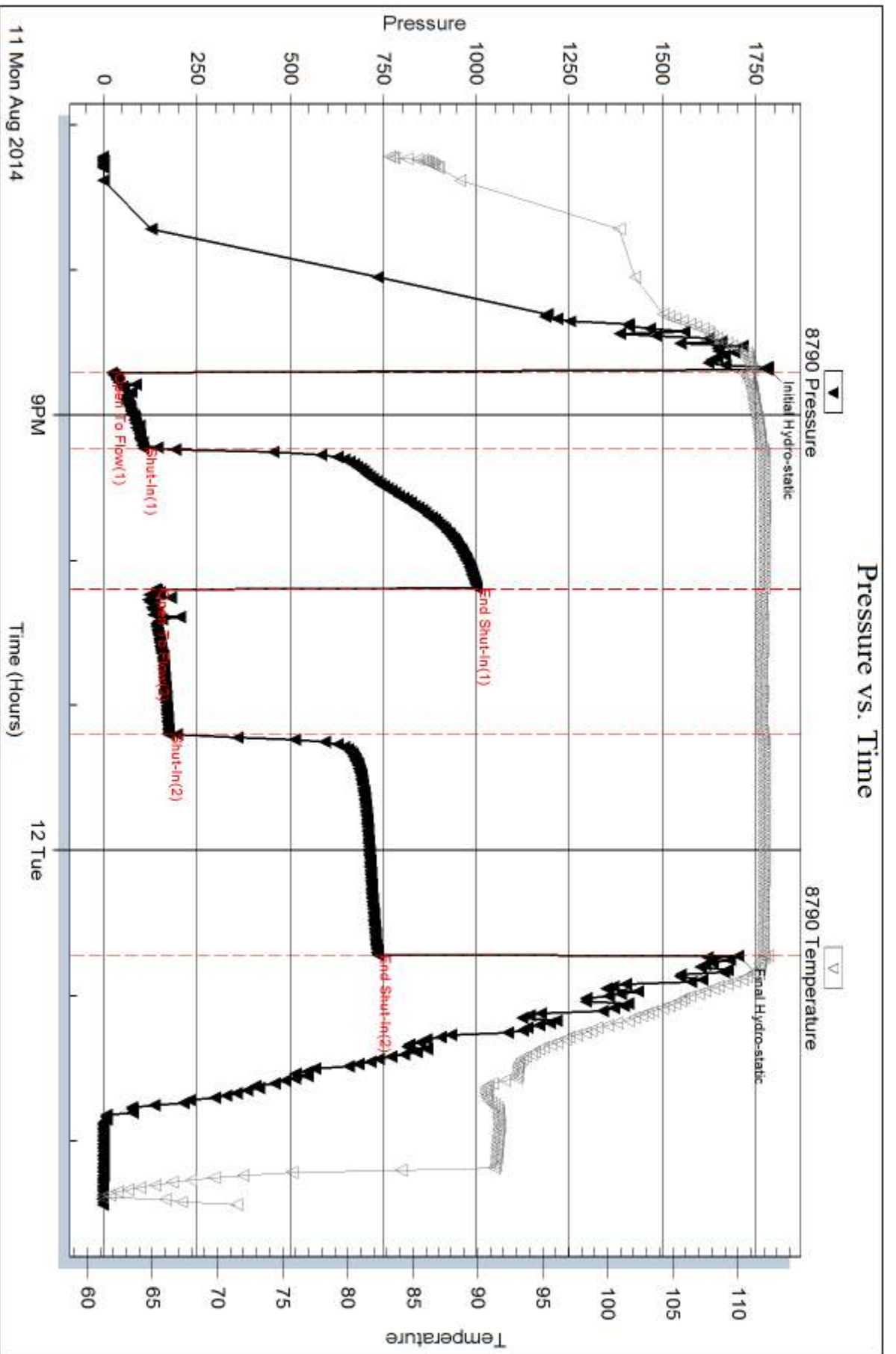
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

