



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300  
Wichita KS 67202

ATTN: Larry Nichol森

**John "A" 1-24**

**24 1S 36W Rawlins KS**

Start Date: 2015.06.14 @ 10:30:00

End Date: 2015.06.14 @ 18:07:30

Job Ticket #: 65058                      DST #: 1

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

Printed: 2015.06.17 @ 16:27:53

Murfin Drilling CO INC  
24 1S 36W Rawlins KS  
John "A" 1-24  
DST # 1  
LKC "A-D"  
2015.06.14



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65058

**DST#: 1**

ATTN: Larry Nichol森

Test Start: 2015.06.14 @ 10:30:00

## GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:18:30

Time Test Ended: 18:07:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Robert Zodrow

Unit No: 66

**Interval: 4152.00 ft (KB) To 4284.00 ft (KB) (TVD)**

Reference Elevations: 3275.00 ft (KB)

Total Depth: 4284.00 ft (KB) (TVD)

3264.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 150.40 psig @ 4153.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.14

End Date:

2015.06.14

Last Calib.:

2015.06.14

Start Time: 10:30:05

End Time:

18:07:29

Time On Btm:

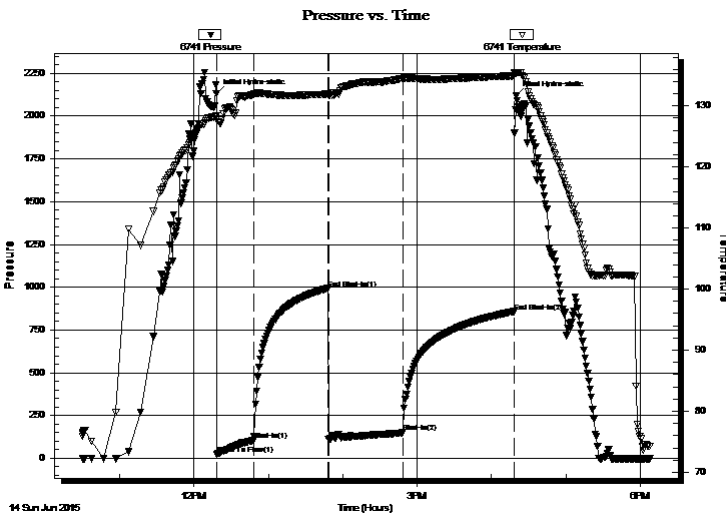
2015.06.14 @ 12:18:00

Time Off Btm:

2015.06.14 @ 16:20:00

**TEST COMMENT:** 30-IS- Blow built to 5"  
60-IS- No return  
60-FF- Blow built to 6"  
90-FS- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2129.51	128.42	Initial Hydro-static
1	22.40	127.78	Open To Flow (1)
30	103.92	131.86	Shut-In(1)
90	991.94	131.93	End Shut-In(1)
91	112.78	131.66	Open To Flow (2)
151	150.40	134.51	Shut-In(2)
240	857.96	134.93	End Shut-In(2)
242	2116.75	135.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
275.00	OCM 15%O 85%M	2.20

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65058

**DST#: 1**

ATTN: Larry Nichol森

Test Start: 2015.06.14 @ 10:30:00

## Tool Information

Drill Pipe:	Length: 3973.00 ft	Diameter: 3.80 inches	Volume: 55.73 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: 182.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 56.63 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4152.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	132.00 ft			
Tool Length:	159.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4130.00	
Hydraulic tool	5.00			4135.00	
Jars	5.00			4140.00	
Safety Joint	3.00			4143.00	
Packer	5.00			4148.00	27.00 Bottom Of Top Packer
Packer	4.00			4152.00	
Stubb	1.00			4153.00	
Recorder	0.00	6741	Inside	4153.00	
Recorder	0.00	8521	Outside	4153.00	
Perforations	33.00			4186.00	
Change Over Sub	1.00			4187.00	
Drill Pipe	93.00			4280.00	
Change Over Sub	1.00			4281.00	
Bullnose	3.00			4284.00	132.00 Bottom Packers & Anchor

**Total Tool Length: 159.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65058

**DST#: 1**

ATTN: Larry Nichol森

Test Start: 2015.06.14 @ 10:30:00

## 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 10.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
275.00	OCM 15%O 85%M	2.200

