



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.Inc.**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Chleborad #1-21

21-3S-33w Rawlins,KS

Start Date: 2014.12.09 @ 05:00:15

End Date: 2014.12.09 @ 12:18:45

Job Ticket #: 58555 DST #: 1

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

Printed: 2014.12.12 @ 17:22:24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
 250 N Water STE 300
 Wichita KS 67202
 ATTN: Keith Reavis

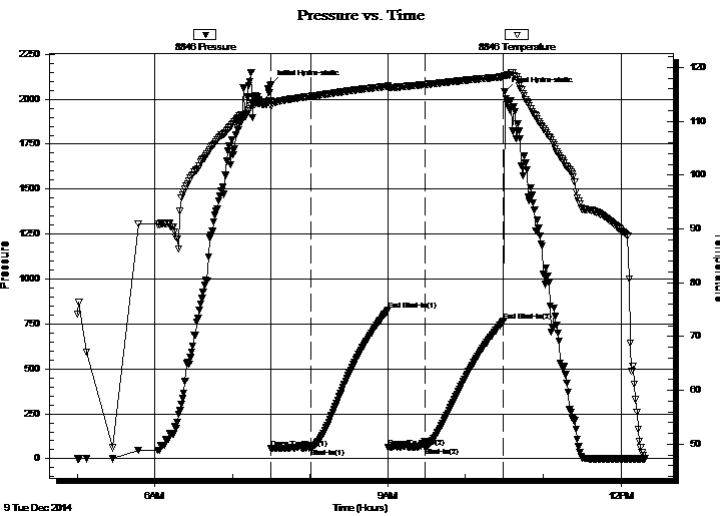
21-3S-33w Rawlins, KS
Chleborad #1-21
 Job Ticket: 58555 **DST#: 1**
 Test Start: 2014.12.09 @ 05:00:15

GENERAL INFORMATION:

Formation: **LKC A-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:29:45
 Time Test Ended: 12:18:45
 Interval: **3912.00 ft (KB) To 4020.00 ft (KB) (TVD)**
 Total Depth: 4020.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Mike Roberts
 Unit No: 65
 Reference Elevations: 3016.00 ft (KB)
 3011.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8846 Inside
 Press@RunDepth: 65.36 psig @ 3918.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.09 End Date: 2014.12.09 Last Calib.: 2014.12.09
 Start Time: 05:00:15 End Time: 12:18:45 Time On Btm: 2014.12.09 @ 07:29:30
 Time Off Btm: 2014.12.09 @ 10:30:15

TEST COMMENT: IF: Built to weak surface blow
 IS: No return blow
 FF: No blow
 FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2079.99	113.80	Initial Hydro-static
1	55.34	112.81	Open To Flow (1)
31	60.35	114.63	Shut-In(1)
91	825.87	116.52	End Shut-In(1)
91	62.38	116.21	Open To Flow (2)
120	65.36	116.81	Shut-In(2)
180	765.18	118.28	End Shut-In(2)
181	2043.09	118.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud with oil spots 100% m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.Inc.

21-3S-33w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Chleborad #1-21

Job Ticket: 58555

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.12.09 @ 05:00:15

Tool Information

Drill Pipe:	Length: 3707.00 ft	Diameter: 3.80 inches	Volume: 52.00 bbl	Tool Weight:	1500.00 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 52.92 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	3912.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	108.00 ft				
Tool Length:	136.00 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			3885.00	
Shut In Tool	5.00			3890.00	
Hydraulic tool	5.00			3895.00	
Jars	5.00			3900.00	
Safety Joint	3.00			3903.00	
Packer	5.00			3908.00	28.00 Bottom Of Top Packer
Packer	4.00			3912.00	
Stubb	1.00			3913.00	
Perforations	5.00			3918.00	
Recorder	0.00	8846	Inside	3918.00	
Recorder	0.00	8737	Outside	3918.00	
Change Over Sub	1.00			3919.00	
Blank Spacing	95.00			4014.00	
Change Over Sub	1.00			4015.00	
Bullnose	5.00			4020.00	108.00 Bottom Packers & Anchor

Total Tool Length: 136.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.Inc.

21-3S-33w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Chleborad #1-21

Job Ticket: 58555

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.12.09 @ 05:00:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w ith oil spots 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