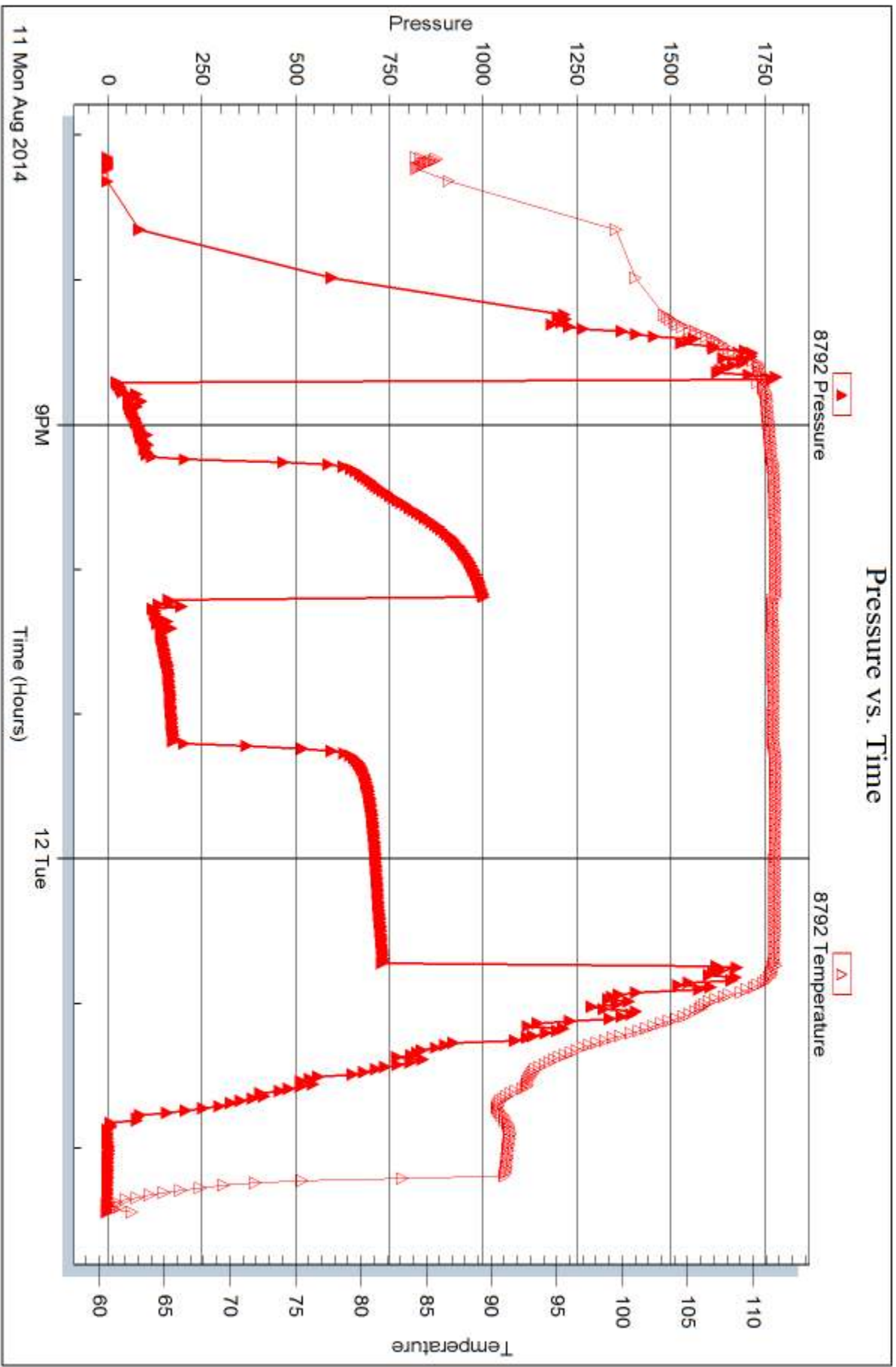


Serial #: 8792

Outside Murfin Dtg. Co., Inc.

Pound #1-34

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 54168

Printed: 2014.08.14 @ 10:14:26



DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water Ste. 300
Wichita, KS 67202-1216

ATTN: Chuck Schmaltz

Pound #1-34

34-22s-12w Stafford,KS

Start Date: 2014.08.12 @ 11:41:21

End Date: 2014.08.12 @ 19:27:21

Job Ticket #: 54169 DST #: 3

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

Printed: 2014.08.14 @ 10:13:44



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.
 250 N. Water Ste. 300
 Wichita, KS 67202-1216
 ATTN: Chuck Schmaltz

34-22s-12w Stafford,KS

Pound #1-34

Job Ticket: 54169

DST#: 3

Test Start: 2014.08.12 @ 11:41:21

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:29:36
 Time Test Ended: 19:27:21
 Interval: **3561.00 ft (KB) To 3698.00 ft (KB) (TVD)**
 Total Depth: 3698.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1842.00 ft (KB)
 1831.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8790