Total Length: 275.00 ft      Total Volume: 2.200 bbl

Num Fluid Samples: 0

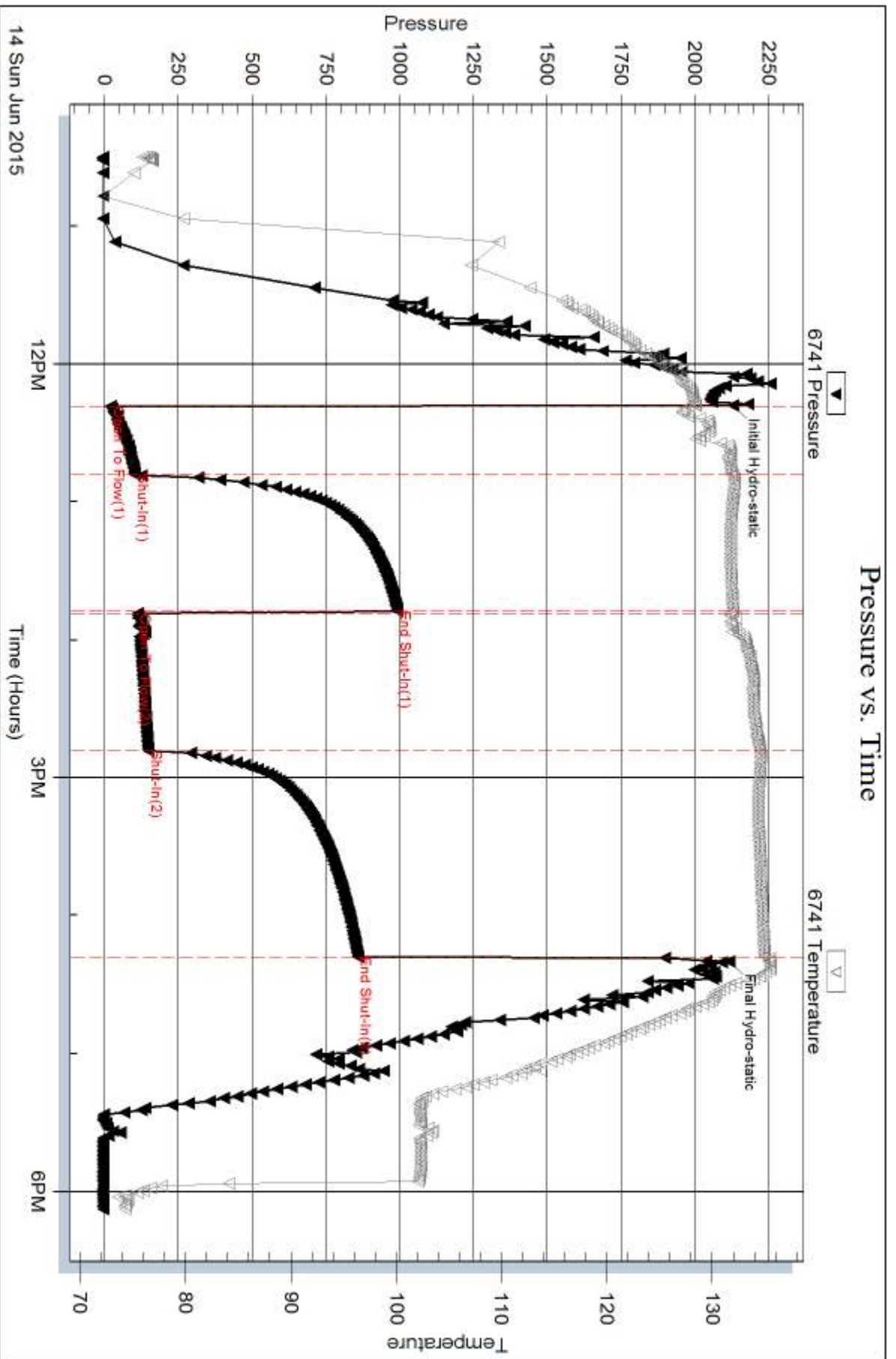
Num Gas Bombs: 0

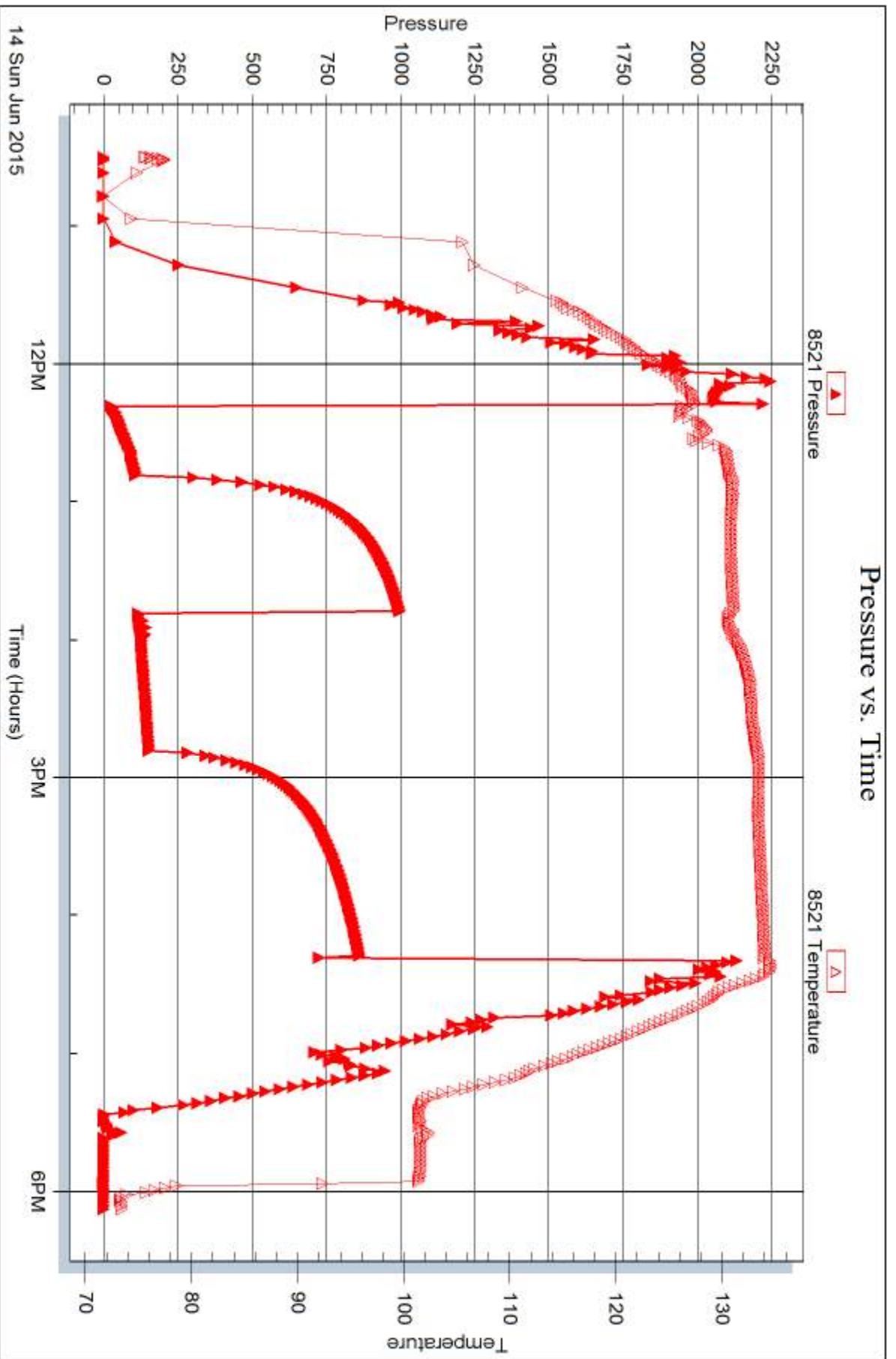
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300  
Wichita KS 67202

ATTN: Larry Nichol森

**John "A" 1-24**

**24 1S 36W Rawlins KS**

Start Date: 2015.06.15 @ 06:00:00

End Date: 2015.06.15 @ 14:10:00

Job Ticket #: 65059                      DST #: 2

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

Printed: 2015.06.17 @ 16:27:19

Murfin Drilling CO INC  
24 1S 36W Rawlins KS  
John "A" 1-24  
DST # 2  
LKC "D-G"  
2015.06.15





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65059

**DST#: 2**

ATTN: Larry Nichol森

Test Start: 2015.06.15 @ 06:00:00

## GENERAL INFORMATION:

Formation: **LKC "D-G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:21:00

Time Test Ended: 14:10:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 66

**Interval: 4285.00 ft (KB) To 4350.00 ft (KB) (TVD)**

Reference Elevations: 3275.00 ft (KB)

Total Depth: 4350.00 ft (KB) (TVD)

3264.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 19.66 psig @ 4286.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.15

End Date:

2015.06.15

Last Calib.:

2015.06.15

Start Time: 06:00:05

End Time:

14:09:59

Time On Btm:

2015.06.15 @ 08:20:30

Time Off Btm:

