



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water STE 300
Wichita KS 67206

ATTN: Sam Sharifaie

Ladenberger "A" #1-6

6-1s-35w Rawlins KS

Start Date: 2014.11.04 @ 00:47:00

End Date: 2014.11.04 @ 08:53:30

Job Ticket #: 60038 DST #: 1

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

Printed: 2014.11.10 @ 15:35:52



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60038

DST#: 1

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 00:47:00

GENERAL INFORMATION:

Formation: **LKC "A - D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:55:30

Time Test Ended: 08:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Nichols

Unit No: 78

Interval: 4177.00 ft (KB) To 4234.00 ft (KB) (TVD)

Reference Elevations: 3212.00 ft (KB)

Total Depth: 4234.00 ft (KB) (TVD)

3201.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 6752

Inside

Press@RunDepth: 91.70 psig @ 4178.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.04

End Date:

2014.11.04

Last Calib.:

2014.11.04

Start Time: 00:47:05

End Time:

08:53:29

Time On Btm:

2014.11.04 @ 02:55:00

Time Off Btm:

2014.11.04 @ 06:59:00

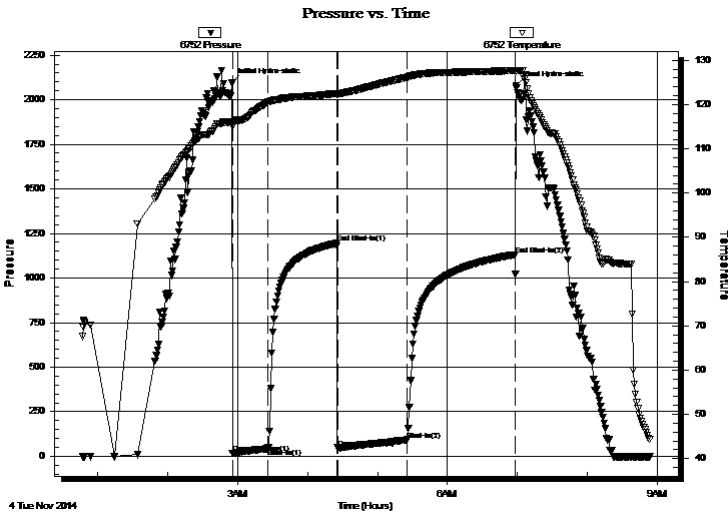
TEST COMMENT: 30 IF - 1/4" blow built to 3"

60 ISI - No return

60 FF - Surface blow started @ 8 mins built to 3"

90 FSI - No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2095.16	116.14	Initial Hydro-static
1	15.43	115.14	Open To Flow (1)
31	42.88	120.50	Shut-In(1)
90	1195.42	122.47	End Shut-In(1)
91	47.74	122.17	Open To Flow (2)
150	91.70	126.13	Shut-In(2)
243	1129.04	127.66	End Shut-In(2)
244	2080.22	127.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
59.00	MCW - 5%M - 95%W	0.29
59.00	MCW - 10%M - 95%W	0.29
57.00	WCM - 50%W - 50%M	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60038

DST#: 1

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 00:47:00

Tool Information

Drill Pipe:	Length: 3977.00 ft	Diameter: 3.80 inches	Volume: 55.79 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 56.80 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4177.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	84.00 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			4151.00	
Shut In Tool	5.00			4156.00	
Hydraulic tool	5.00			4161.00	
Jars	5.00			4166.00	
Safety Joint	2.00			4168.00	
Packer	5.00			4173.00	27.00 Bottom Of Top Packer
Packer	4.00			4177.00	
Stubb	1.00			4178.00	
Recorder	0.00	6752	Inside	4178.00	
Recorder	0.00	8322	Outside	4178.00	
Perforations	20.00			4198.00	
Change Over Sub	1.00			4199.00	
Drill Pipe	31.00			4230.00	
Change Over Sub	1.00			4231.00	
Bullnose	3.00			4234.00	57.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60038

DST#: 1

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 00:47:00

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:

22000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
59.00	MCW - 5%M - 95%W	0.290
59.00	MCW - 10%M - 95%W	0.290
57.00	WCM - 50%W - 50%M	0.280

Total Length: 175.00 ft Total Volume: 0.860 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

