



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Bob Stolzle

Pollnow #1-14

14-2s-29w Decatur,KS

Start Date: 2013.04.23 @ 08:06:00

End Date: 2013.04.23 @ 16:05:45

Job Ticket #: 50709 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.04.29 @ 13:45:59



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50709 **DST#: 1**
Test Start: 2013.04.23 @ 08:06:00

Tool Information

Drill Pipe:	Length: 3477.00 ft	Diameter: 3.80 inches	Volume: 48.77 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 49.68 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3664.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	85.00 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			3636.00	
Shut In Tool	5.00			3641.00	
Hydraulic tool	5.00			3646.00	
Jars	5.00			3651.00	
Safety Joint	3.00			3654.00	
Packer	5.00			3659.00	29.00 Bottom Of Top Packer
Packer	5.00			3664.00	
Packer - Shale	0.00			3664.00	
Stubb	1.00			3665.00	
Recorder	0.00	6799	Inside	3665.00	
Recorder	0.00	8648	Inside	3665.00	
Perforations	17.00			3682.00	
Change Over Sub	1.00			3683.00	
Drill Pipe	31.00			3714.00	
Change Over Sub	1.00			3715.00	
Bullnose	5.00			3720.00	56.00 Bottom Packers & Anchor
Total Tool Length:	85.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50709 **DST#: 1**
Test Start: 2013.04.23 @ 08:06:00

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1700.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

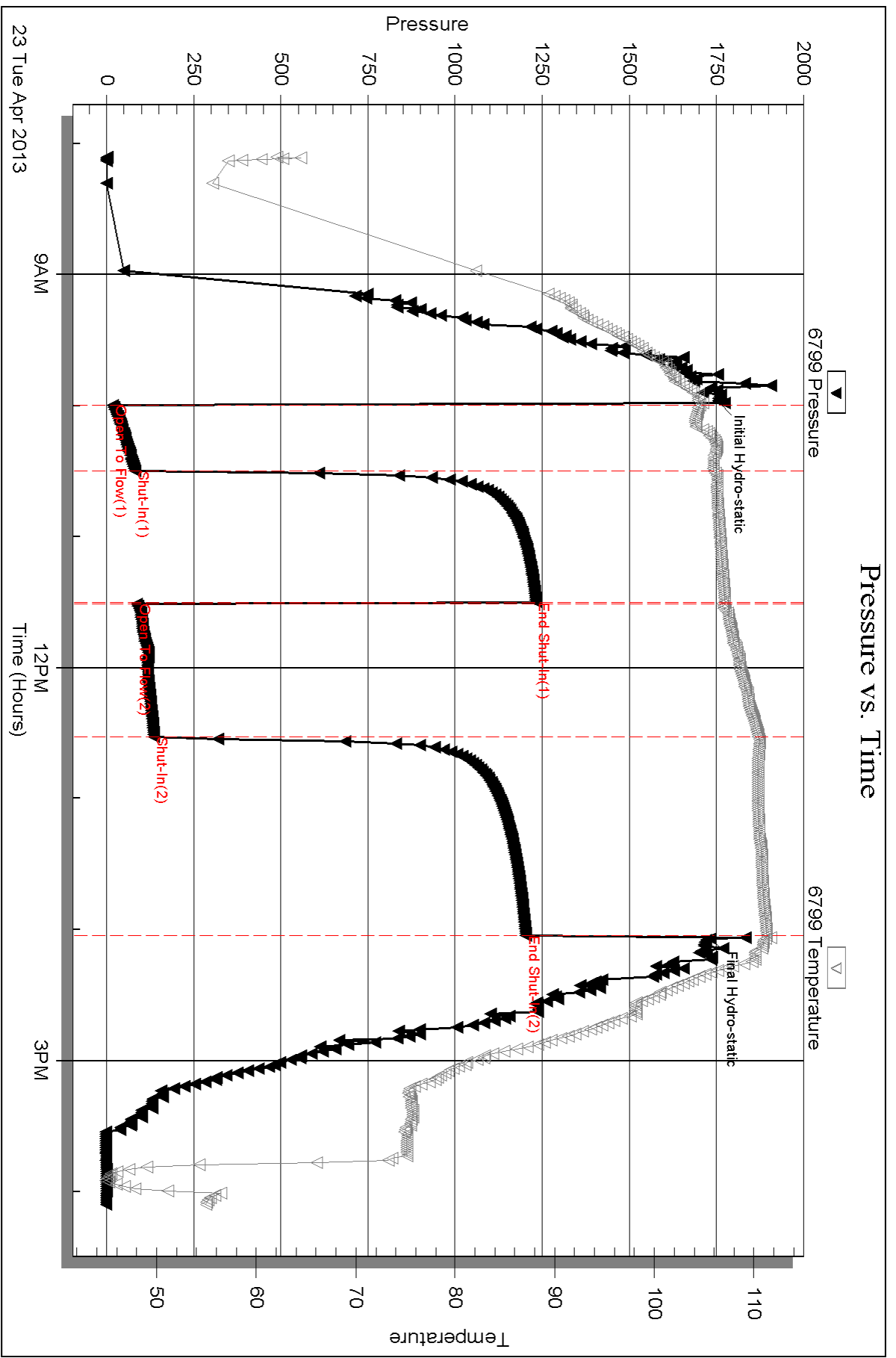
Length ft	Description	Volume bbl
186.00	MW 70W 30M	0.915
72.00	OSM 100M (oil spots)	1.010

Total Length: 258.00 ft Total Volume: 1.925 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW = .4 @ 55 deg = 22,000ppm