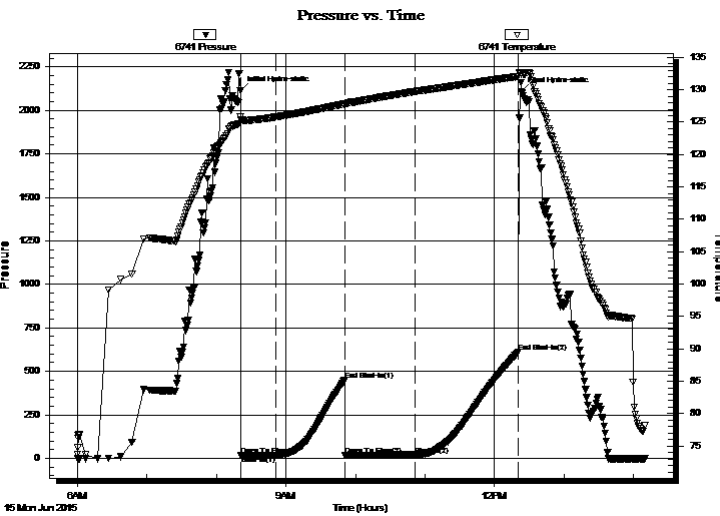
2015.06.15 @ 12:23:00

TEST COMMENT: 30-IS- Surface blow died in 17 mins

60-IS- No return

60-FF- No blow

90-FS- No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2111.91	125.85	Initial Hydro-static
1	15.90	125.43	Open To Flow (1)
31	16.13	125.81	Shut-In(1)
90	449.69	127.82	End Shut-In(1)
91	17.70	127.78	Open To Flow (2)
151	19.66	129.73	Shut-In(2)
240	610.95	132.06	End Shut-In(2)
243	2107.66	132.45	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	MUD oil spots in tool	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 INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65059

**DST#: 2**

ATTN: Larry Nichol森

Test Start: 2015.06.15 @ 06:00:00

## Tool Information

Drill Pipe:	Length: 4094.00 ft	Diameter: 3.80 inches	Volume: 57.43 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: 182.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 88000.00 lb
			<u>Total Volume: 58.33 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4285.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4263.00	
Hydraulic tool	5.00			4268.00	
Jars	5.00			4273.00	
Safety Joint	3.00			4276.00	
Packer	5.00			4281.00	27.00 Bottom Of Top Packer
Packer	4.00			4285.00	
Stubb	1.00			4286.00	
Recorder	0.00	6741	Inside	4286.00	
Recorder	0.00	8521	Outside	4286.00	
Perforations	28.00			4314.00	
Change Over Sub	1.00			4315.00	
Drill Pipe	31.00			4346.00	
Change Over Sub	1.00			4347.00	
Bullnose	3.00			4350.00	65.00 Bottom Packers & Anchor

**Total Tool Length: 92.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65059

**DST#: 2**

ATTN: Larry Nicholzen

Test Start: 2015.06.15 @ 06:00:00

### 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: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 10.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
2.00	MUD oil spots in tool	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

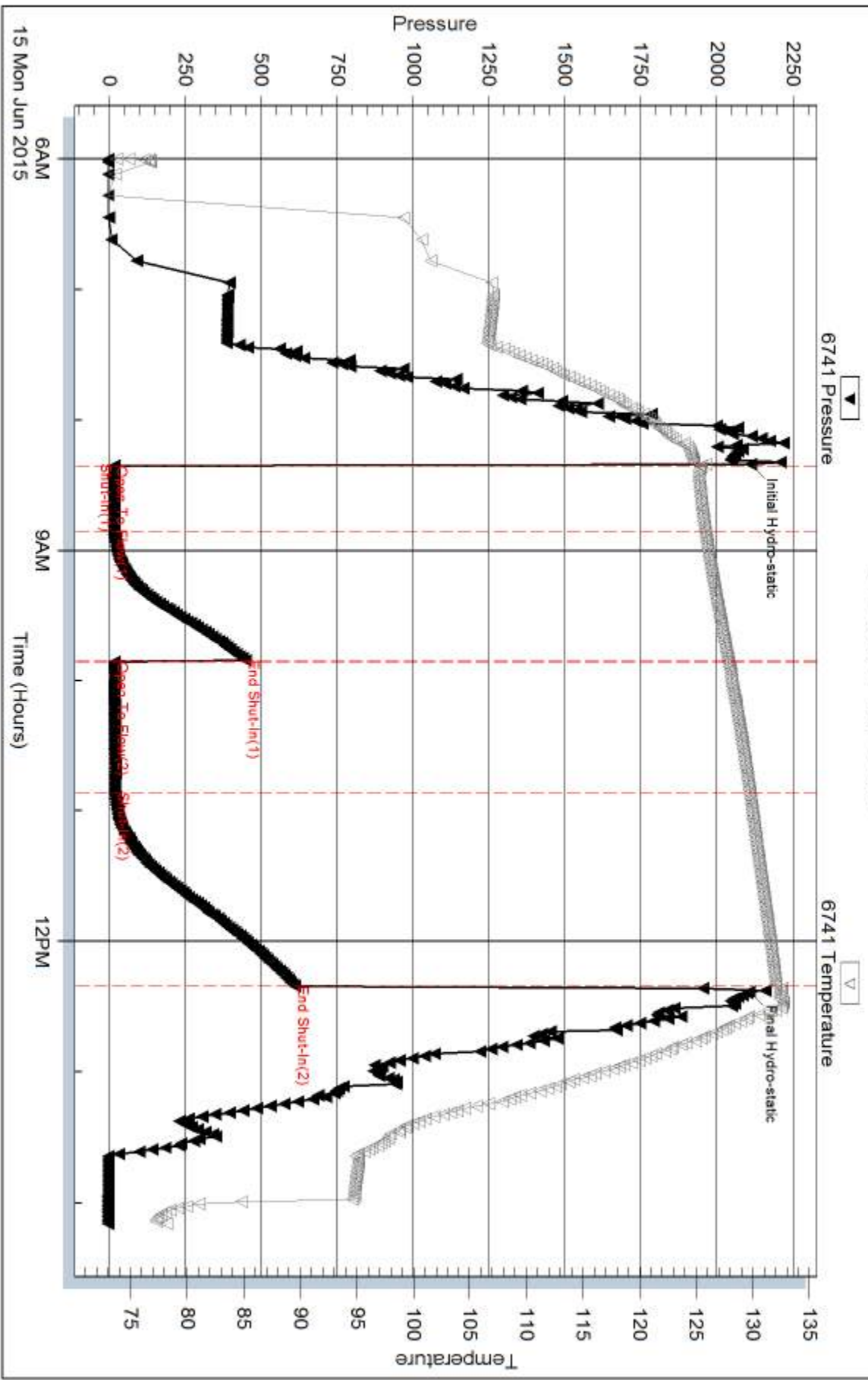
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