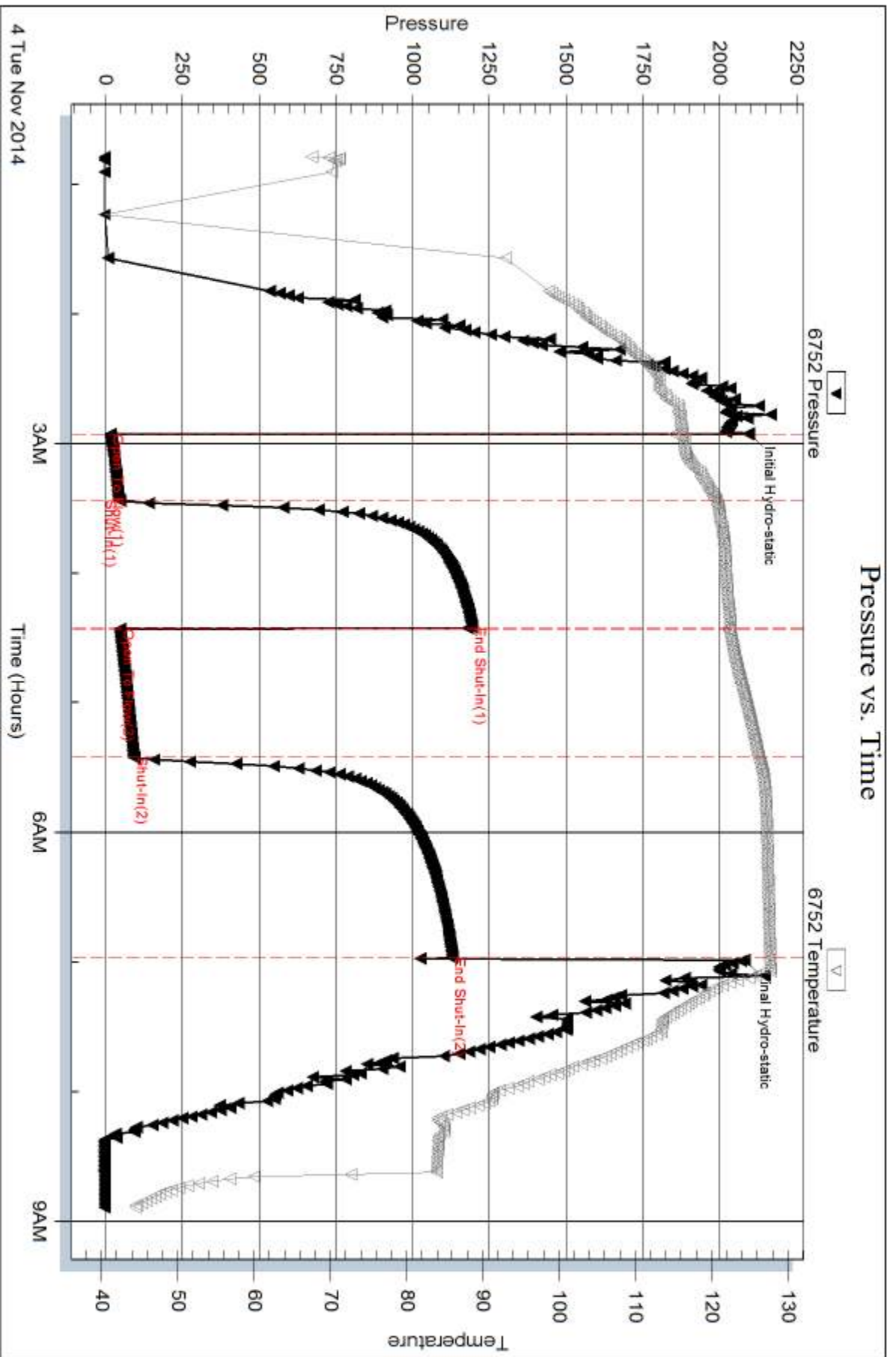
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .468 @ 38.9 DEG F