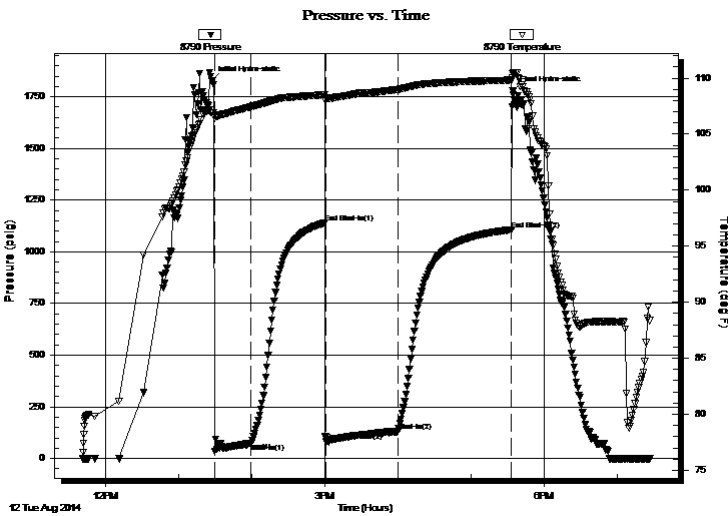
Inside

Press@RunDepth: 130.67 psig @ 3568.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.12 End Date: 2014.08.12 Last Calib.: 2014.08.12
 Start Time: 11:41:26 End Time: 19:27:20 Time On Btm: 2014.08.12 @ 13:27:36
 Time Off Btm: 2014.08.12 @ 17:34:21

TEST COMMENT: IF: Good blow . surf. - 9"
 IS: No blow
 FF: Strong blow . BOB @ 5min.
 FS: Weak 1" BB

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1827.85	106.90	Initial Hydro-static
2	33.30	106.43	Open To Flow (1)
32	74.20	107.45	Shut-In(1)
93	1139.55	108.51	End Shut-In(1)
94	81.42	108.23	Open To Flow (2)
153	130.67	108.98	Shut-In(2)
246	1106.81	109.83	End Shut-In(2)
247	1778.11	110.42	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
305.00	GOCM 35%g, 30%o, 35%m	1.76
0.00	970' GIP	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (m ³ /d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54169

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.08.12 @ 11:41:21

Tool Information

Drill Pipe:	Length: 3268.00 ft	Diameter: 3.80 inches	Volume: 45.84 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 47.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 65500.00 lb
Depth to Top Packer:	3561.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	137.00 ft			
Tool Length:	164.00 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			3535.00	
Shut In Tool	5.00			3540.00	
Hydraulic tool	5.00			3545.00	
Jars	5.00			3550.00	
Safety Joint	2.00			3552.00	
Packer	5.00			3557.00	27.00 Bottom Of Top Packer
Packer	4.00			3561.00	
Stubb	1.00			3562.00	
Perforations	5.00			3567.00	
Change Over Sub	1.00			3568.00	
Recorder	0.00	8790	Inside	3568.00	
Recorder	0.00	8792	Outside	3568.00	
Drill Pipe	95.00			3663.00	
Change Over Sub	1.00			3664.00	
Perforations	31.00			3695.00	
Bullnose	3.00			3698.00	137.00 Bottom Packers & Anchor
Total Tool Length:	164.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

34-22s-12w Stafford,KS

250 N. Water Ste. 300
Wichita, KS 67202-1216

Pound #1-34

Job Ticket: 54169

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.08.12 @ 11:41:21

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

18000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 18000.00 ppm

Filter Cake: 0.04 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
305.00	GOCM 35%g, 30%o, 35%m	1.764
0.00	970' GIP	0.000