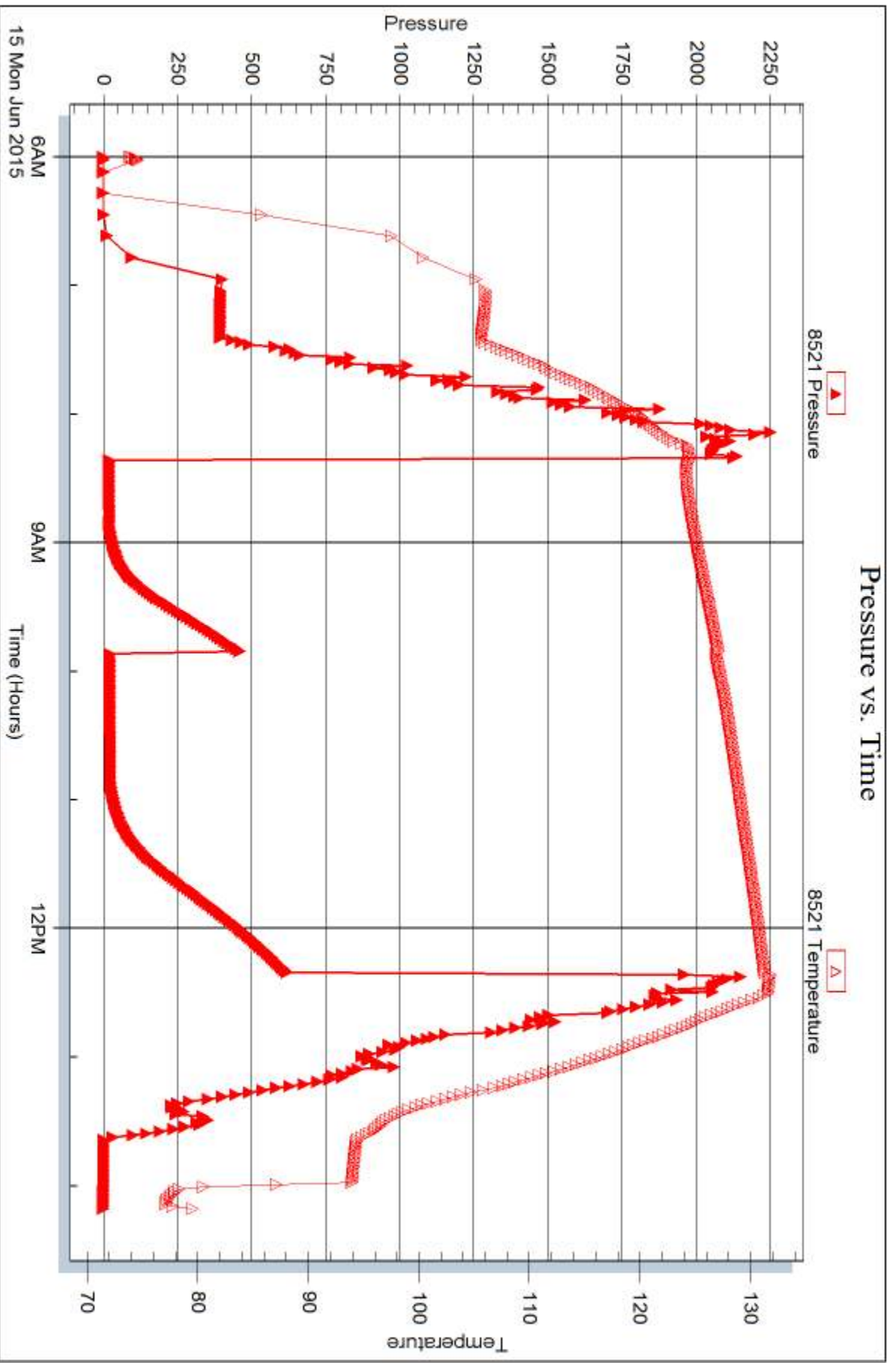


Serial #: 8521

Outside Murfin Drilling CO INC

John "A" 1-24

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300  
Wichita KS 67202

ATTN: Larry Nichol森

**John "A" 1-24**

**24 1S 36W Rawlins KS**

Start Date: 2015.06.16 @ 00:25:00

End Date: 2015.06.16 @ 08:35:30

Job Ticket #: 65060                      DST #: 3

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

Printed: 2015.06.17 @ 16:26:35



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65060

**DST#: 3**

ATTN: Larry Nichol森

Test Start: 2015.06.16 @ 00:25:00

## GENERAL INFORMATION:

Formation: **LKC H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:18:30

Time Test Ended: 08:35:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 66

**Interval: 4341.00 ft (KB) To 4426.00 ft (KB) (TVD)**

Reference Elevations: 3275.00 ft (KB)

Total Depth: 4284.00 ft (KB) (TVD)

3264.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 87.84 psig @ 4342.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.16

End Date:

2015.06.16

Last Calib.:

2015.06.16

Start Time: 00:25:05

End Time:

08:35:29

Time On Btm:

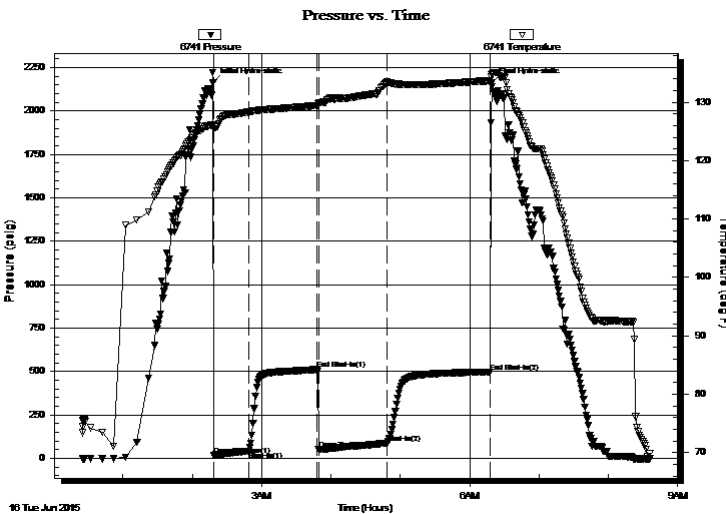
2015.06.16 @ 02:18:00

Time Off Btm:

2015.06.16 @ 06:19:00

**TEST COMMENT:** 30-IF- Blow built to 3 1/4"  
60-ISI- No return  
60-FF- Blow started in 24 mins built to 2 1/4"  
90-FSI- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2163.68	126.11	Initial Hydro-static
1	16.49	125.38	Open To Flow (1)
31	41.63	128.31	Shut-In(1)
90	511.51	129.44	End Shut-In(1)
91	50.39	129.73	Open To Flow (2)
151	87.84	133.45	Shut-In(2)