CHLORIDES = 22,000 PPM

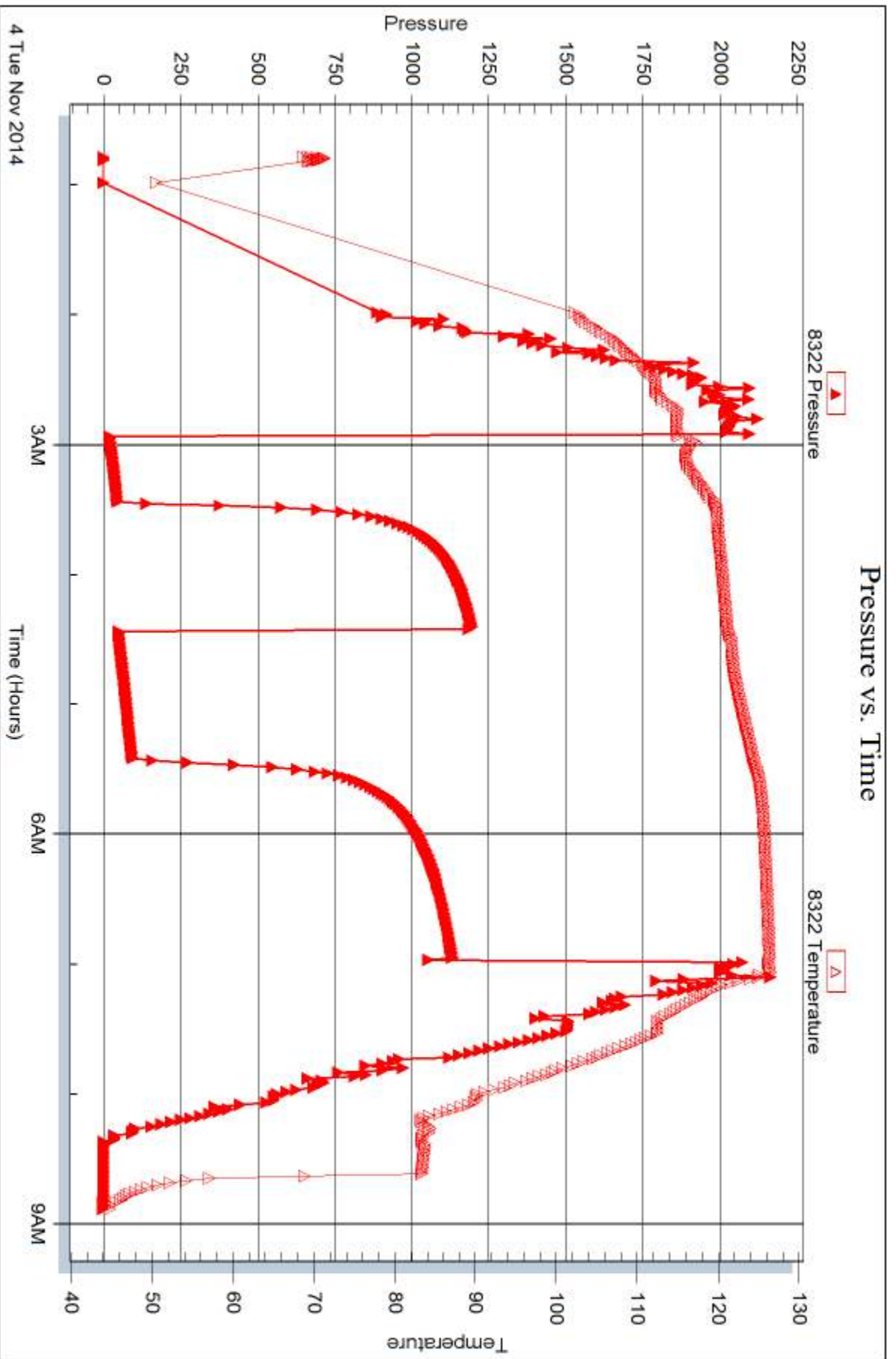


Serial #: 8322

Outside Murfin Drilling Co.

Ladenberger "A" #1-6

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60038

Printed: 2014.11.10 @ 15:35:53



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water STE 300
Wichita KS 67206

ATTN: Sam Sharifaie

Ladenberger "A" #1-6

6-1s-35w Rawlins KS

Start Date: 2014.11.04 @ 17:55:00

End Date: 2014.11.05 @ 01:02:30

Job Ticket #: 60039 DST #: 2

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

Printed: 2014.11.10 @ 15:35:19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60039

DST#: 2

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 17:55:00

GENERAL INFORMATION:

Formation: **LKC " G "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:03:00

Time Test Ended: 01:02:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 78

Interval: 4234.00 ft (KB) To 4290.00 ft (KB) (TVD)

Reference Elevations: 3212.00 ft (KB)

Total Depth: 4290.00 ft (KB) (TVD)

3201.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 6752 Inside

Press@RunDepth: 16.18 psig @ 4235.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.04

End Date:

2014.11.05

Last Calib.: 2014.11.05

Start Time: 17:55:05

End Time:

01:02:29

Time On Btm: 2014.11.04 @ 20:02:45

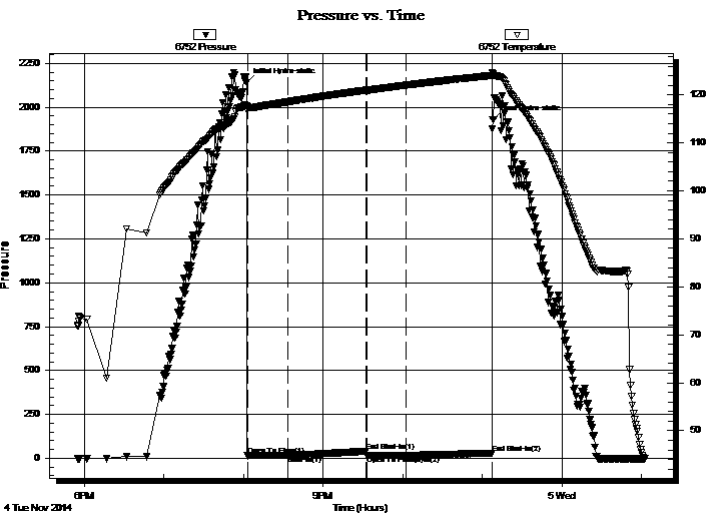
Time Off Btm: 2014.11.04 @ 23:08:00

TEST COMMENT: 30 IF - 1/4" blow built to 3/4" (in diesel)

60 ISI - No return

30 FF - No blow

60 FSI - No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.50	117.74	Initial Hydro-static
1	14.85	116.95	Open To Flow (1)
31	16.49	118.54	Shut-In(1)
90	40.66	120.97	End Shut-In(1)
91	15.69	120.98	Open To Flow (2)
120	16.18	122.03	Shut-In(2)
185	30.23	124.04	End Shut-In(2)
186	1931.35	124.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud - 100%M	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

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60039

DST#: 2

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 17:55:00

Tool Information

Drill Pipe:	Length: 4007.00 ft	Diameter: 3.80 inches	Volume: 56.21 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 57.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4234.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	83.00 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			4208.00	
Shut In Tool	5.00			4213.00	
Hydraulic tool	5.00			4218.00	
Jars	5.00			4223.00	
Safety Joint	2.00			4225.00	
Packer	5.00			4230.00	27.00 Bottom Of Top Packer
Packer	4.00			4234.00	
Stubb	1.00			4235.00	
Recorder	0.00	6752	Inside	4235.00	
Recorder	0.00	8322	Outside	4235.00	
Perforations	18.00			4253.00	
Change Over Sub	1.00			4254.00	
Drill Pipe	32.00			4286.00	
Change Over Sub	1.00			4287.00	
Bullnose	3.00			4290.00	56.00 Bottom Packers & Anchor

Total Tool Length: 83.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60039

DST#: 2

ATTN: Sam Sharifaie

Test Start: 2014.11.04 @ 17:55:00

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: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud - 100%M	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