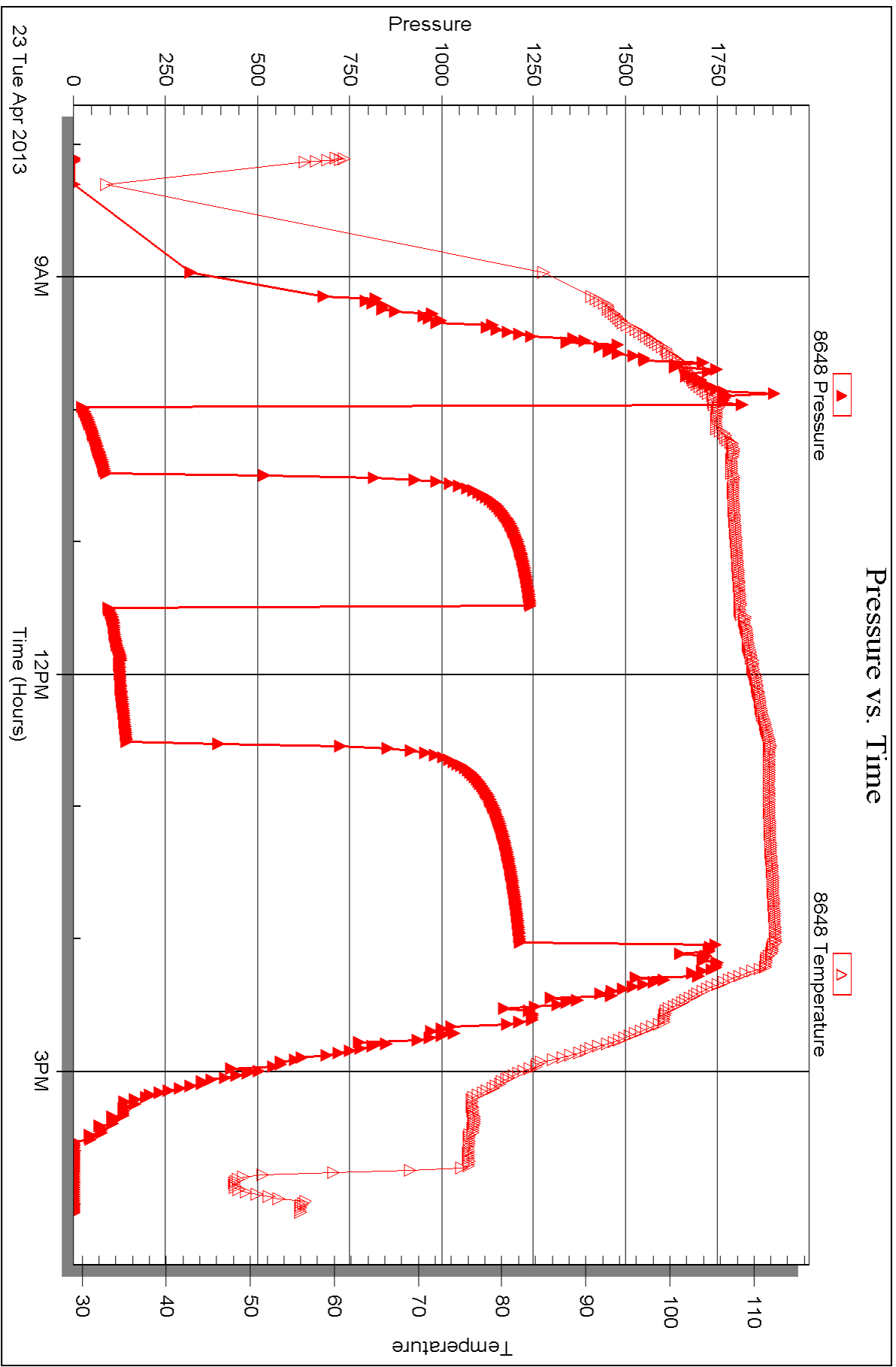
Serial #: 8648

Inside

Murfin Drilling Co., Inc

Pollnow #1-14

DST Test Number: 1





DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Bob Stolze

Pollnow #1-14

14-2s-29w Decatur,KS

Start Date: 2013.04.24 @ 02:10:00

End Date: 2013.04.24 @ 09:49:00

Job Ticket #: 50710 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.04.29 @ 13:45:11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50710 **DST#: 2**
Test Start: 2013.04.24 @ 02:10:00

GENERAL INFORMATION:

Formation: **LKC "D-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:45:45
Time Test Ended: 09:49:00
Interval: **3720.00 ft (KB) To 3815.00 ft (KB) (TVD)**
Total Depth: 3815.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 43
Reference Elevations: 2710.00 ft (KB)
2705.00 ft (CF)
KB to GR/CF: 5.00 ft

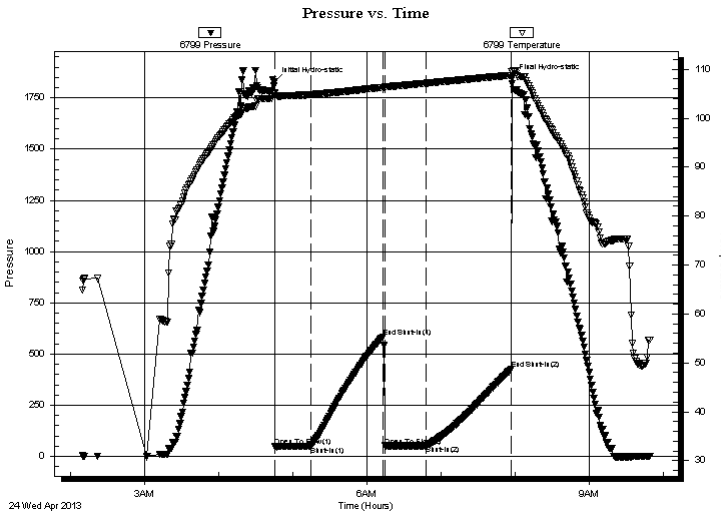
Serial #: 6799

Inside

Press @ Run Depth: 51.74 psig @ 3721.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.04.24 End Date: 2013.04.24 Last Calib.: 2013.04.24
Start Time: 02:10:05 End Time: 09:48:59 Time On Btm: 2013.04.24 @ 04:45:15
Time Off Btm: 2013.04.24 @ 07:57:15

TEST COMMENT: 30 - IF- 1/2" Blow built to 1"
60 - IS- No Return
30 - FF- No Blow
60 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1828.61	105.10	Initial Hydro-static
1	46.82	104.63	Open To Flow (1)
30	50.99	104.82	Shut-In(1)
88	583.34	106.31	End Shut-In(1)
90	50.93	106.41	Open To Flow (2)
123	51.74	107.13	Shut-In(2)
192	425.50	108.78	End Shut-In(2)
192	1846.73	109.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	OSM 100M (oil spots)	0.34

Gas Rates

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



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DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

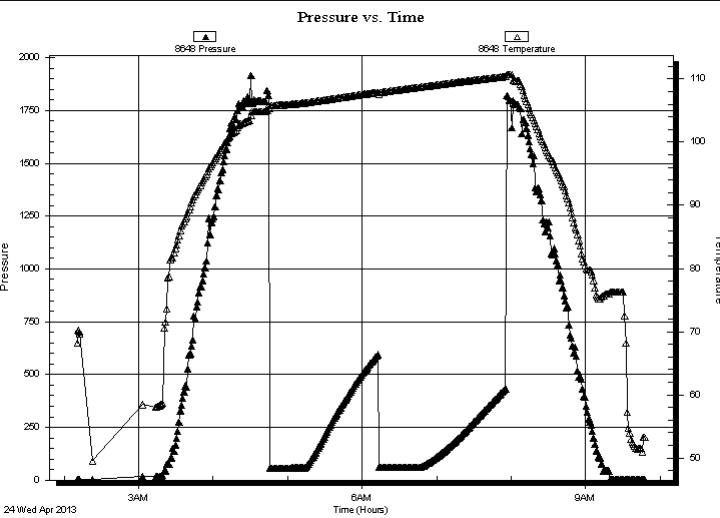
14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50710 **DST#: 2**
Test Start: 2013.04.24 @ 02:10:00

GENERAL INFORMATION:

Formation: **LKC "D-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:45:45
Time Test Ended: 09:49:00
Interval: **3720.00 ft (KB) To 3815.00 ft (KB) (TVD)**
Total Depth: 3815.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 43
Reference Elevations: 2710.00 ft (KB)
2705.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8648 Inside
Press @ Run Depth: psig @ 3721.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.04.24 End Date: 2013.04.24 Last Calib.: 2013.04.24
Start Time: 02:10:50 End Time: 09:47:59 Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 1/2" Blow built to 1"
60 - IS- No Return
30 - FF- No Blow
60 - FS- No Return



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

Recovery		
Length (ft)	Description	Volume (bbl)
70.00	OSM 100M (oil spots)	0.34

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc

14-2s-29w Decatur,KS

250 N Water STE #300
Wichita, KS 67202

Pollnow #1-14

Job Ticket: 50710

DST#: 2

ATTN: Bob Stolzle

Test Start: 2013.04.24 @ 02:10:00

Tool Information

Drill Pipe:	Length: 3537.00 ft	Diameter: 3.80 inches	Volume: 49.61 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 50.52 bbl</u>	Tool Chased 15.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3720.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	95.00 ft			
Tool Length:	124.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Tool opened early and had to be chased approx. 15' to bottom. Bled off surge blow and reset tool before initial flow period.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3692.00	
Shut In Tool	5.00			3697.00	
Hydraulic tool	5.00			3702.00	
Jars	5.00			3707.00	
Safety Joint	3.00			3710.00	
Packer	5.00			3715.00	29.00 Bottom Of Top Packer
Packer	5.00			3720.00	
Packer - Shale	0.00			3720.00	
Stubb	1.00			3721.00	
Recorder	0.00	6799	Inside	3721.00	
Recorder	0.00	8648	Inside	3721.00	
Perforations	25.00			3746.00	
Change Over Sub	1.00			3747.00	
Drill Pipe	62.00			3809.00	
Change Over Sub	1.00			3810.00	
Bullnose	5.00			3815.00	95.00 Bottom Packers & Anchor
Total Tool Length:	124.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50710 **DST#: 2**
Test Start: 2013.04.24 @ 02:10:00

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: 2.00 inches			

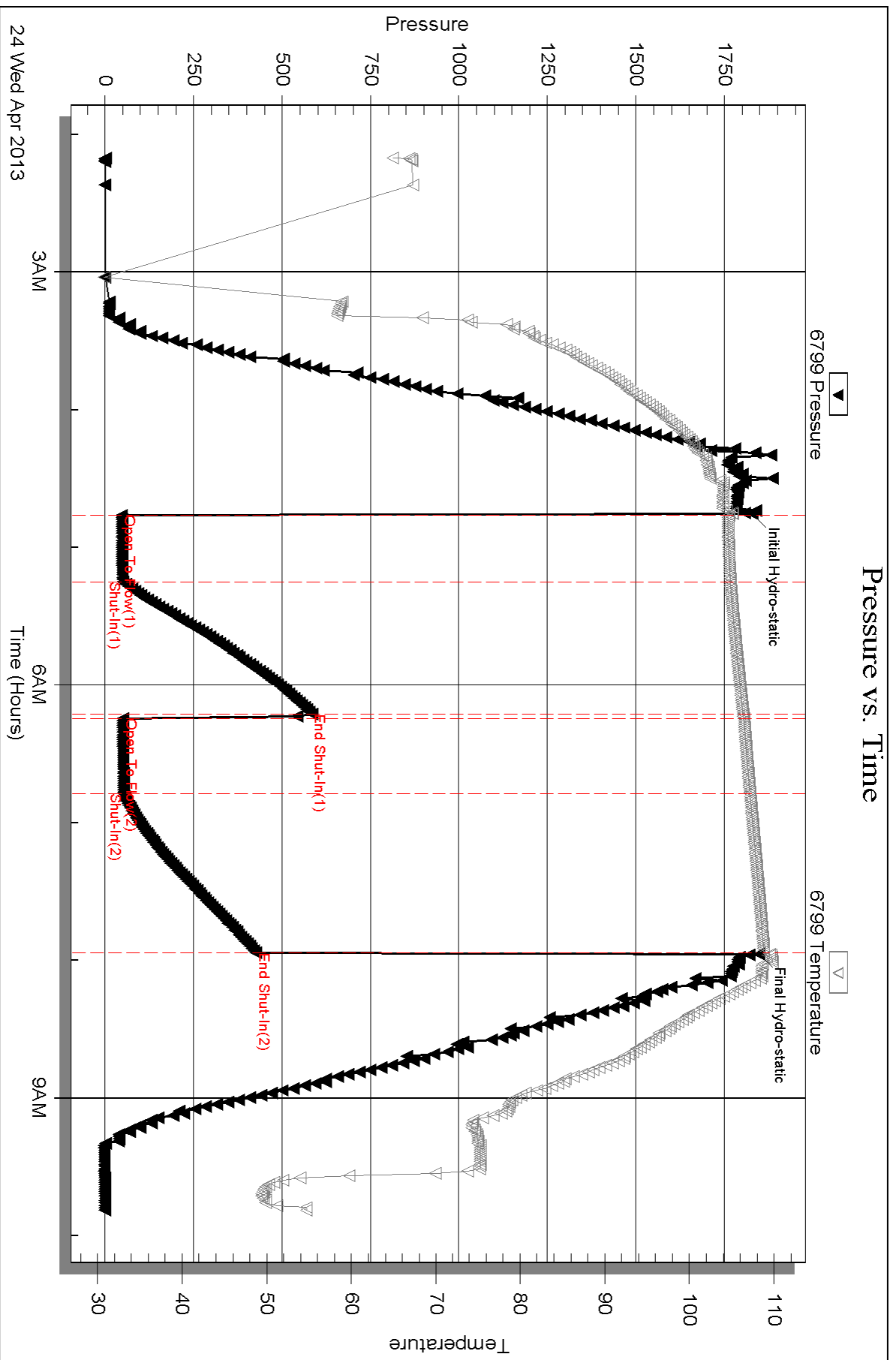
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	OSM 100M (oil spots)	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time