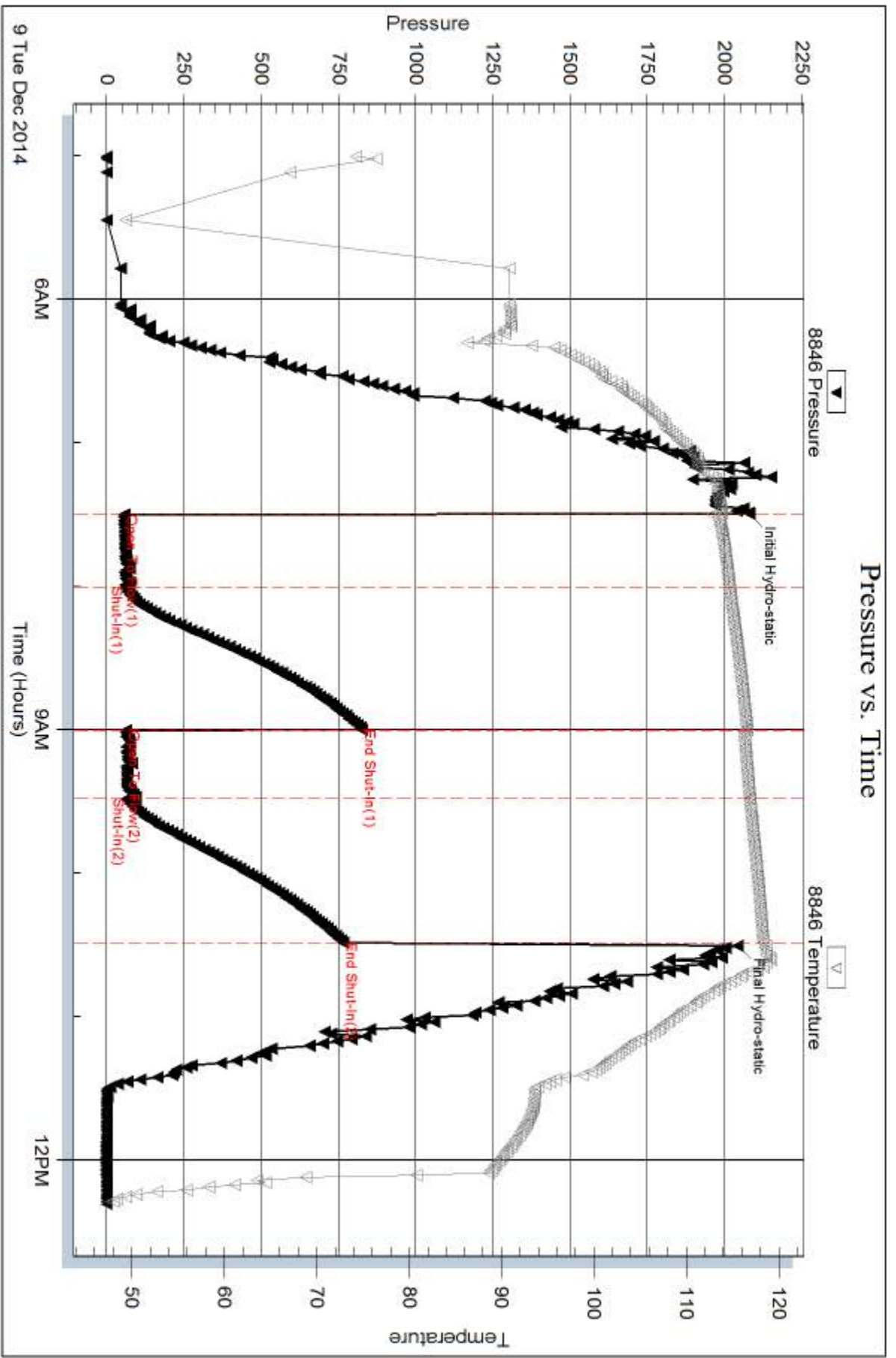
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