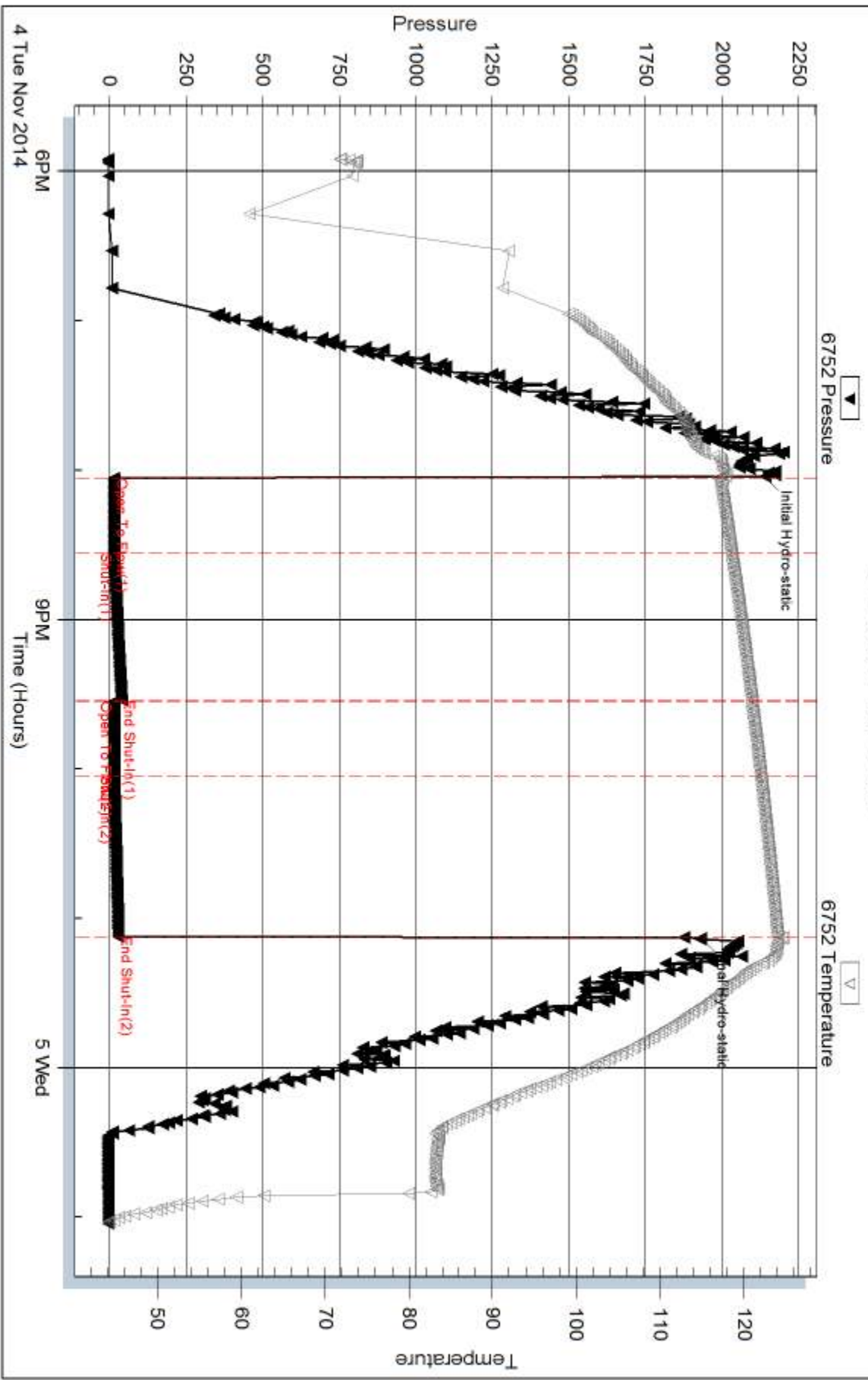
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