240	497.16	133.71	End Shut-In(2)
241	2162.00	134.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	OCM 25%) 75%M	0.59
5.00	Clean Oil 100%O	0.02

\* 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 INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65060

**DST#: 3**

ATTN: Larry Nichol森

Test Start: 2015.06.16 @ 00:25:00

## Tool Information

Drill Pipe:	Length: 4157.00 ft	Diameter: 3.80 inches	Volume: 58.31 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: 182.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	92000.00 lb
			<u>Total Volume: 59.21 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4341.00 ft			Final	72000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	85.00 ft				
Tool Length:	112.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4319.00	
Hydraulic tool	5.00			4324.00	
Jars	5.00			4329.00	
Safety Joint	3.00			4332.00	
Packer	5.00			4337.00	27.00 Bottom Of Top Packer
Packer	4.00			4341.00	
Stubb	1.00			4342.00	
Recorder	0.00	6741	Inside	4342.00	
Recorder	0.00	8521	Outside	4342.00	
Perforations	16.00			4358.00	
Change Over Sub	1.00			4359.00	
Drill Pipe	63.00			4422.00	
Change Over Sub	1.00			4423.00	
Bullnose	3.00			4426.00	85.00 Bottom Packers & Anchor

**Total Tool Length: 112.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling CO INC

**24 1S 36W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**John "A" 1-24**

Job Ticket: 65060

**DST#: 3**

ATTN: Larry Nichol森

Test Start: 2015.06.16 @ 00:25:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 10.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	OCM 25%) 75%M	0.590
5.00	Clean Oil 100%O	0.025