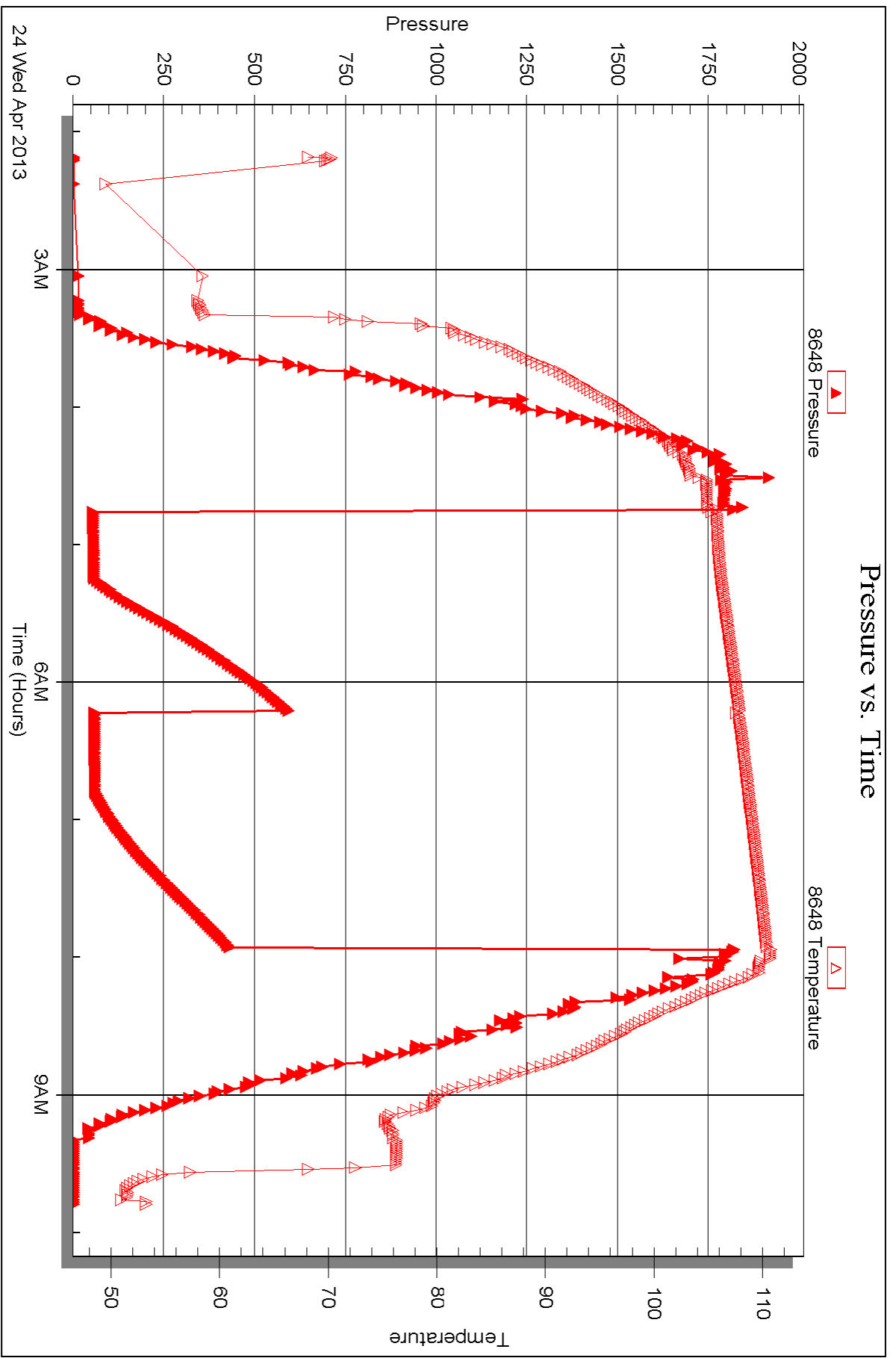
Serial #: 8648

Inside

Murfin Drilling Co., Inc

Pollnow #1-14

DST Test Number: 2





DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Bob Stolzle

Pollnow #1-14

14-2s-29w Decatur,KS

Start Date: 2013.04.24 @ 19:10:00

End Date: 2013.04.25 @ 03:02:30

Job Ticket #: 50711 DST #: 3

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

Printed: 2013.04.29 @ 13:44:11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

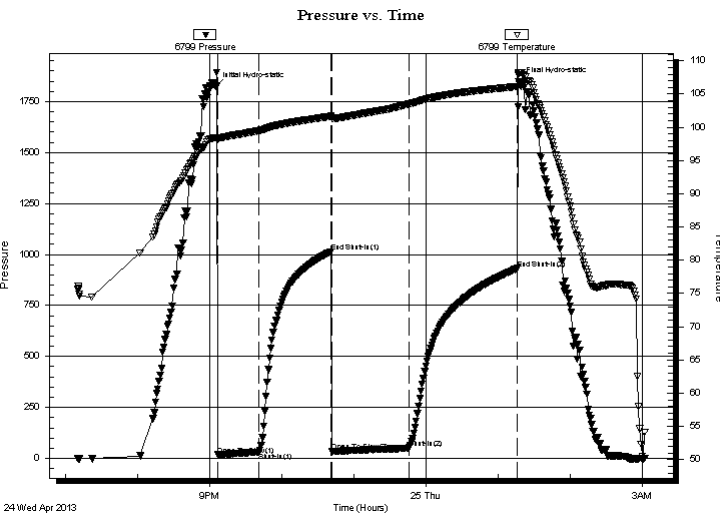
14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50711 **DST#: 3**
Test Start: 2013.04.24 @ 19:10:00

GENERAL INFORMATION:

Formation: **LKC "H-J"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 21:06:45 Tester: Kevin Mack
Time Test Ended: 03:02:30 Unit No: 43
Interval: 3806.00 ft (KB) To 3880.00 ft (KB) (TVD) Reference Elevations: 2710.00 ft (KB)
Total Depth: 3880.00 ft (KB) (TVD) 2705.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 6799 Inside
Press @ RunDepth: 50.56 psig @ 3807.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.04.24 End Date: 2013.04.25 Last Calib.: 2013.04.25
Start Time: 19:10:05 End Time: 03:02:29 Time On Btm: 2013.04.24 @ 21:05:15
Time Off Btm: 2013.04.25 @ 01:17:00

TEST COMMENT: 30 - IF - 1/2" Blow built to 2"
60 - ISI - No Return
60 - FF - Weak Surface Blow started at 30 min. Built to 1/2"
90 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1824.28	98.41	Initial Hydro-static
2	17.15	98.33	Open To Flow (1)
36	30.56	99.47	Shut-In(1)
96	1013.89	101.65	End Shut-In(1)
97	33.37	101.35	Open To Flow (2)
161	50.56	103.46	Shut-In(2)
251	931.22	106.13	End Shut-In(2)
252	1845.11	108.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	OSM 100M (oil spots)	0.32

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50711 **DST#: 3**
Test Start: 2013.04.24 @ 19:10:00

Tool Information

Drill Pipe:	Length: 3602.00 ft	Diameter: 3.80 inches	Volume: 50.53 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 51.44 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3806.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	74.00 ft				
Tool Length:	103.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments: Tool slid approx 7' to bottom.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3778.00	
Shut In Tool	5.00			3783.00	
Hydraulic tool	5.00			3788.00	
Jars	5.00			3793.00	
Safety Joint	3.00			3796.00	
Packer	5.00			3801.00	29.00 Bottom Of Top Packer
Packer	5.00			3806.00	
Stubb	1.00			3807.00	
Recorder	0.00	6799	Inside	3807.00	
Recorder	0.00	8648	Inside	3807.00	
Perforations	3.00			3810.00	
Change Over Sub	1.00			3811.00	
Drill Pipe	63.00			3874.00	
Change Over Sub	1.00			3875.00	
Bullnose	5.00			3880.00	74.00 Bottom Packers & Anchor