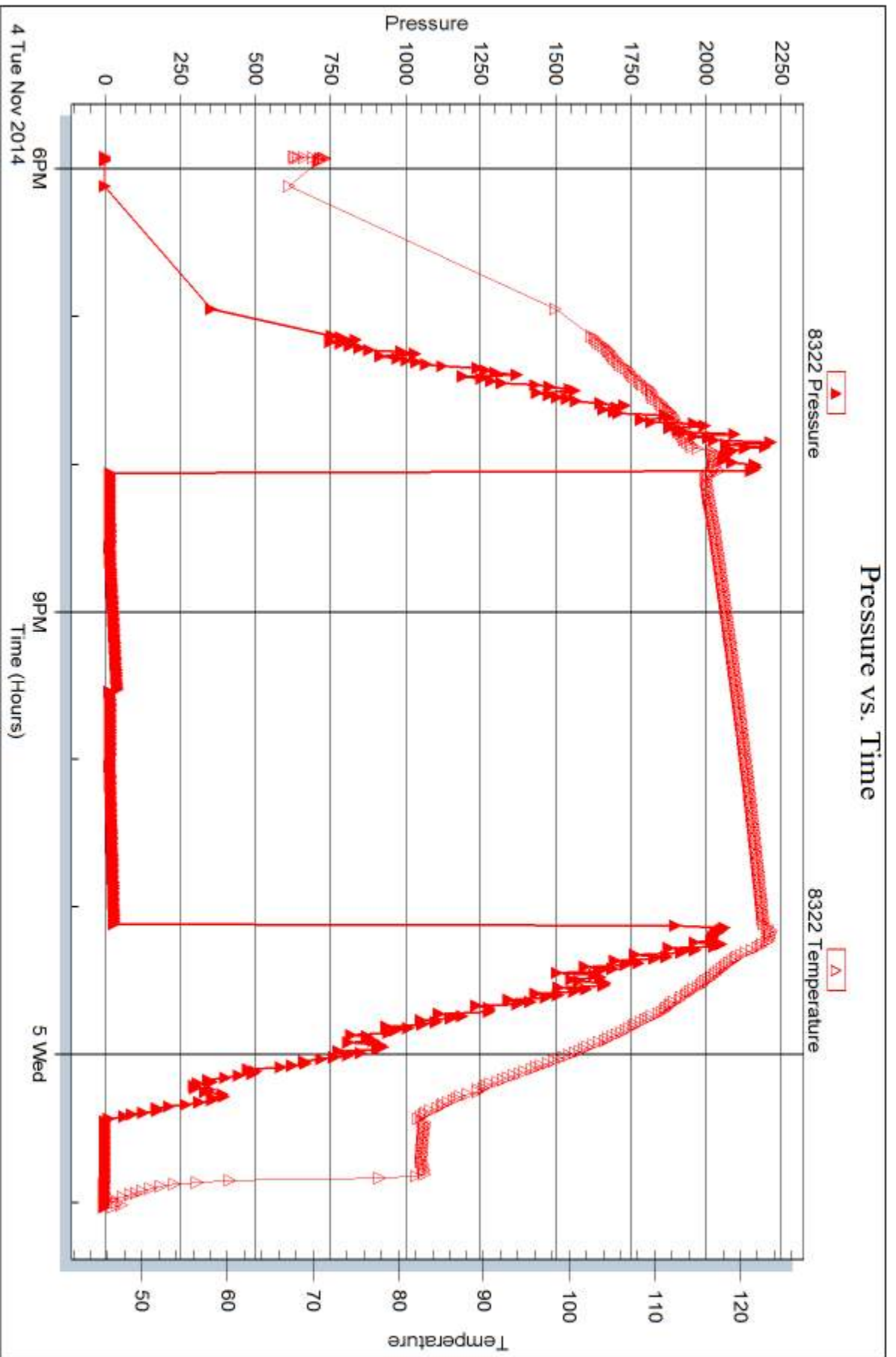


Serial #: 8322

Outside Murfin Drilling Co.

Ladenberger "A" #1-6

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 60039

Printed: 2014.11.10 @ 15:35:20



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water STE 300
Wichita KS 67206

ATTN: Sam Sharifaie

Ladenberger "A" #1-6

6-1s-35w Rawlins KS

Start Date: 2014.11.05 @ 13:23:00

End Date: 2014.11.05 @ 22:39:00

Job Ticket #: 60040 DST #: 3

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

Printed: 2014.11.10 @ 15:32:27



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60040

DST#: 3

ATTN: Sam Sharifaie

Test Start: 2014.11.05 @ 13:23:00

GENERAL INFORMATION:

Formation: **LKC "H - J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:31:15

Time Test Ended: 22:39:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 78

Interval: 4292.00 ft (KB) To 4386.00 ft (KB) (TVD)

Reference Elevations: 3212.00 ft (KB)

Total Depth: 4386.00 ft (KB) (TVD)

3201.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 6752 Inside

Press@RunDepth: 287.75 psig @ 4293.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.05 End Date: 2014.11.05

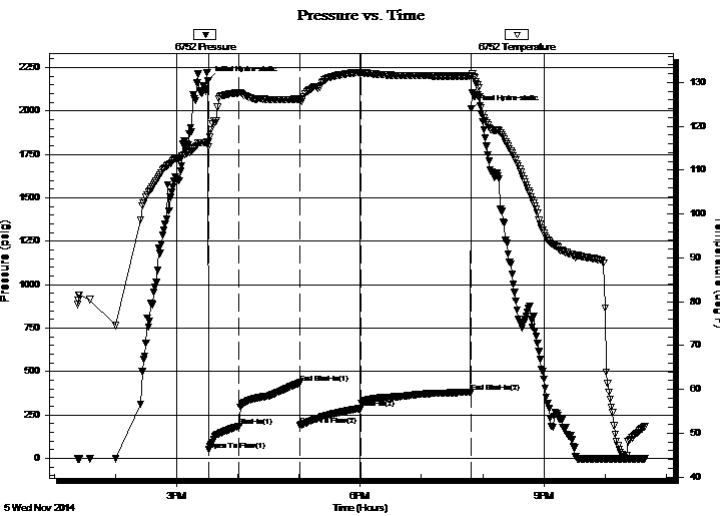
Last Calib.: 2014.11.05

Start Time: 13:23:05 End Time: 22:39:00

Time On Btm: 2014.11.05 @ 15:31:00

Time Off Btm: 2014.11.05 @ 19:48:45

TEST COMMENT: 30 IF - 1" blow built to BoB @ 6 mins
60 ISI - Surface blow built to 1 1/2" @ 33 mins died back to 1/4"
60 FF - Surface blow built to BoB @ 11 mins
90 FSI - Surface blow died @ 22 mins