Total Length: 125.00 ft      Total Volume: 0.615 bbl

Num Fluid Samples: 0

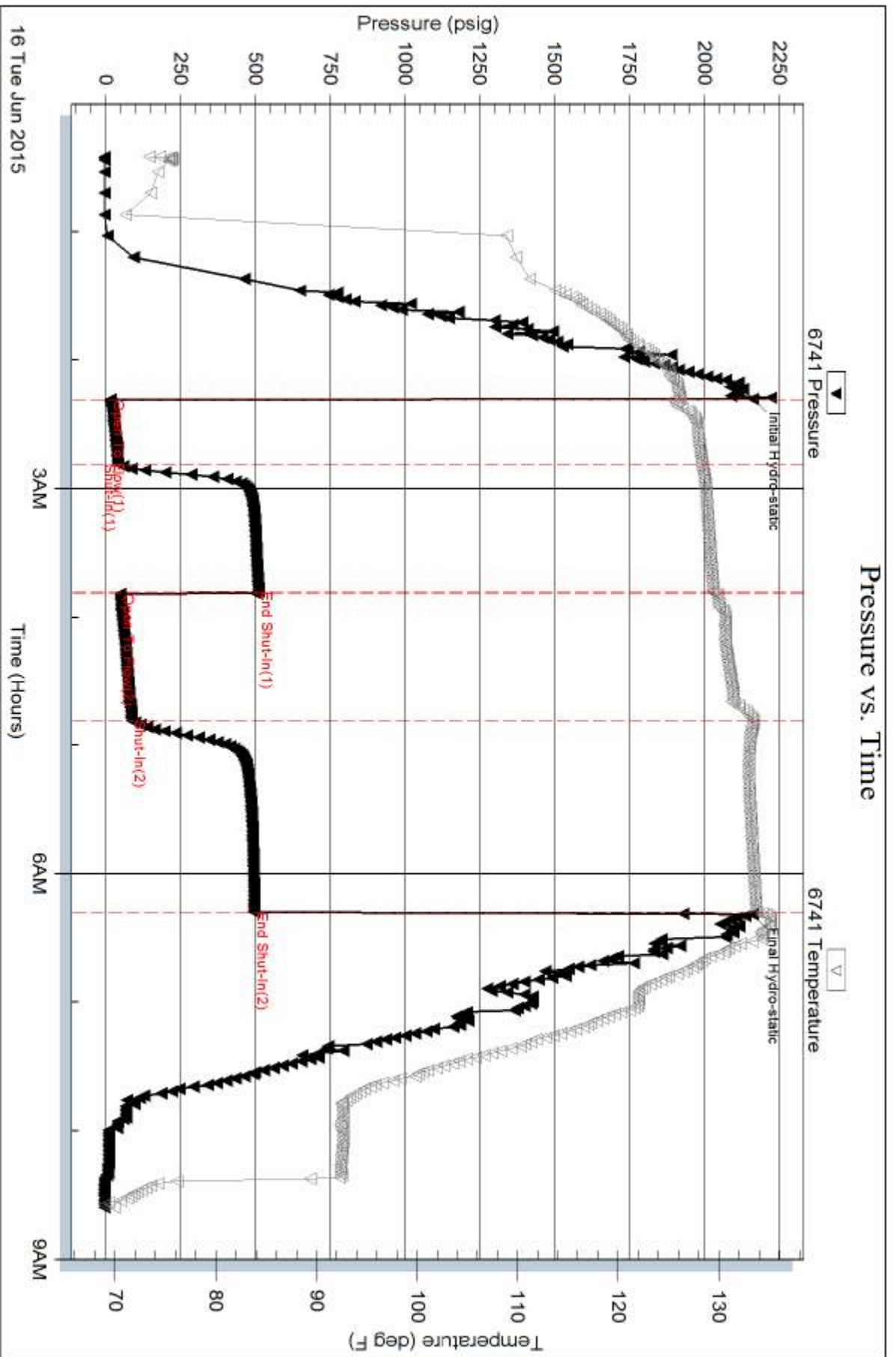
Num Gas Bombs: 0

Serial #:

Laboratory Name:

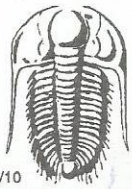
Laboratory Location:

Recovery Comments:









# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **65058**

Well Name & No. John "A" # 1-24 Test No. 1 Date 6-14-2015  
 Company Murfin Drilling Co. Inc. Elevation 3275 KB 3264 GL  
 Address 250 N Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Larry Nicholson Rig Murfin #2  
 Location: Sec. 24 Twp. 15 Rge. 36 W Co. Rawlins State KS