Total Tool Length: 103.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc

14-2s-29w Decatur,KS

250 N Water STE #300
Wichita, KS 67202

Pollnow #1-14

Job Ticket: 50711

DST#: 3

ATTN: Bob Stolzle

Test Start: 2013.04.24 @ 19:10:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	OSM 100M (oil spots)	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

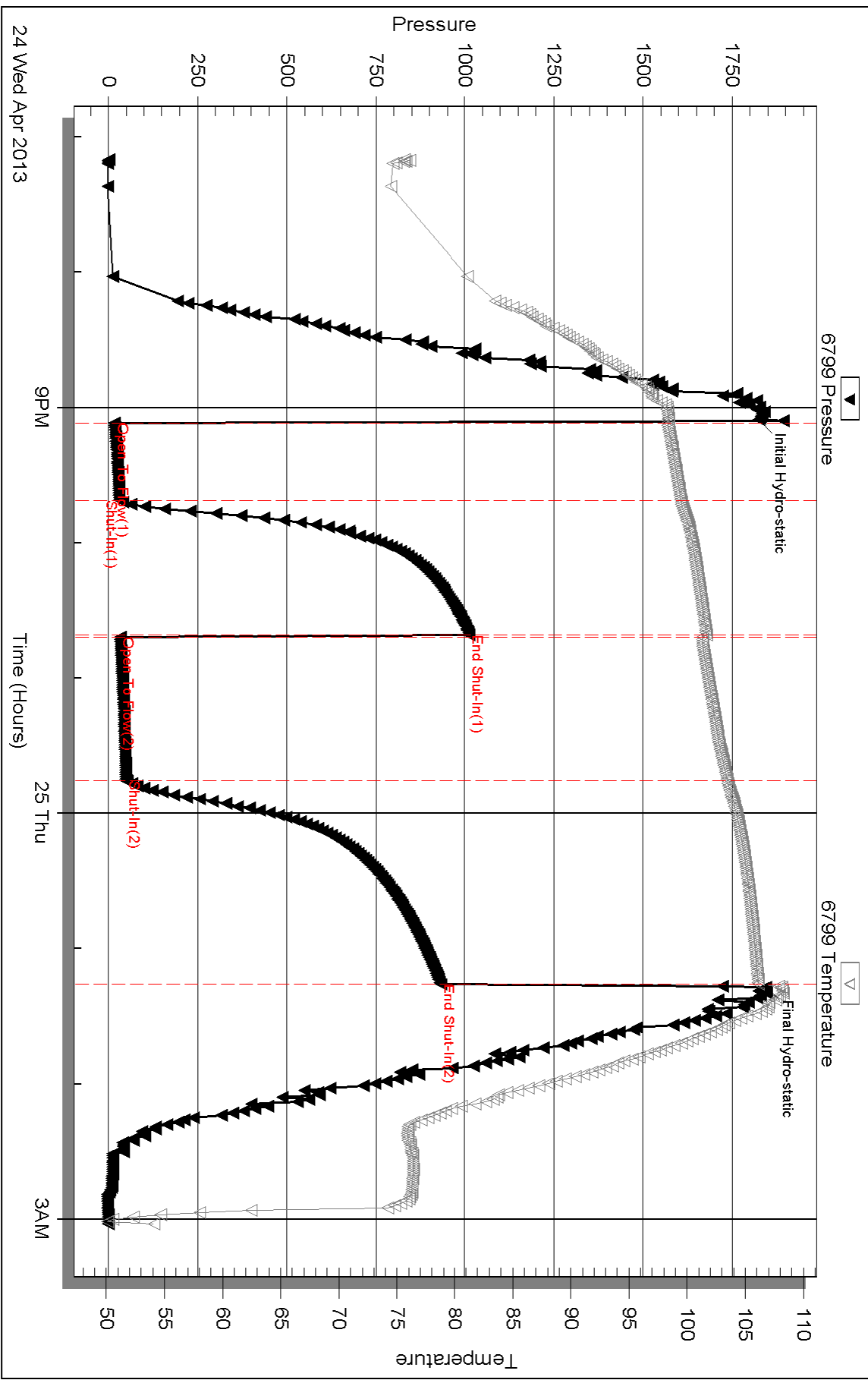
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