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.16	116.37	Initial Hydro-static
1	48.76	115.40	Open To Flow (1)
31	184.96	127.74	Shut-In(1)
90	435.31	126.20	End Shut-In(1)
90	189.73	126.10	Open To Flow (2)
150	287.75	132.29	Shut-In(2)
258	380.38	131.50	End Shut-In(2)
258	2009.73	131.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
237.00	OMCW - 10%o - 25%M - 65%W	1.45
126.00	OMCW - 15%o - 30%M - 55%W	1.77
189.00	OWCM - 10%o - 25%W - 65%M	2.65
38.00	GMCO - 5%G - 45%M - 50%o	0.53
15.00	GO - 10%G - 90%o	0.21
0.00	200' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60040

DST#: 3

ATTN: Sam Sharifaie

Test Start: 2014.11.05 @ 13:23:00

Tool Information

Drill Pipe:	Length: 4072.00 ft	Diameter: 3.80 inches	Volume: 57.12 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 58.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4292.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	121.00 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			4266.00	
Shut In Tool	5.00			4271.00	
Hydraulic tool	5.00			4276.00	
Jars	5.00			4281.00	
Safety Joint	2.00			4283.00	
Packer	5.00			4288.00	27.00 Bottom Of Top Packer
Packer	4.00			4292.00	
Stubb	1.00			4293.00	
Recorder	0.00	6752	Inside	4293.00	
Recorder	0.00	8322	Outside	4293.00	
Perforations	24.00			4317.00	
Change Over Sub	1.00			4318.00	
Drill Pipe	64.00			4382.00	
Change Over Sub	1.00			4383.00	
Bullnose	3.00			4386.00	94.00 Bottom Packers & Anchor

Total Tool Length: 121.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

6-1s-35w Rawlins KS

250 N. Water STE 300
Wichita KS 67206

Ladenberger "A" #1-6

Job Ticket: 60040

DST#: 3

ATTN: Sam Sharifaie

Test Start: 2014.11.05 @ 13:23:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 74.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
237.00	OMCW - 10%o - 25%M - 65%W	1.448
126.00	OMCW - 15%o - 30%M - 55%W	1.767
189.00	OWCM - 10%o - 25%W - 65%M	2.651
38.00	GMCO - 5%G - 45%M - 50%o	0.533
15.00	GO - 10%G - 90%o	0.210
0.00	200' GIP	0.000

Total Length: 605.00 ft Total Volume: 6.609 bbl

Num Fluid Samples: 0

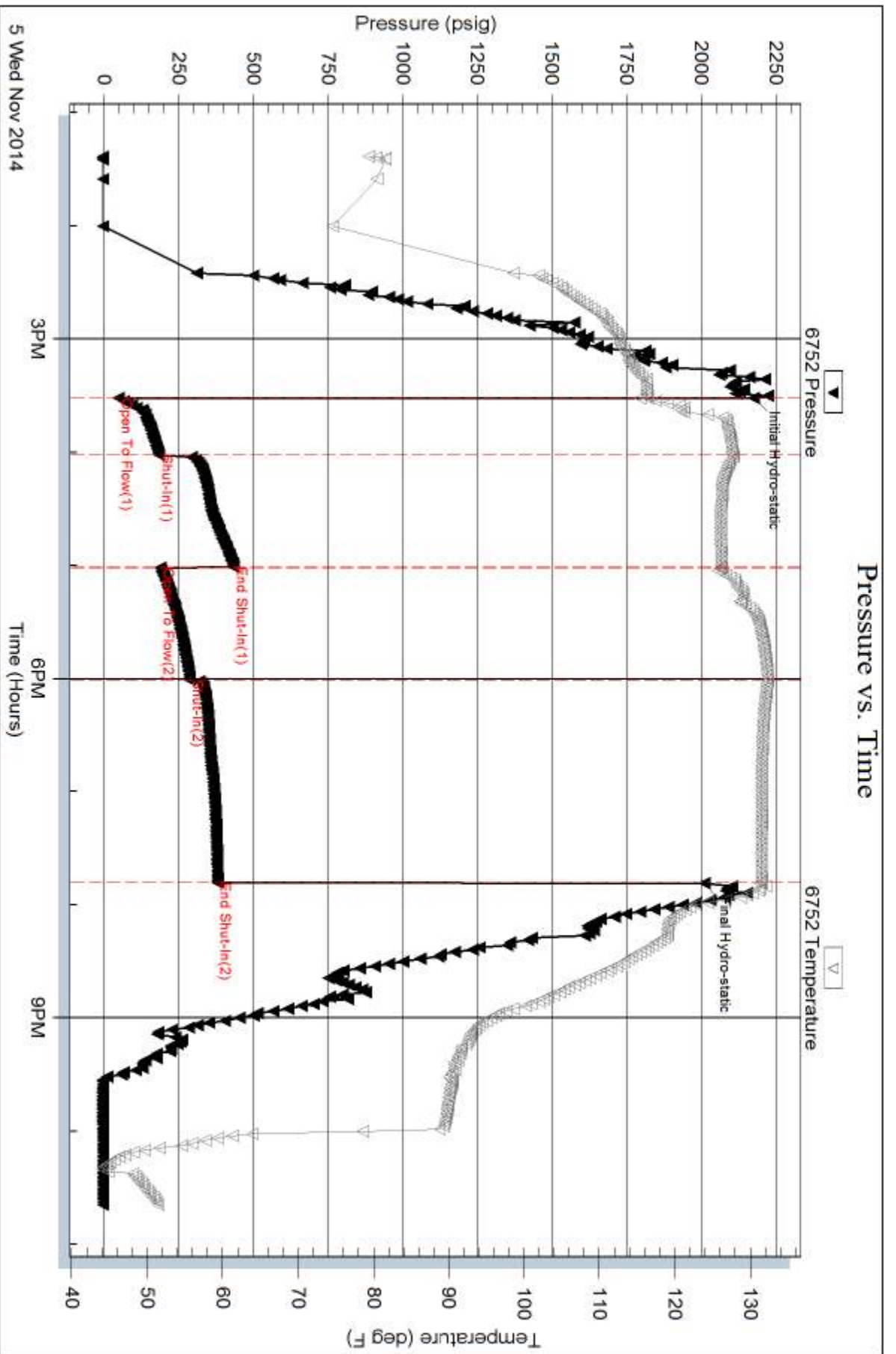
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: OIL API = 35 @ 80 DEG F = 33 COR 60 DEG F