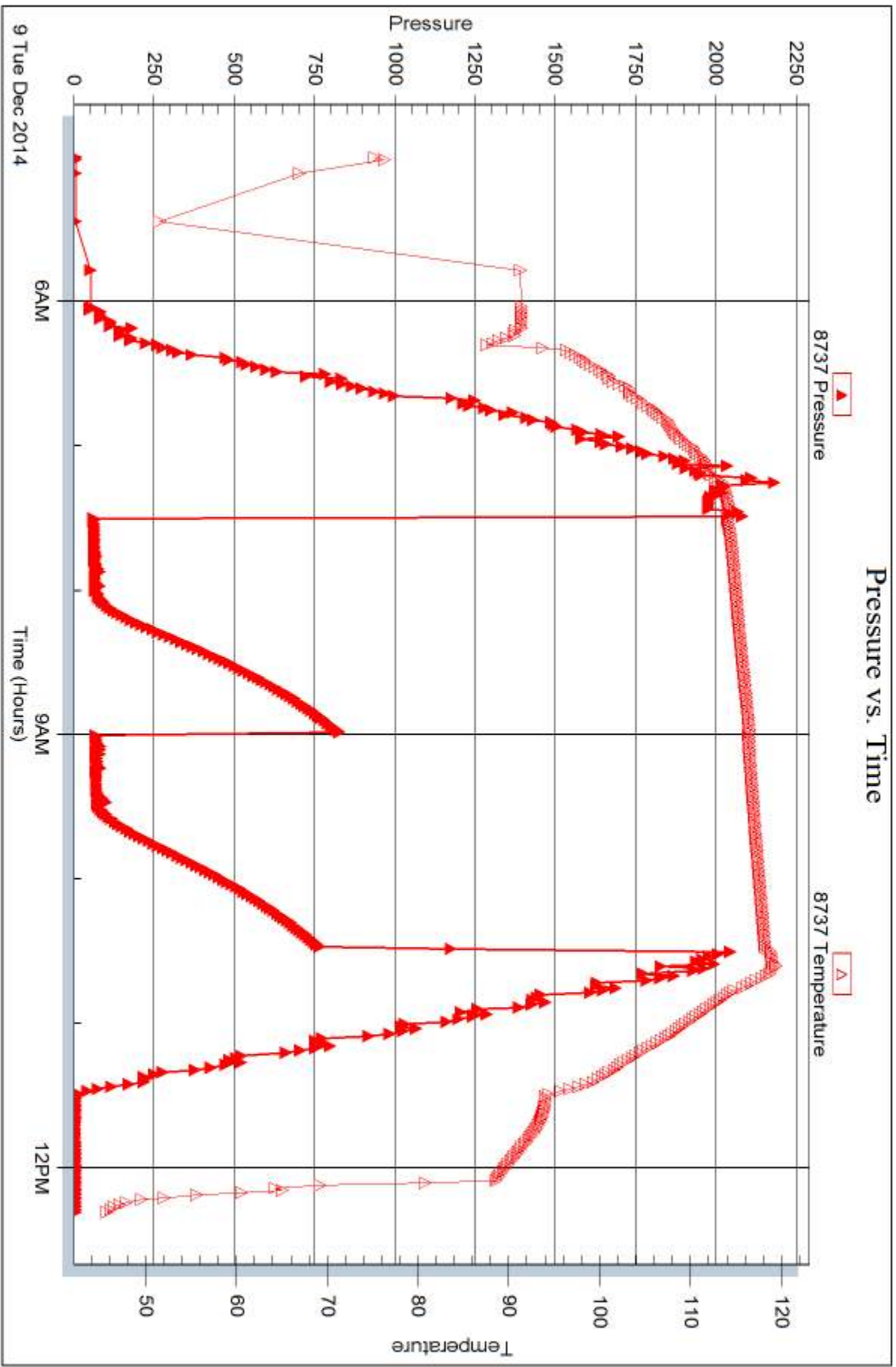


Serial #: 8737

Outside Murfin Drilling Co. Inc.

Oleborad #1-21

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.Inc.**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Chleborad #1-21

21-3S-33w Rawlins,KS

Start Date: 2014.12.09 @ 21:02:15

End Date: 2014.12.10 @ 04:21:45

Job Ticket #: 58556 DST #: 2

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Keith Reavis

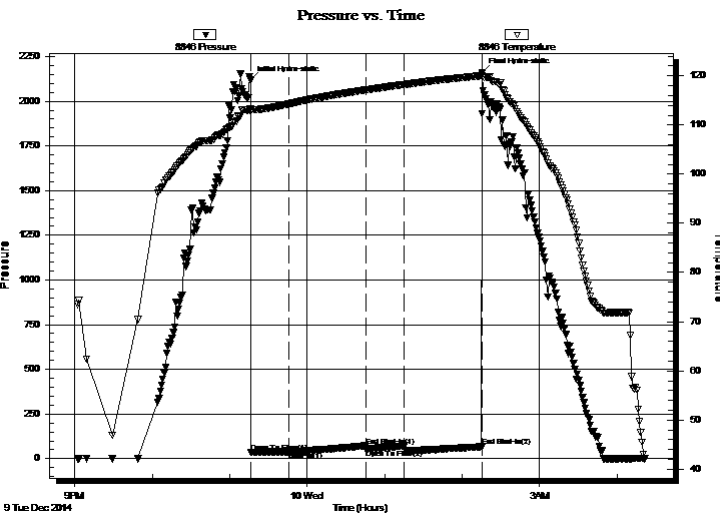
21-3S-33w Rawlins, KS
Chleborad #1-21
Job Ticket: 58556 **DST#: 2**
Test Start: 2014.12.09 @ 21:02:15

GENERAL INFORMATION:

Formation: **LKC F-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:16:15
Time Test Ended: 04:21:45
Interval: **4018.00 ft (KB) To 4070.00 ft (KB) (TVD)**
Total Depth: 4070.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 65
Reference Elevations: 3016.00 ft (KB)
3011.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8846 **Inside**
Press@RunDepth: 71.79 psig @ 4024.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.09 End Date: 2014.12.10 Last Calib.: 2014.12.10
Start Time: 21:02:15 End Time: 04:21:45 Time On Btm: 2014.12.09 @ 23:16:00
Time Off Btm: 2014.12.10 @ 02:15:30

TEST COMMENT: IF: Built to 1" blow
IS: No return blow
FF: No blow
FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2118.04	113.29	Initial Hydro-static
1	36.43	112.79	Open To Flow (1)
30	39.09	114.26	Shut-In(1)
90	71.48	117.13	End Shut-In(1)
90	52.53	117.13	Open To Flow (2)
120	71.79	118.24	Shut-In(2)
179	67.12	120.02	End Shut-In(2)
180	2160.96	120.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud with oil spots	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.Inc.

21-3S-33w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Chleborad #1-21

Job Ticket: 58556

DST#: 2

ATTN: Keith Reavis

Test Start: 2014.12.09 @ 21:02:15

Tool Information

Drill Pipe:	Length: 3833.00 ft	Diameter: 3.80 inches	Volume: 53.77 bbl	Tool Weight:	1500.00 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 54.69 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4018.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	108.00 ft				
Tool Length:	136.00 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			3991.00	
Shut In Tool	5.00			3996.00	
Hydraulic tool	5.00			4001.00	
Jars	5.00			4006.00	
Safety Joint	3.00			4009.00	
Packer	5.00			4014.00	28.00 Bottom Of Top Packer
Packer	4.00			4018.00	
Stubb	1.00			4019.00	
Perforations	5.00			4024.00	
Recorder	0.00	8846	Inside	4024.00	
Recorder	0.00	8737	Outside	4024.00	
Change Over Sub	1.00			4025.00	
Blank Spacing	95.00			4120.00	
Change Over Sub	1.00			4121.00	
Bullnose	5.00			4126.00	108.00 Bottom Packers & Anchor

Total Tool Length: 136.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Keith Reavis

21-3S-33w Rawlins,KS
Chleborad #1-21
Job Ticket: 58556 **DST#: 2**
Test Start: 2014.12.09 @ 21:02:15

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1400.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w ith oil spots	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