Total Length: 305.00 ft

Total Volume: 1.764 bbl

Num Fluid Samples: 0

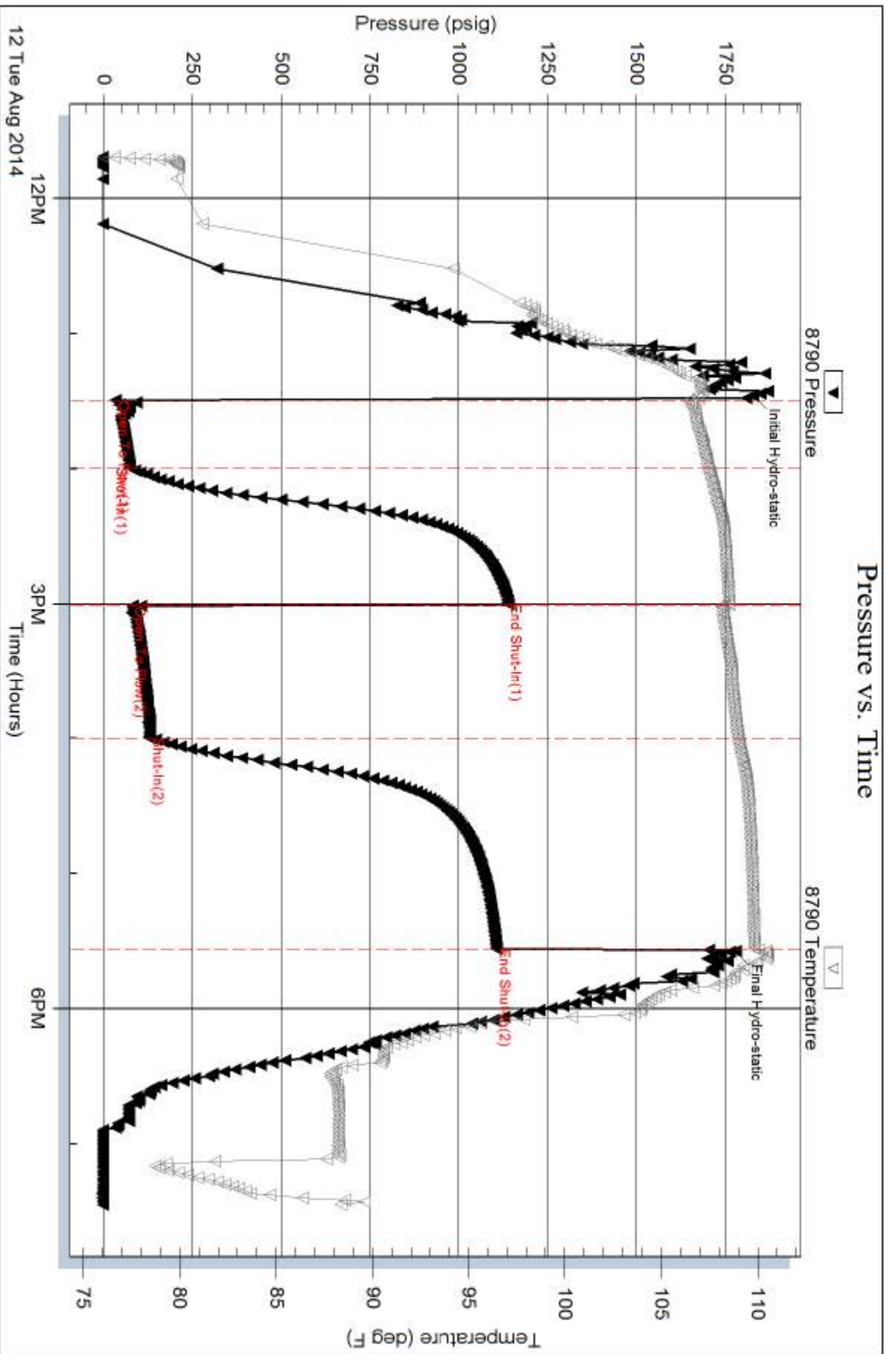
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