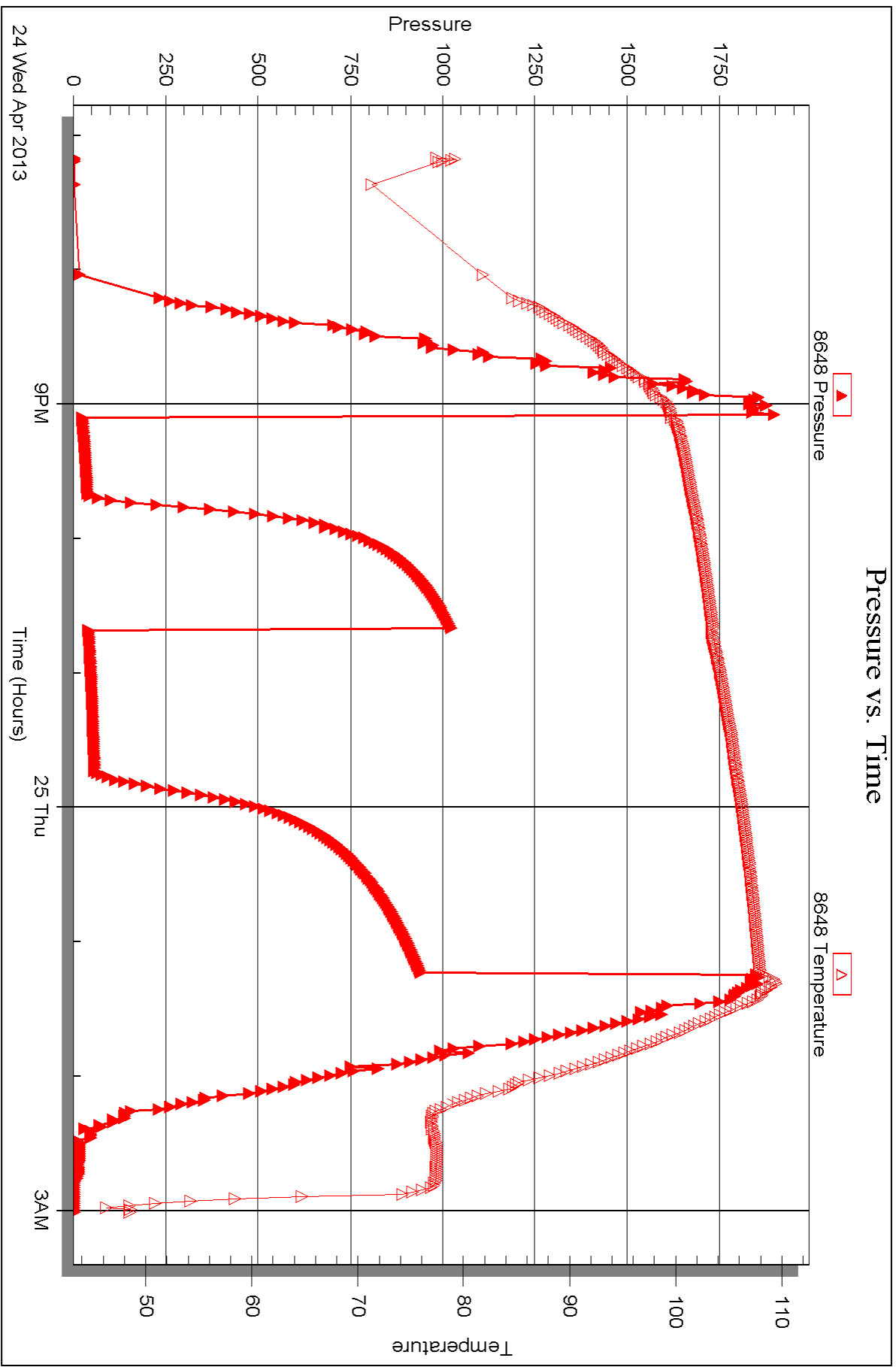
Serial #: 8648

Inside

Murfin Drilling Co., Inc

Pollnow #1-14

DST Test Number: 3





DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Bob Stolzle

Pollnow #1-14

14-2s-29w Decatur,KS

Start Date: 2013.04.25 @ 10:05:00

End Date: 2013.04.25 @ 18:24:15

Job Ticket #: 50712 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.04.29 @ 13:43:19



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N Water STE #300
 Wichita, KS 67202
 ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
 Job Ticket: 50712 **DST#: 4**
 Test Start: 2013.04.25 @ 10:05:00

GENERAL INFORMATION:

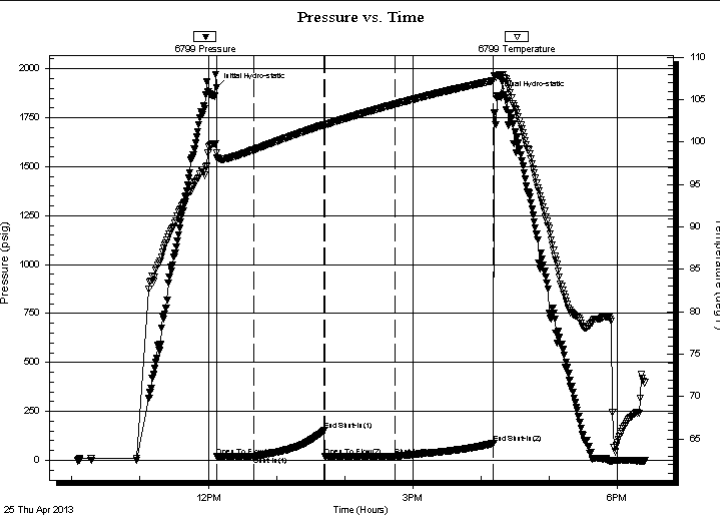
Formation: **LKC "K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:07:45
 Time Test Ended: 18:24:15
 Interval: **3867.00 ft (KB) To 3910.00 ft (KB) (TVD)**
 Total Depth: 3910.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Kevin Mack
 Unit No: 43
 Reference Elevations: 2710.00 ft (KB)
 2705.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press @ RunDepth: 21.23 psig @ 3868.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.25 End Date: 2013.04.25 Last Calib.: 2013.04.25
 Start Time: 10:05:05 End Time: 18:24:14 Time On Btm: 2013.04.25 @ 12:07:15
 Time Off Btm: 2013.04.25 @ 16:14:15

TEST COMMENT: 30 - IF- 1/4" Blow built to 1"
 60 - IS- No Return
 60 - FF- Surface Blow did not build or die
 90 - FS- Weak Surface Return started at 15 min. Did not build or die.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1902.92	98.79	Initial Hydro-static
1	18.41	98.19	Open To Flow (1)
33	19.75	99.07	Shut-In(1)
95	151.16	102.05	End Shut-In(1)
96	20.15	102.06	Open To Flow (2)
158	21.23	104.47	Shut-In(2)
244	87.06	107.25	End Shut-In(2)
247	1863.45	107.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OSM 100M (oil spots)	0.05
0.00	Show of free oil in tool	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50712 **DST#: 4**
Test Start: 2013.04.25 @ 10:05:00

Tool Information

Drill Pipe:	Length: 3662.00 ft	Diameter: 3.80 inches	Volume: 51.37 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 52.28 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3867.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	72.00 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			3839.00	
Shut In Tool	5.00			3844.00	
Hydraulic tool	5.00			3849.00	
Jars	5.00			3854.00	
Safety Joint	3.00			3857.00	
Packer	5.00			3862.00	29.00 Bottom Of Top Packer
Packer	5.00			3867.00	
Stubb	1.00			3868.00	
Recorder	0.00	6799	Inside	3868.00	
Recorder	0.00	8648	Inside	3868.00	
Perforations	3.00			3871.00	
Change Over Sub	1.00			3872.00	
Drill Pipe	32.00			3904.00	
Change Over Sub	1.00			3905.00	
Bullnose	5.00			3910.00	43.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N Water STE #300
Wichita, KS 67202
ATTN: Bob Stolzle

14-2s-29w Decatur,KS
Pollnow #1-14
Job Ticket: 50712 **DST#: 4**
Test Start: 2013.04.25 @ 10:05:00