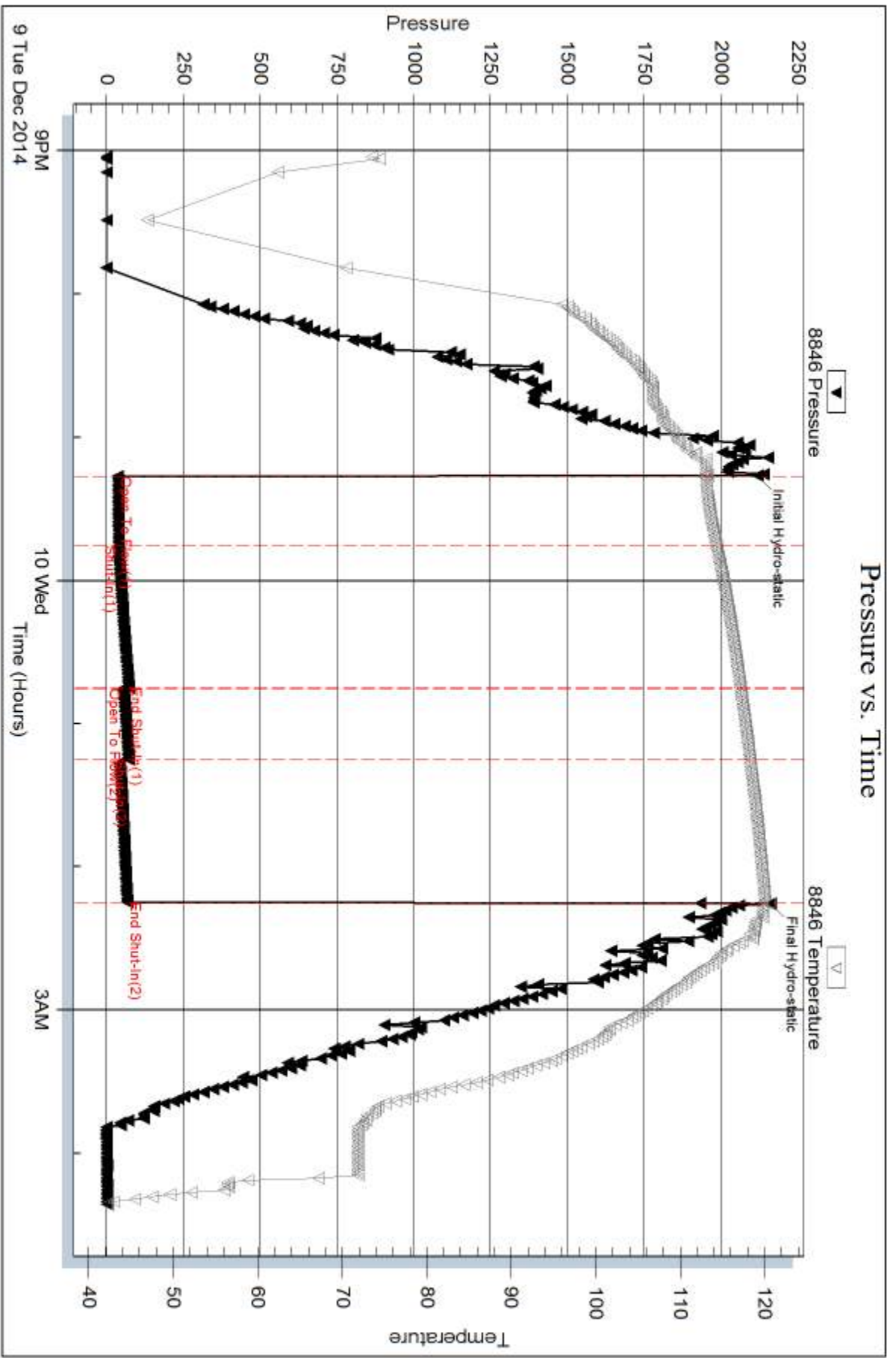
Serial #: 8846

Inside

Murfin Drilling Co. Inc.