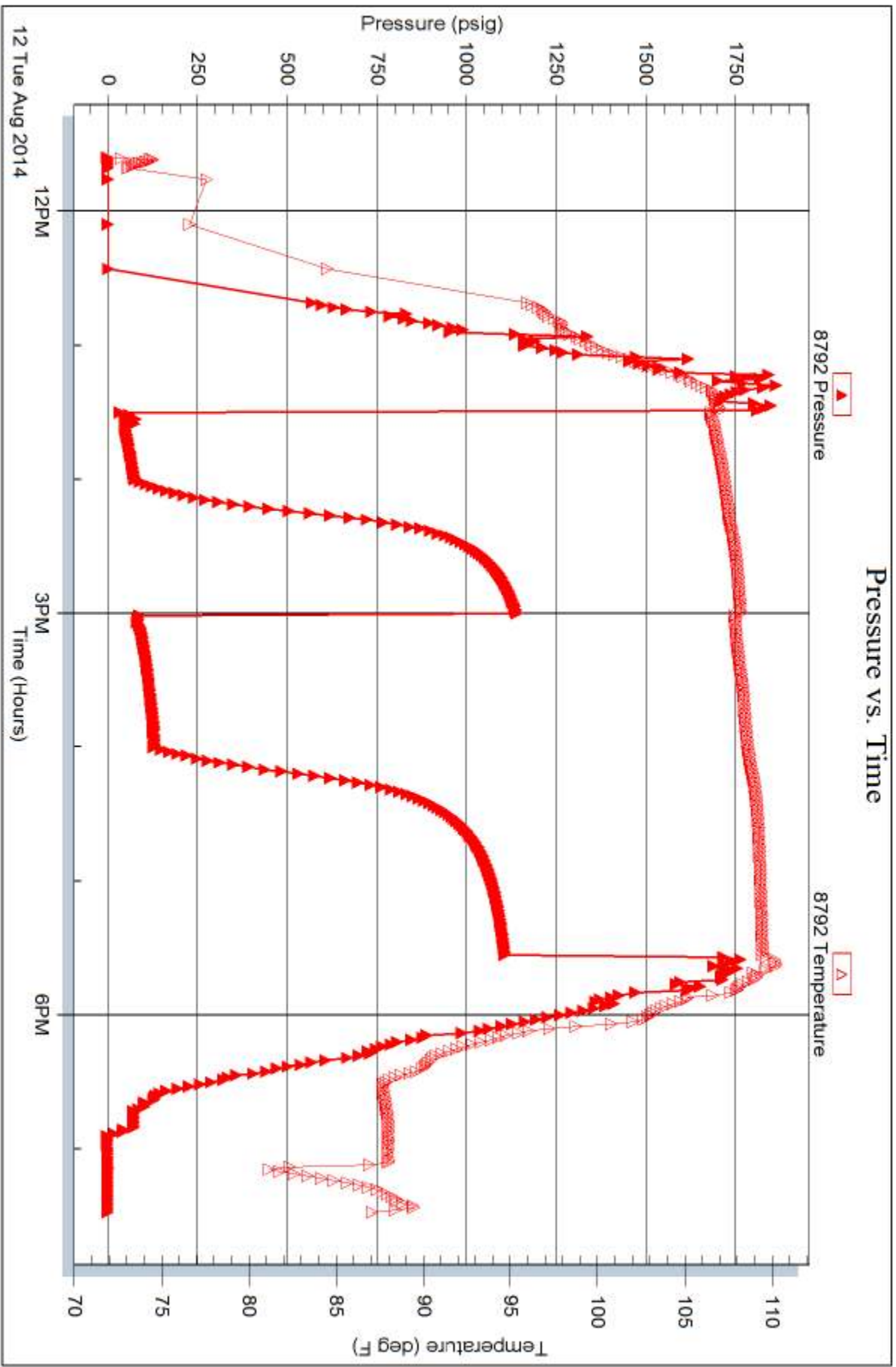


Serial #: 8792

Outside Murfin Drtg. Co., Inc.

Pound #1-34

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 54169

Printed: 2014.08.14 @ 10:13:45



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54167

Well Name & No. Pound 1-34 Test No. 1 Date 8-10-14
 Company Murfin Drlg. Co., Inc. Elevation 1842 KB 1831 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Chuck Schmutz Rig Murfin 21
 Location: Sec. 34 Twp. 22s. Rge. 12w Co. Stafford State KS

Interval Tested 3351-3425 Zone Tested Trans. "D-F"
 Anchor Length 74 Drill Pipe Run 3078 Mud Wt. 9.4+
 Top Packer Depth 3346 Drill Collars Run 276 Vis 62
 Bottom Packer Depth 3351 Wt. Pipe Run Ø WL 10.2
 Total Depth 3425 Chlorides 16,200 ppm System LCM 1#
 Blow Description IF: Weak blow. Surf. - 1" ISI: No blow
FF: Weak blow: No blow - Surf. FSI: No blow.