Interval Tested 4152 — 4284 Zone Tested LKC "A-D"  
 Anchor Length 132 Drill Pipe Run 3973 Mud Wt. 9.0  
 Top Packer Depth 4148 Drill Collars Run 182 Vis 58  
 Bottom Packer Depth 4152 (shake) Wt. Pipe Run 0 WL 7.2  
 Total Depth 4284 Chlorides 700 ppm System LCM 10  
 Blow Description IF - Blow built to 5"  
ISI - No return  
FF - Blow built to 6"  
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>275</u>	<u>OCM</u>	<u>1.5</u>		<u>85</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 275 BHT 135 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2129</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>09:00</u> <u>6-14</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:30</u> <u>6-14</u>
(C) First Final Flow <u>104</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>12:18</u> <u>6-14</u>
(D) Initial Shut-In <u>992</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>16:18</u> <u>6-14</u>
(E) Second Initial Flow <u>113</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>18:07</u> <u>6-14</u>
(F) Second Final Flow <u>150</u>	<input checked="" type="checkbox"/> Mileage <u>108 RT</u> <u>108</u>	Comments <u>Stayed at the rig water hauler got stuck block the lease road Nobody could get in or out.</u>
(G) Final Shut-In <u>858</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2116</u>	<input checked="" type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Total <u>1833</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1833</u>	

Approved By \_\_\_\_\_ Our Representative Robert Zedner  
 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. **65059**

Well Name & No. John "A" #1-24 Test No. 2 Date 6-15-2015  
 Company Murfin Drilling Co Inc Elevation 3275 KB 3264 GL  
 Address 250 N water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Larry Nichol森 Rig Murfin #2  
 Location: Sec. 24 Twp. 1S Rge. 36W Co. Rawlins State KS

Interval Tested 4285 — 4350 Zone Tested LKC "D-D"  
 Anchor Length 65 Drill Pipe Run 4094 Mud Wt. 9.0  
 Top Packer Depth 4281 Drill Collars Run 182 Vis 58  
 Bottom Packer Depth 4285 (shale) Wt. Pipe Run 0 WL 2.2  
 Total Depth 4350 Chlorides 200 ppm System LCM 10  
 Blow Description IF - surface blow died in 17 mins  
ISI - NO return  
FF - NO blow  
FSI - NO return

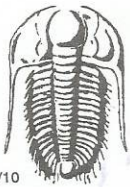
Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>mud oil spots in tool</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 132 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2112  Test 1150 T-On Location 05:30 6-15  
 (B) First Initial Flow 15  Jars 250 T-Started 06:00 6-15  
 (C) First Final Flow 16  Safety Joint 75 T-Open 08:21 6-15  
 (D) Initial Shut-In 450  Circ Sub \_\_\_\_\_ T-Pulled 12:20 6-15  
 (E) Second Initial Flow 17  Hourly Standby \_\_\_\_\_ T-Out ~~10:20~~ 14:10 6-15  
 (F) Second Final Flow 19  Mileage 108 Comments \_\_\_\_\_  
 (G) Final Shut-In 610  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2107  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 60  Day Standby \_\_\_\_\_ Total 1833  
 Final Flow 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 90 Sub Total 1833

Approved By \_\_\_\_\_ Our Representative Robert Zedrow  
 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. **65060**

Well Name & No. John "A" #1-24 Test No. 3 Date 6-16-2015  
 Company Murfin Drilling CO Inc Elevation 3275 KB 3264 GL  
 Address 250 N Water STE 300 Wichita KS, 67202  
 Co. Rep / Geo. Larry NicholSEN Rig Murfin #2  
 Location: Sec. 24 Twp. 1S Rge. 36W Co. Rawlins State KS

Interval Tested 4341 — 4426 Zone Tested LKC "H-J"  
 Anchor Length 85 Drill Pipe Run 4157 Mud Wt. 9.0  
 Top Packer Depth 4337 Drill Collars Run 182 Vis 58  
 Bottom Packer Depth 4341 (shale) Wt. Pipe Run 0 WL 9.2  
 Total Depth 4426 Chlorides 700 ppm System LCM 10  
 Blow Description IF - Blow built to 3 1/4"  
ISF - NO return  
FF - Blow started in 24 mins built to 2 1/4"  
FSI - NO return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Clean oil</u>	<u>100</u>			
<u>120</u>	<u>OCM</u>	<u>25</u>		<u>75</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 125 BHT 133 Gravity 32 API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2163  Test 1150 T-On Location 00:05 6-16  
 (B) First Initial Flow 16  Jars 250 T-Started 00:25 6-16  
 (C) First Final Flow 42  Safety Joint 75 T-Open 02:18 6-16  
 (D) Initial Shut-In 571  Circ Sub \_\_\_\_\_ T-Pulled 06:18 6-16  
 (E) Second Initial Flow 50  Hourly Standby \_\_\_\_\_ T-Out 08:35 6-16  
 (F) Second Final Flow 88  Mileage 108 RT X 2 Comments Drove out loaded  
 (G) Final Shut-In 497  Sampler 108+108 took at 12:00 on 6-17-15  
 (H) Final Hydrostatic 2162  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1941  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1941

Approved By \_\_\_\_\_ Our Representative Robert Zedlow

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