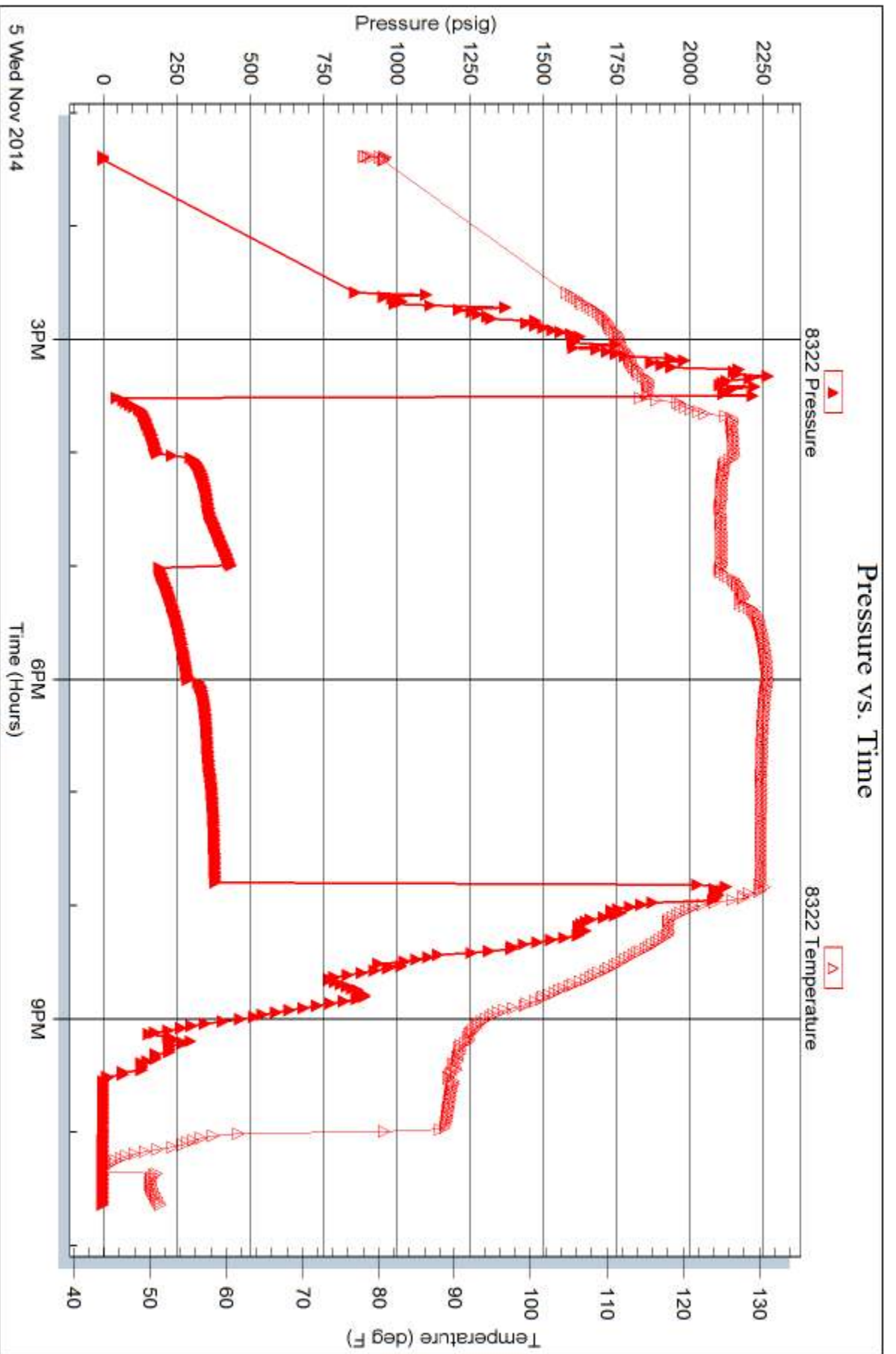


Serial #: 8322

Outside Murfin Drilling Co.

Ladenberger "A" #1-6

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 60040

Printed: 2014.11.10 @ 15:32:28

Test Ticket

TESTING INC.