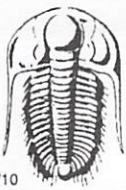
Rec	Feet of	%gas	%oil	%water	%mud
90	Dry mud			100	
	(VSLI OSpkdM in hyd. tool)				

Rec Total 90 BHT 109 Gravity n/c API RW n/c @ n/c °F Chlorides 16,200 ppm
 (A) Initial Hydrostatic 1721 Test 1150 T-On Location 2130
 (B) First Initial Flow 20 Jars 250 T-Started 2322
 (C) First Final Flow 44 Safety Joint 75 T-Open 0110
 (D) Initial Shut-In 1093 Circ Sub _____ T-Pulled 0410
 (E) Second Initial Flow 47 Hourly Standby _____ T-Out 0552
 (F) Second Final Flow 66 Mileage 74 114.70
 (G) Final Shut-In 1086 Sampler _____
 (H) Final Hydrostatic 1664 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Initial Open 30
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 60
 Sub Total 0
 Total 1589.70
 MP/DST Disc't _____
 Sub Total 1589.70

Approved By [Signature]

Our Representative Ryan Reynolds

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. 54168

Well Name & No. Pound 1-34 Test No. 2 Date 8-12-14
 Company Murfin Drilling Co. Inc. Elevation 1842 KB 1831 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Chuck Schmalz Rig Murfin 21
 Location: Sec. 34 Twp. 22s. Rge. 12w. Co. Stafford State KS

Interval Tested 3459-3587 Zone Tested Lans. "H-L"
 Anchor Length 128' Drill Pipe Run 3173 Mud Wt. 9.3
 Top Packer Depth 3454 Drill Collars Run 276 Vis 48
 Bottom Packer Depth 3459 Wt. Pipe Run Ø WL 8.0
 Total Depth 3587 Chlorides 13,800 ppm System LCM 1/2#
 Blow Description IF: Weak blow. surf. - 1" ISI: No blow
FF: Weak blow. surf. - 1" FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>345</u>	<u>WCM</u>			<u>45</u>	<u>55</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 345 BHT 112 Gravity N/C API RW -12 @ 64 °F Chlorides 79000 ppm

(A) Initial Hydrostatic <u>1782</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1830</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1913</u>
(C) First Final Flow <u>107</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2042</u>
(D) Initial Shut-In <u>1002</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0043</u>
(E) Second Initial Flow <u>138</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0226</u>
(F) Second Final Flow <u>174</u>	<input checked="" type="checkbox"/> Mileage <u>74</u> <u>114.70</u>	Comments
(G) Final Shut-In <u>734</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1704</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<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>60</u>	<input type="checkbox"/> Day Standby	Total <u>1589.70</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1589.70</u>	

Approved By [Signature] Our Representative Ryan Reynolds

Trilobite Testing Inc. shall not be liable for damaged or 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. 54169

Well Name & No. Pound 1-34 Test No. 3 Date 8-12-14
 Company Murfin Drilling Co. Inc. Elevation 1842 KB 1831 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Chuck Schmalz Rig Murfin 21
 Location: Sec. 34 Twp. 22S Rge. 12W Co. Stafford State KS

Interval Tested 3561-3698 Zone Tested Viola
 Anchor Length 137 Drill Pipe Run 3268 Mud Wt. 9.5
 Top Packer Depth 3556 Drill Collars Run 276 Vis 53
 Bottom Packer Depth 3561 Wt. Pipe Run Ø WL 10.2
 Total Depth 3698 Chlorides 18000 ppm System LCM Trc
 Blow Description IF: Good blow. surf. - 9" ISI: No blow
FF: Strong blow. BoB @ 5 min. FSI: Weak 1" BB

Rec	Feet of	%gas	%oil	%water	%mud
<u>970</u>	<u>GIP</u>				
<u>305</u>	<u>GOCM</u>	<u>35</u>	<u>30</u>	<u>35</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 305 BHT 110 Gravity w/c API RW w/c @ w/c °F Chlorides 18000 ppm

(A) Initial Hydrostatic	<u>1828</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>1130</u>
(B) First Initial Flow	<u>33</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>1141</u>
(C) First Final Flow	<u>74</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>1330</u>
(D) Initial Shut-In	<u>1140</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>1731</u>
(E) Second Initial Flow	<u>81</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>1927</u>
(F) Second Final Flow	<u>131</u>	<input checked="" type="checkbox"/> Mileage	<u>74</u> <u>114.70</u>	Comments	
(G) Final Shut-In	<u>1107</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1778</u>	<input type="checkbox"/> Straddle			

Initial Open 30 Shale Packer
 Initial Shut-In 60 Shale Packer
 Final Flow 60 Extra Packer
 Final Shut-In 90 Extra Recorder
 Day Standby
 Accessibility

Sub Total 0
 Total 1589.70
 Sub Total 1589.70

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