Oleborad #1-21

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 58556

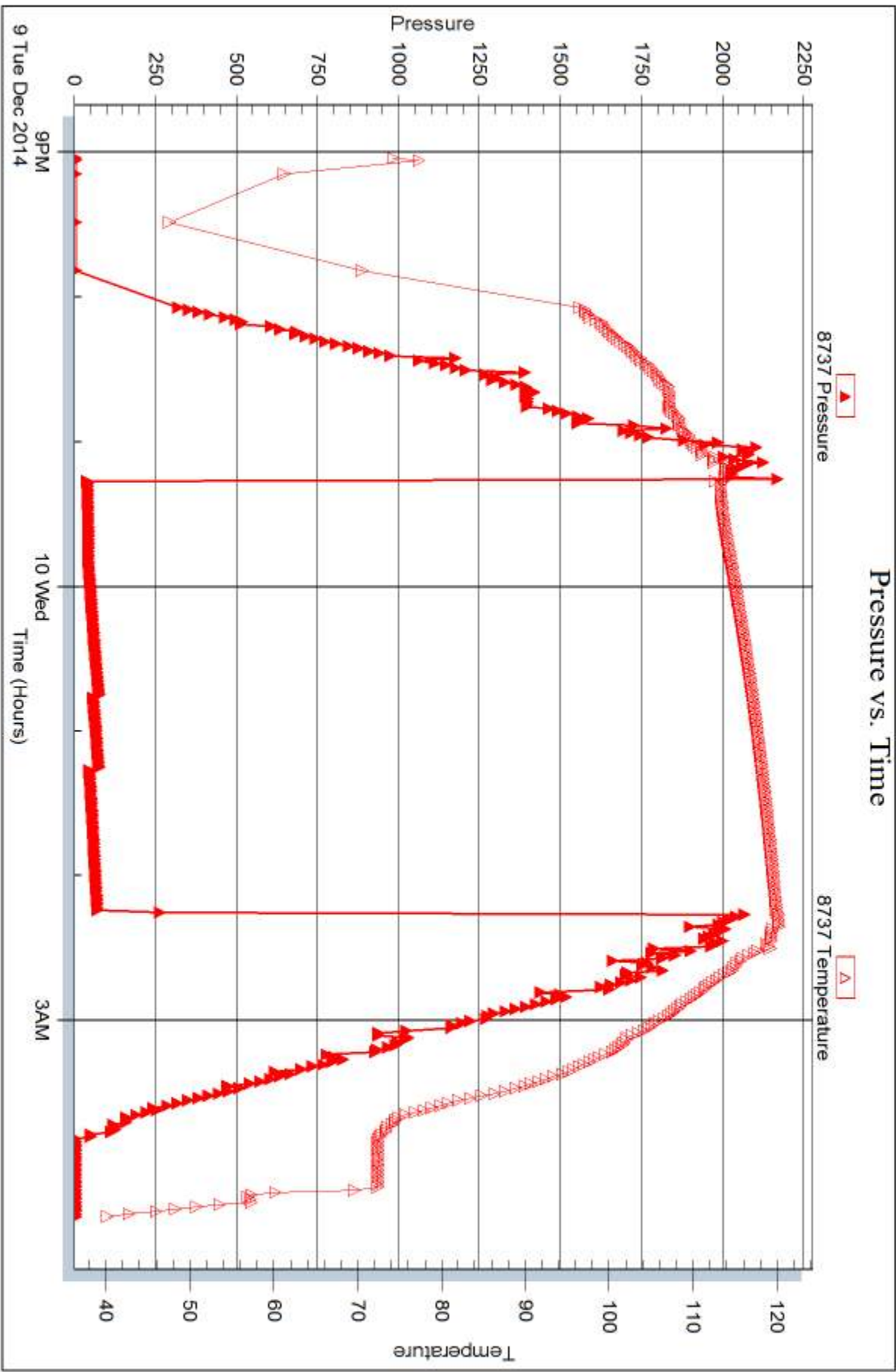
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Serial #: 8737

Outside Murfin Drilling Co. Inc.

Oleborad #1-21

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 58556

Printed: 2014.12.12 @ 17:22:00



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.Inc.**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Chleborad #1-21

21-3S-33w Rawlins,KS

Start Date: 2014.12.10 @ 15:57:15

End Date: 2014.12.11 @ 00:45:15

Job Ticket #: 58557 DST #: 3

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

Printed: 2014.12.12 @ 17:21:07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Keith Reavis

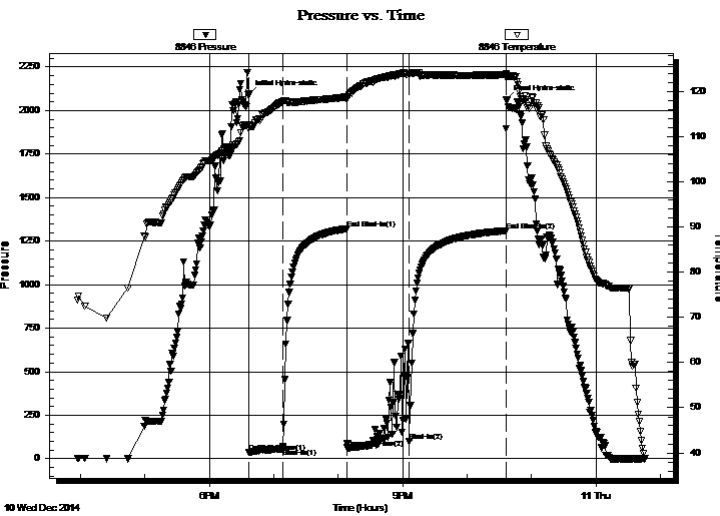
21-3S-33w Rawlins, KS
Chleborad #1-21
Job Ticket: 58557 **DST#: 3**
Test Start: 2014.12.10 @ 15:57:15

GENERAL INFORMATION:

Formation: **LKC J**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 18:36:45 Tester: Mike Roberts
Time Test Ended: 00:45:15 Unit No: 65
Interval: 4091.00 ft (KB) To 4149.00 ft (KB) (TVD) Reference Elevations: 3016.00 ft (KB)
Total Depth: 4149.00 ft (KB) (TVD) 3011.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 8846 Inside
Press@RunDepth: 101.82 psig @ 4095.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.10 End Date: 2014.12.11 Last Calib.: 2014.12.11
Start Time: 15:57:15 End Time: 00:45:15 Time On Btm: 2014.12.10 @ 18:36:30
Time Off Btm: 2014.12.10 @ 22:36:45

TEST COMMENT: IF: Built to 2" blow
IS: No return blow
FF: Built to 2" blow
FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2094.13	112.60	Initial Hydro-static
1	36.68	111.81	Open To Flow (1)
32	58.06	117.74	Shut-In(1)
92	1319.81	118.75	End Shut-In(1)
92	62.85	118.22	Open To Flow (2)
150	101.82	123.95	Shut-In(2)
240	1309.66	123.65	End Shut-In(2)
241	2061.65	123.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mud	0.61