Mud and Cushion Information

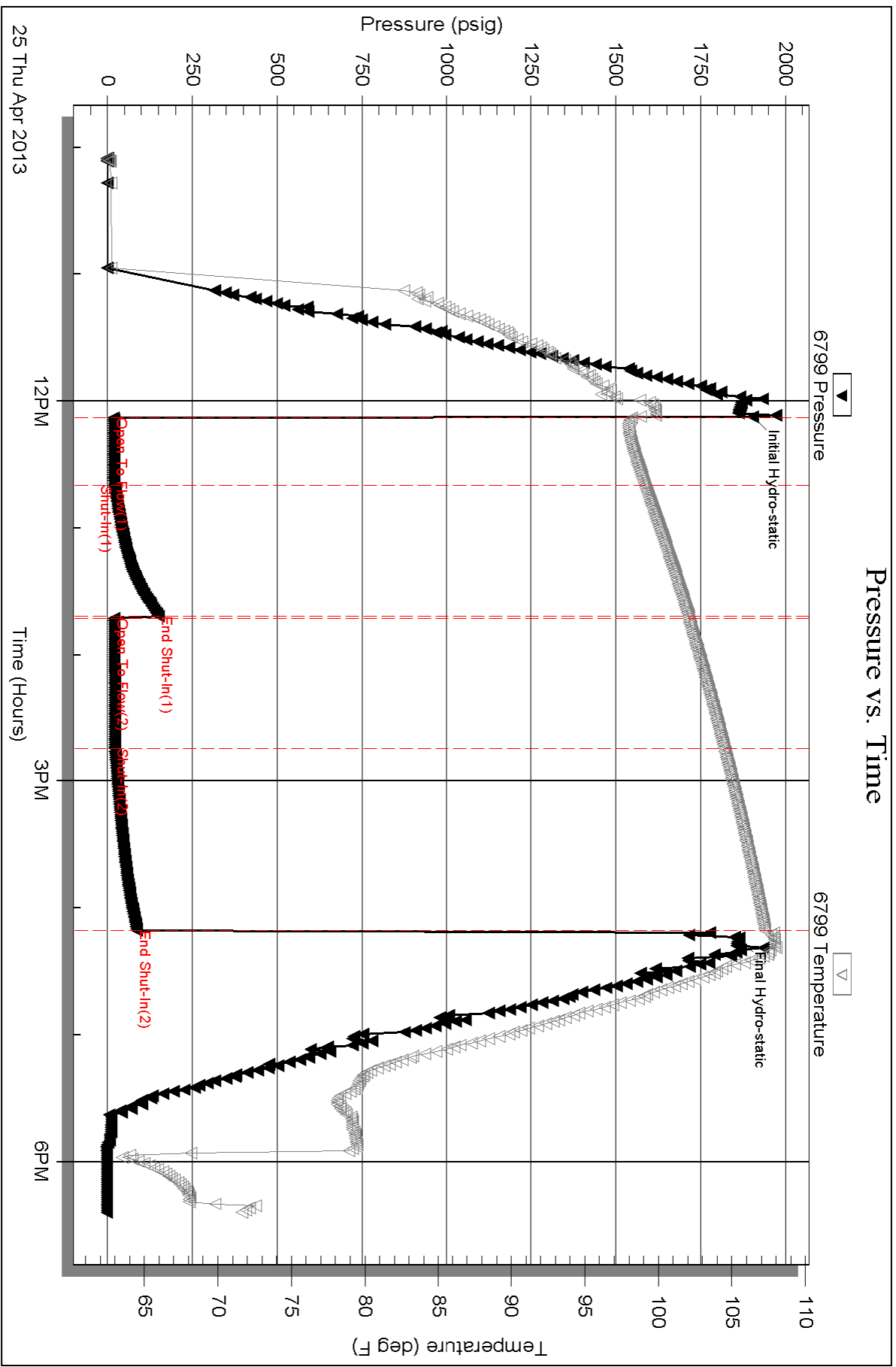
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OSM 100M (oil spots)	0.049
0.00	Show of free oil in tool	0.000

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:



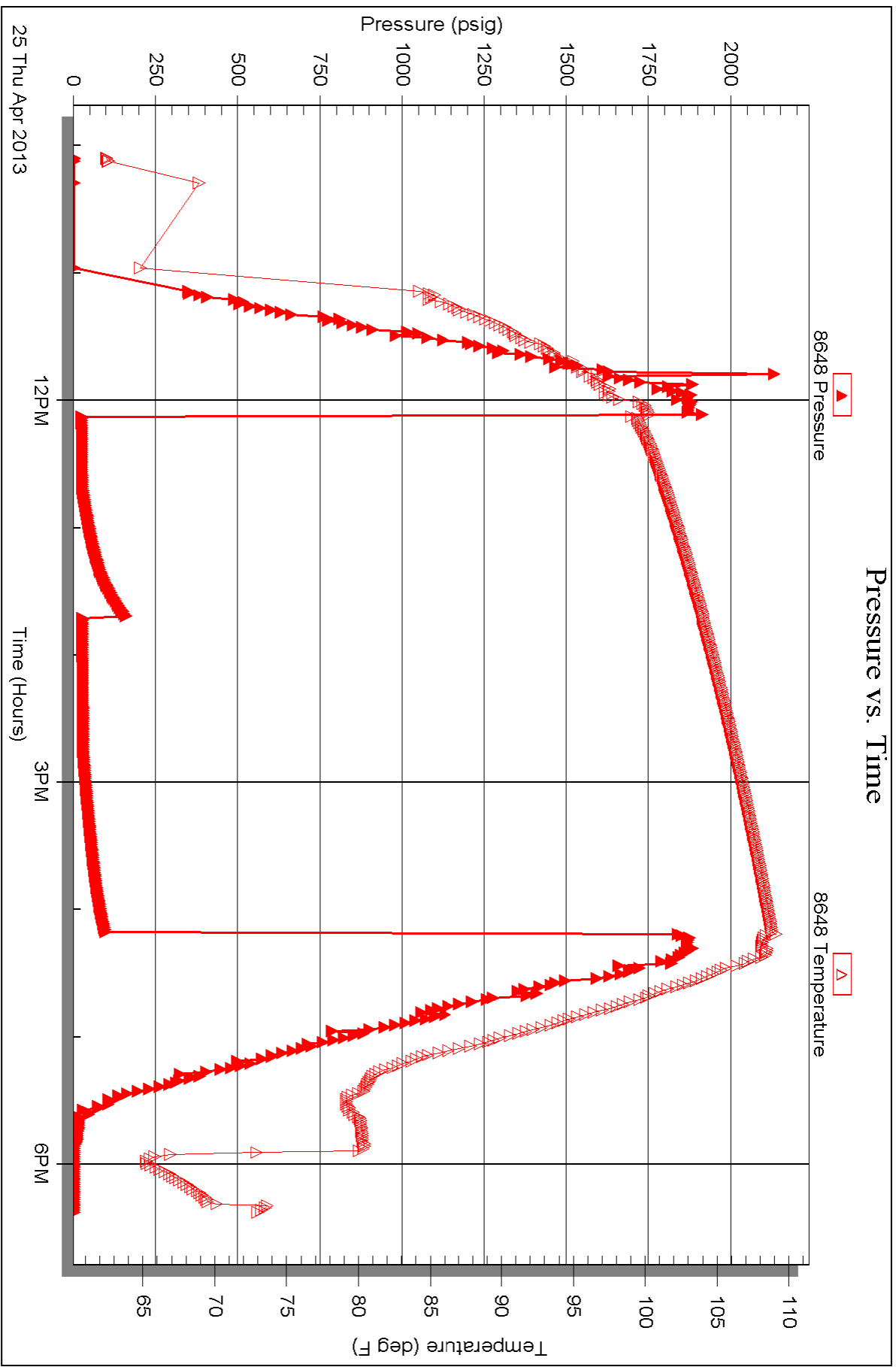
Serial #: 8648

Inside

Murfin Drilling Co., Inc

Pollnow #1-14

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50709

Well Name & No. Pollnow #1-14 Test No. 1 Date 4-23-13
 Company Murfin Drilling Co., Inc. Elevation 2710 KB 2705 GL
 Address 250 N Water STE # 300 ~~DEPT # 300~~ Wichita, KS 67202
 Co. Rep / Geo. Bob Stolze Rig Murfin #3
 Location: Sec. 14 Twp. 2S Rge. 29W Co. Decatur State KS

Interval Tested 3664-3720 Zone Tested LKC "A"
 Anchor Length 56' Drill Pipe Run 3477 Mud Wt. 8.9
 Top Packer Depth 3660 Drill Collars Run 186' Vis 52
 Bottom Packer Depth 3664 Wt. Pipe Run Ø WL 6.4
 Total Depth 3720 Chlorides 1,700 ppm System LCM 4#