15 Commerce Parkway • Hays, Kansas 67601

NO. 60038

No. Ladenburger "A" #1-6 Test No. 1 Date 11/4/14
 Company Martin Drilling Co. Elevation 32012 KB 3201 GL
 Address 250 N. Water STE 300 Wichita KS 67206
 Co. Rep / Geo. Sam Sharifaie Rig Martin #2
 Location: Sec. 8 Twp. 1S Rge. 35W Co. Rawlins State KS

Interval Tested 4177 - 4234 Zone Tested 2KC "A-D"
 Anchor Length 57' Drill Pipe Run 3977' Mud Wt. 9.2
 Top Packer Depth 4172 Drill Collars Run 206' Vis 54
 Bottom Packer Depth 4177 Wt. Pipe Run 0' WL 7.2
 Total Depth 4234 Chlorides 800 ppm System LCM 7
 Blow Description IF - 1/4" blow built to 3" (in diesel)
ISI - No return
FF - Surface blow started @ 8 mins built to 3"
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>57'</u>	<u>MCW</u>		<u>50</u>	<u>50</u>	
<u>59'</u>	<u>WCM</u>		<u>90</u>	<u>10</u>	
<u>57'</u>	<u>WCM</u>		<u>95</u>	<u>5</u>	

Rec Total 175' BHT 128° Gravity — API RW 468 @ 38.9° F Chlorides 22,000 ppm
 Test 1250 T-On Location 00:00
 Jars 250 T-Started 00:47
 Safety Joint 75 T-Open 02:55
 Circ Sub NC T-Pulled 06:55
 Hourly Standby _____ T-Out 08:53
 Mileage 116 RT 179.80 Comments _____
 Sampler _____
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1754.80

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Approved By _____ Our Representative [Signature]

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. 60039

4/10

Well Name & No. Ladenburger "A" #1-6 Test No. 2 Date 11/4/14
 Company Martin Drilling Co Elevation 3212 KB 3201 GL
 Address 250 N. Water STE 300 Wichita KS 67206
 Co. Rep / Geo. Sam Sharitaie Rig Martin #2
 Location: Sec. 6 Twp. 15 Rge. 35W Co. Kawlin State KS

Interval Tested 4234 - 4290 Zone Tested LKC "G"
 Anchor Length 56' Drill Pipe Run 4007' Mud Wt. 9.1
 Top Packer Depth 4229 Drill Collars Run 206' Vis 73
 Bottom Packer Depth 4234 Wt. Pipe Run 0' WL 5.2
 Total Depth 4290 Chlorides 600 ppm System LCM 8
 Blow Description IF - 1/4" blow built to 3/4" (in diesel)
FSI - No return
FF - No blow
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>2'</u>	<u>Mud</u>			<u>100%</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2' BHT 124° Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic 2140 Test 1250 T-On Location 17:30
 (B) First Initial Flow 15 Jars 250 T-Started 17:55
 (C) First Final Flow 16 Safety Joint 75 T-Open 20:02
 (D) Initial Shut-In 41 Circ Sub NC T-Pulled 23:02
 (E) Second Initial Flow 16 Hourly Standby — T-Out 01:02
 (F) Second Final Flow 16 Mileage 116 RT 179.80 Comments —
 (G) Final Shut-In 30 Sampler —
 (H) Final Hydrostatic 1931 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 0
 Day Standby — Total 1754.80
 Accessibility — MP/DST Disc't —
 Sub Total 1754.80

Approved By _____ Our Representative [Signature]

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. 60040

Well Name & No. Ladenburger "A" #1-6 Test No. 3 Date 11/5/14
 Company Martin Drilling Co. Elevation 3212 KB 3201 GL
 Address 250 N. Water STE 300 Wichita KS 67206
 Co. Rep / Geo. Sam Sharitaie Rig Martin #2
 Location: Sec. 6 Twp. 15 Rge. 35 W Co. Rawlins State KS

Interval Tested 4292 - 4386 Zone Tested 2KC "H-J"
 Anchor Length 94' Drill Pipe Run 4070' Mud Wt. 9.2
 Top Packer Depth 4287 Drill Collars Run 206' Vis 74
 Bottom Packer Depth 4292 Wt. Pipe Run 0' WL 5.6
 Total Depth 4386 Chlorides 800 ppm System LCM 3
 Blow Description IF - 1" blow built to Bob @ 6 mins (in diesel)
ISI - Surface blow built to 1 1/2" @ 33 mins died back to 1/4"
FF - Surface blow built to Bob @ 11 mins
FSI - Surface blow died @ 22 mins

Rec	Feet of	%gas	%oil	%water	%mud
15'	60	10	90		
38'	60 GMCO	5	50		45
189'	OWCM		10	25	65
126'	OMCW		15	55	30
237'	OMCW		10	65	25

Rec Total 605' BHT 131° Gravity 33 API RW - @ - F Chlorides - ppm
 (A) Initial Hydrostatic 2175 Test 1250 T-On Location 13:00
 (B) First Initial Flow 49 Jars 250 T-Started 13:23
 (C) First Final Flow 185 Safety Joint 75 T-Open 15:31
 (D) Initial Shut-In 435 Circ Sub NL T-Pulled 19:06
 (E) Second Initial Flow 190 Hourly Standby _____ T-Out 22:39
 (F) Second Final Flow 288 Mileage 116 RT 179.80 Comments 200' GIP
 (G) Final Shut-In 380 Sampler _____
 (H) Final Hydrostatic 2010 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 60 Extra Packer _____ Extra Copies _____
 Final Flow 60 Extra Recorder _____ Sub Total 0
 Final Shut-In 90 Day Standby _____ Total 1754.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1754.80

Approved By _____ Our Representative [Signature]
 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.