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

21-3S-33w Rawlins, KS

250 N Water STE 300
Wichita KS 67202

Chleborad #1-21

Job Ticket: 58557

DST#: 3

ATTN: Keith Reavis

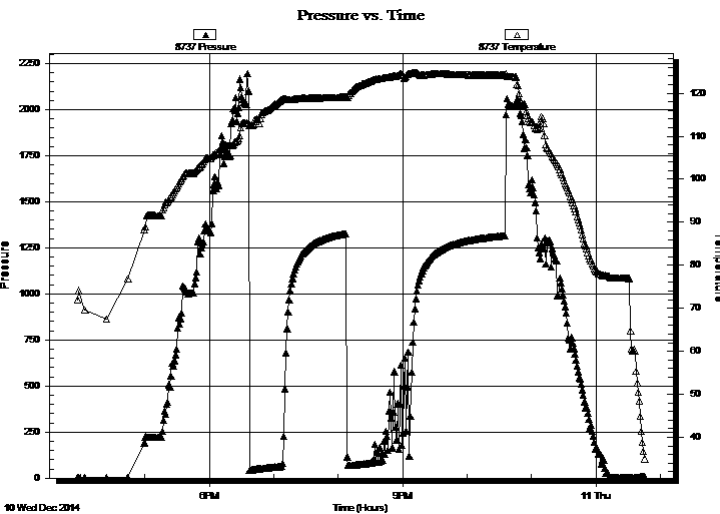
Test Start: 2014.12.10 @ 15:57:15

GENERAL INFORMATION:

Formation: LKC J		Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)		Tester: Mike Roberts
Time Tool Opened: 18:36:45		Unit No: 65
Time Test Ended: 00:45:15		
Interval: 4091.00 ft (KB) To 4149.00 ft (KB) (TVD)	Reference Elevations:	3016.00 ft (KB)
Total Depth: 4149.00 ft (KB) (TVD)		3011.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 5.00 ft

Serial #: 8737	Outside			
Press@RunDepth: psig @ 4095.00 ft (KB)		Capacity: 8000.00 psig		
Start Date: 2014.12.10	End Date: 2014.12.11	Last Calib.: 2014.12.11		
Start Time: 15:57:15	End Time: 00:45:15	Time On Btm:		
		Time Off Btm:		

TEST COMMENT: IF: Built to 2" blow
IS: No return blow
FF: Built to 2" blow
FS: No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mud	0.61

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Keith Reavis

21-3S-33w Rawlins,KS
Chleborad #1-21
Job Ticket: 58557 **DST#: 3**
Test Start: 2014.12.10 @ 15:57:15

Tool Information

Drill Pipe:	Length: 3896.00 ft	Diameter: 3.80 inches	Volume: 54.65 bbl	Tool Weight:	1500.00 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 55.57 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4091.00 ft			Final	61000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	58.00 ft				
Tool Length:	86.00 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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Change Over Sub	1.00			4064.00	
Shut In Tool	5.00			4069.00	
Hydraulic tool	5.00			4074.00	
Jars	5.00			4079.00	
Safety Joint	3.00			4082.00	
Packer	5.00			4087.00	28.00 Bottom Of Top Packer
Packer	4.00			4091.00	
Stubb	1.00			4092.00	
Perforations	3.00			4095.00	
Recorder	0.00	8846	Inside	4095.00	
Recorder	0.00	8737	Outside	4095.00	
Change Over Sub	1.00			4096.00	
Blank Spacing	32.00			4128.00	
Change Over Sub	1.00			4129.00	
Perforations	15.00			4144.00	
Bullnose	5.00			4149.00	58.00 Bottom Packers & Anchor
Total Tool Length:	86.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.Inc.
250 N Water STE 300
Wichita KS 67202
ATTN: Keith Reavis

21-3S-33w Rawlins,KS
Chleborad #1-21
Job Ticket: 58557 **DST#: 3**
Test Start: 2014.12.10 @ 15:57:15

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.19 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3900.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	mud	0.610

Total Length: 124.00 ft Total Volume: 0.610 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