Blow Description IF - 1" Blow built to 5 3/4"
ISI - NO Return
FF - Blow started at 5 min. Built to 9"
FSI - NO Return

Rec	Feet of	%gas	spots	%oil	%water	%mud
72	OSM				100	
186	MW			70	30	

Rec Total 258 BHT III Gravity - API RW .4 @ 55° F Chlorides 22,000 ppm
 (A) Initial Hydrostatic 1755 Test 1150 T-On Location 7:20 AM
 (B) First Initial Flow 17 Jars 250 T-Started 8:06 AM
 (C) First Final Flow 81 Safety Joint 75 T-Open 10:00 AM
 (D) Initial Shut-In 1232 Circ Sub N/C T-Pulled 2:00 PM
 (E) Second Initial Flow 86 Hourly Standby T-Out 4:10 PM
 (F) Second Final Flow 135 Mileage 10 RT 15.50 Comments _____
 (G) Final Shut-In 1203 Sampler _____
 (H) Final Hydrostatic 1733 Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1740.50
 Sub Total 1740.50 MP/DST Disc't _____

Approved By _____ Our Representative

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. 50710

Well Name & No. Poll now #1-14 Test No. 2 Date 4-24-13
 Company Murfin Drilling Co., Inc Elevation 2710 KB 2705 GL
 Address 250 N Water STE #3000 Wichita, KS 67202
 Co. Rep / Geo. Bob Stolze Rig Murfin #3
 Location: Sec. 14 Twp. 2S Rge. 29W Co. Decatur State KS

Interval Tested 3720-3815 Zone Tested LKC "D-G"
 Anchor Length 95' Drill Pipe Run 3537 Mud Wt. 9.0
 Top Packer Depth 3716 Drill Collars Run 186' Vis 56
 Bottom Packer Depth 3720 Wt. Pipe Run ~~1800~~ WL 6.4
 Total Depth 3815 Chlorides 2500 ppm System LCM 3

Blow Description IF - 1/2" Blow built to 1"
ISI - No Return
FF - No Blow
FBI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>OSM</u>	<u>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 70 BHT 109 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic	<u>1828</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>1:20 AM</u>
(B) First Initial Flow	<u>46</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>2:10 AM</u>
(C) First Final Flow	<u>50</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>4:45 AM</u>
(D) Initial Shut-In	<u>583</u>	<input checked="" type="checkbox"/> Circ Sub	<u>N/C</u>	T-Pulled	<u>7:45 AM</u>
(E) Second Initial Flow	<u>50</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>10:00 AM</u>
(F) Second Final Flow	<u>51</u>	<input checked="" type="checkbox"/> Mileage	<u>10 RT 15.50</u>	Comments	<u>Chased tool approx 15' to Bottom after opening, then Reser tool.</u>
(G) Final Shut-In	<u>425</u>	<input type="checkbox"/> Sampler		<input type="checkbox"/> Ruined Shale Packer	
(H) Final Hydrostatic	<u>1846</u>	<input 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>30</u>	<input type="checkbox"/> Extra Recorder		Total	<u>1740.50</u>
Final Shut-In	<u>60</u>	<input type="checkbox"/> Day Standby		MP/DST Disc't	
		<input type="checkbox"/> Accessibility			
		Sub Total	<u>1740.50</u>		

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50711

Well Name & No. Pollnow # 1-14 Test No. 3 Date 4-24-13
 Company Murfin Drilling Co., Inc. Elevation 2710 KB 2705 GL
 Address 250 N Water STE # 300 Wichita, KS 67202
 Co. Rep / Geo. Bob Stolzie Rig Murfin #3
 Location: Sec. 14 Twp. 2S Rge. 29W Co. Decatur State KS

Interval Tested 3806-3880 Zone Tested LKC "H-J"
 Anchor Length 74' Drill Pipe Run 3602 Mud Wt. 9.2
 Top Packer Depth 3802 Drill Collars Run 186' Vis 52
 Bottom Packer Depth 3806 Wt. Pipe Run Ø WL 6.8
 Total Depth 3880 Chlorides 2,500 ppm System LCM 3#

Blow Description TF - 1/2" Blow built to 2"
ISF - NO Return
FF - weak surface blow started at 30 min. Built to 1/2"
FSD - NO Return

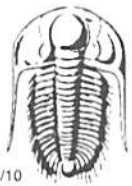
Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>OSM</u>	<u>Spots</u>		<u>less</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 65 BHT 106 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic	<u>1824</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>6:50 PM</u>
(B) First Initial Flow	<u>17</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>7:10 PM</u>
(C) First Final Flow	<u>30</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>9:00 PM</u>
(D) Initial Shut-In	<u>1013</u>	<input checked="" type="checkbox"/> Circ Sub	<u>NIL</u>	T-Pulled	<u>1:00 AM</u>
(E) Second Initial Flow	<u>33</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>3:00 AM</u>
(F) Second Final Flow	<u>50</u>	<input checked="" type="checkbox"/> Mileage	<u>10RT</u> 15.50	Comments	
(G) Final Shut-In	<u>931</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1845</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	
Initial Open	<u>30</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Ruined Packer	
Initial Shut-In	<u>60</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>60</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>90</u>	<input type="checkbox"/> Day Standby		Total	<u>1490.50</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1490.50</u>		

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50712

Well Name & No. Pollnow # 1-14 Test No. 4 Date 4-25-13
 Company Muffin Drilling Co., Inc Elevation 2710 KB 2705 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Bob Stolzie Rig Muffin #8
 Location: Sec. 14 Twp. 2S Rge. 29W Co. Decatur State KS

Interval Tested 3867-3910 Zone Tested LKC "K"
 Anchor Length 43' Drill Pipe Run 3662 Mud Wt. 9.1
 Top Packer Depth 3863 Drill Collars Run 186' Vis 63
 Bottom Packer Depth 3867 Wt. Pipe Run Ø WL 6.4
 Total Depth 3910 Chlorides 2,200 ppm System LCM 5-#

Blow Description IF - 1/4" Blow built to 1"
ISI - No Return
FF - Surface Blow did not build or die.
FSI - Weak Surface Return started at 15 min. Did not build or die.

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>OSM</u>	<u>SPOTS</u>		<u>100</u>	
<u>Ø</u>	<u>Show of Free Oil in tool</u>				

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

(A) Initial Hydrostatic <u>1903</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>9:40 AM</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>10:05 AM</u>
(C) First Final Flow <u>20</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>12:10 PM</u>
(D) Initial Shut-In <u>151</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>4:10 PM</u>
(E) Second Initial Flow <u>20</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>6:30 PM</u>
(F) Second Final Flow <u>21</u>	<input checked="" type="checkbox"/> Mileage <u>10 RT</u> 15.50	Comments <u>Loaded tool is at end of test</u>
(G) Final Shut-In <u>87</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1863</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

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

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 1490.50

Total 1490.50

MP/DST Disc't _____

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