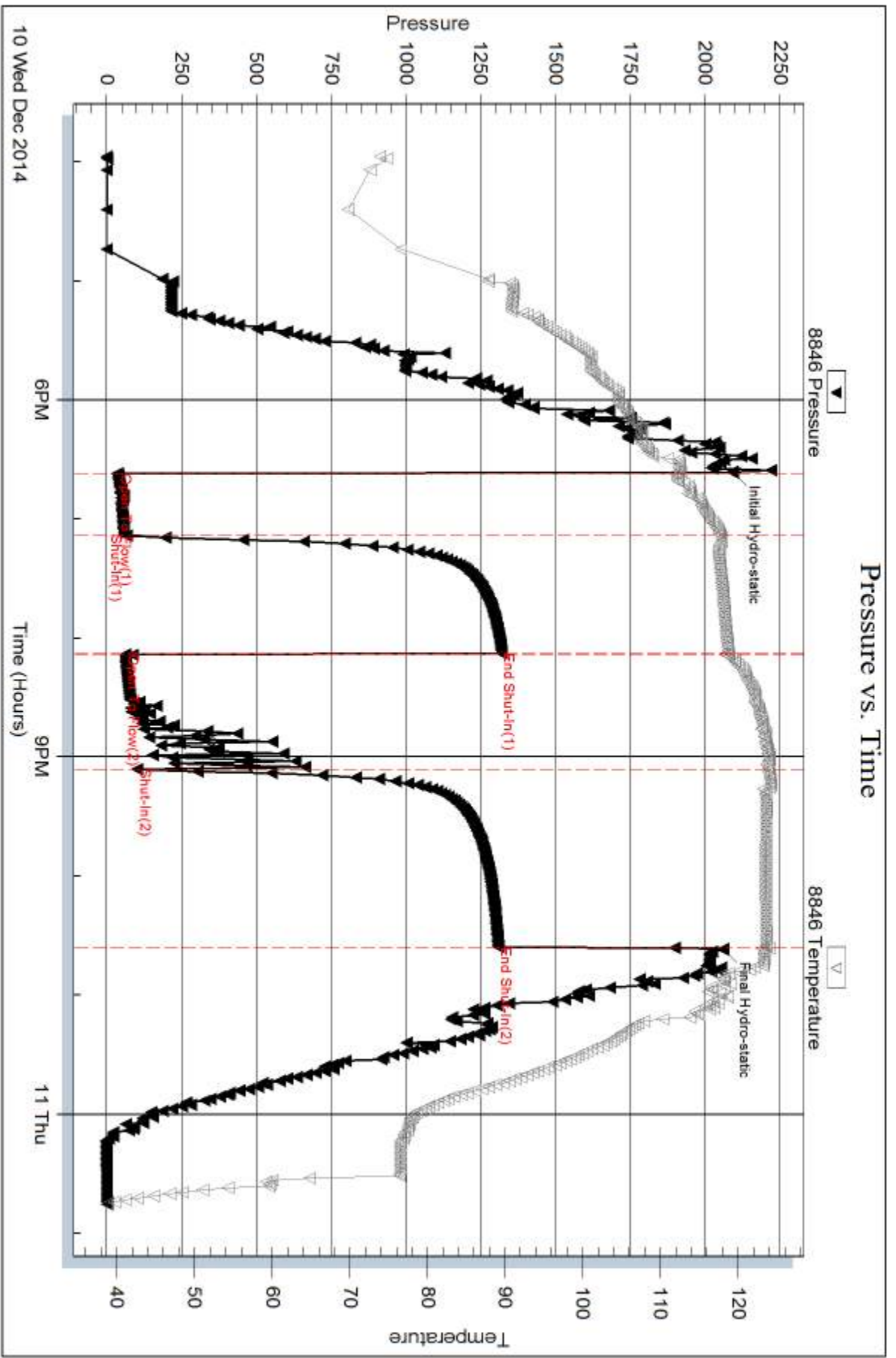
Serial #: 8846

Inside

Murfin Drilling Co. Inc.

Oleborad #1-21

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 58557

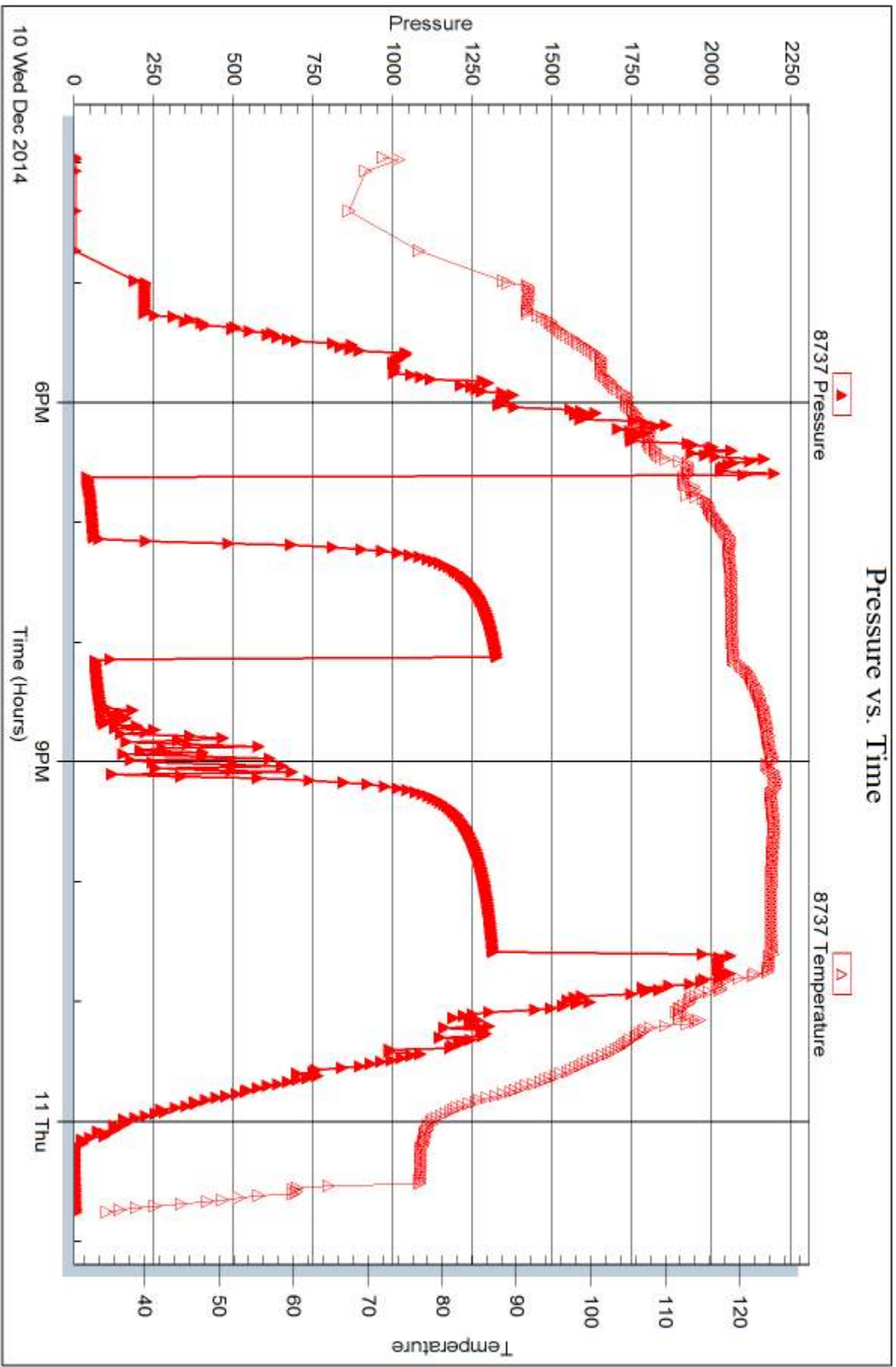
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Serial #: 8737

Outside Murfin Drilling Co. Inc.

Oleborod #1-21

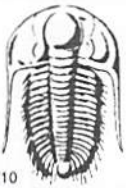
DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 58557

Printed: 2014.12.12 @ 17:21:08



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

785-650-5123

Test Ticket

NO. 58555

Well Name & No. Chlorad #1-21 Test No. 1 Date 12-9-14
 Company Murfin Drilling Co Inc. Elevation 3016 KB 3011 GL
 Address 250 N. Water St 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin 7
 Location: Sec. 21 Twp. 35 Rge. 33W Co. Rawlins State KS

Interval Tested 3912-4020 Zone Tested Lansing A-D
 Anchor Length 108 Drill Pipe Run ~~3662~~ 3707 Mud Wt. 9.2
 Top Packer Depth 3907 Drill Collars Run ~~232~~ 187 Vis 69
 Bottom Packer Depth 3912 Wt. Pipe Run Ø WL 6.4
 Total Depth 4020 Chlorides 1200 ppm System LCM 2

Blow Description IF: Built to Weak Surface Blow
IS: No Return Blow
FF: NO Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>mud with oil spots</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 5 BHT _____ Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2079</u>	<input checked="" type="checkbox"/> Test <u>1250.00</u>	T-On Location <u>03:00</u>
(B) First Initial Flow <u>55</u>	<input checked="" type="checkbox"/> Jars <u>250.00</u>	T-Started <u>05:00</u>
(C) First Final Flow <u>60</u>	<input checked="" type="checkbox"/> Safety Joint <u>751.00</u>	T-Open <u>07:30</u>
(D) Initial Shut-In <u>825</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>10:30</u>
(E) Second Initial Flow <u>62</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>12:18</u>
(F) Second Final Flow <u>65</u>	<input checked="" type="checkbox"/> Mileage <u>222 RT 344.10</u>	Comments _____
(G) Final Shut-In <u>765</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2043</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

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

Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Sub Total 1668 MP/DST Disc't _____

Approved By _____ Our Representative Mike Roberts

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. 58556

4/10

Well Name & No. ~~Chleborad~~ Chleborad #1-21 Test No. 2 Date 12-9-14
 Company Murfin Drilling Co Inc. Elevation 3016 KB 3011 GL
 Address 250 N. Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin 7
 Location: Sec. 21 Twp. 3S Rge. 33W Co. Rawlins State KS

Interval Tested 4018-4070 Zone Tested Lansing F+G
 Anchor Length 52 Drill Pipe Run 3833 Mud Wt. 9.2
 Top Packer Depth 4013 Drill Collars Run 187 Vis 55
 Bottom Packer Depth 4018 Wt. Pipe Run 0 WL 6.4
 Total Depth 4070 Chlorides 1400 ppm System LCM 2

Blow Description IFI Built to 1" Blow
IS: NO Return Blow
FF: NO Blow
FS: NO Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>MUD with oil spots</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 5 BHT 120 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 2118 Test 1250 T-On Location 20:00
 (B) First Initial Flow 36 Jars 250 T-Started 21:02
 (C) First Final Flow 39 Safety Joint 75 T-Open 23:16
 (D) Initial Shut-In 71 Circ Sub N/C T-Pulled 02:16
 (E) Second Initial Flow 52 Hourly Standby _____ T-Out 09:21
 (F) Second Final Flow 71 Mileage 74 RT From Motel Comments _____
 (G) Final Shut-In 67 Sampler 93 _____
 (H) Final Hydrostatic 2160 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1668
 Final Shut-In 60 Accessibility _____ MP/DST Disc't _____
 Sub Total 1668

Approved By _____ Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58557

Well Name & No. ~~Chleborad~~ Chleborad #1-21 Test No. 3 Date 12-10-14
 Company Martin Drilling Co Inc. Elevation 3016 KB 3011 GL
 Address 250 N. Water St # 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Martin 7
 Location: Sec. 21 Twp. 3S Rge. 33W Co. Rawlins State KS

Interval Tested 4091-4149 Zone Tested J
 Anchor Length 58 Drill Pipe Run 3896 Mud Wt. 9.4
 Top Packer Depth 4086 Drill Collars Run 187 Vis 51
 Bottom Packer Depth 4091 Wt. Pipe Run 0 WL 7.2
 Total Depth 4149 Chlorides 3900 ppm System LCM 2

Blow Description IF: Built to 2" Blow
IS: No Return Blow
FF: Built to 2" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>124</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 Total 124 BHT 123 Gravity _____ API RW _____ @ _____ F Chlorides _____ ppm

(A) Initial Hydrostatic 2094
 (B) First Initial Flow 36
 (C) First Final Flow 58
 (D) Initial Shut-In 1319
 (E) Second Initial Flow 62
 (F) Second Final Flow 101
 (G) Final Shut-In 1309
 (H) Final Hydrostatic 2061

Test 1250
 Jars 250
 Safety Joint 75
 Circ Sub _____
 Hourly Standby _____
 Mileage 74 RT From Moke
 Sampler 186
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1761

T-On Location 15:00
 T-Started 15:57
 T-Open 18:37
 T-Pulled 22:37
 T-Out 00:45
 Comments Loaded Tools
12-12-14 at 12:00 PM
left from house
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1761
 MP/DST Disc't _____

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

Approved By _____ Our Representative Mike Roberts

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