



DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Rocky Milford

Burk Trust 'A' #6-23

23-1s-36w Rawlins KS

Start Date: 2014.04.01 @ 12:52:00

End Date: 2014.04.01 @ 20:27:45

Job Ticket #: 56981 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.04.04 @ 12:00:20

Murfin Drilling Co., Inc

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

DST # 1

LKC "A"

2014.04.01



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

Job Ticket: 56981 **DST#: 1**
Test Start: 2014.04.01 @ 12:52:00

GENERAL INFORMATION:

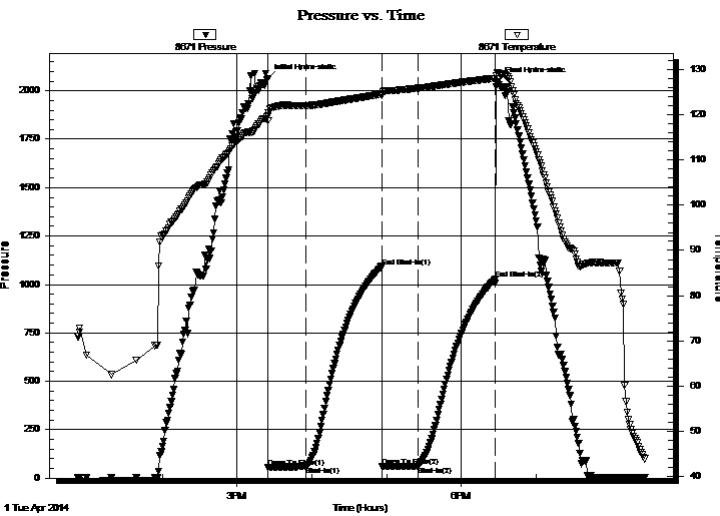
Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:25:00
Time Test Ended: 20:27:45
Interval: **4180.00 ft (KB) To 4255.00 ft (KB) (TVD)**
Total Depth: 4255.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: James Winder
Unit No: 57
Reference Elevations: 3302.00 ft (KB)
3297.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8671

Inside

Press@RunDepth: 62.32 psig @ 4181.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.04.01 End Date: 2014.04.01 Last Calib.: 2014.04.01
Start Time: 12:52:05 End Time: 20:27:44 Time On Btm: 2014.04.01 @ 15:24:45
Time Off Btm: 2014.04.01 @ 18:29:15

TEST COMMENT: 30 - IF: 2 1/2" surge blow at open, built to 3" in 20 min., died back to 2 1/2" at close
60 - IS: No blow back
30 - FF: No blow
60 - FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2061.32	119.77	Initial Hydro-static
1	55.47	118.80	Open To Flow (1)
31	59.63	122.04	Shut-In(1)
92	1092.43	124.58	End Shut-In(1)
92	61.39	124.20	Open To Flow (2)
121	62.32	125.94	Shut-In(2)
183	1026.33	128.12	End Shut-In(2)
185	2048.79	129.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	Mud w /Oil spots 94%m, 3%o, 3%g	0.39

Gas Rates

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



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ATTN: Rocky Milford

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

Job Ticket: 56981 **DST#: 1**

Test Start: 2014.04.01 @ 12:52:00

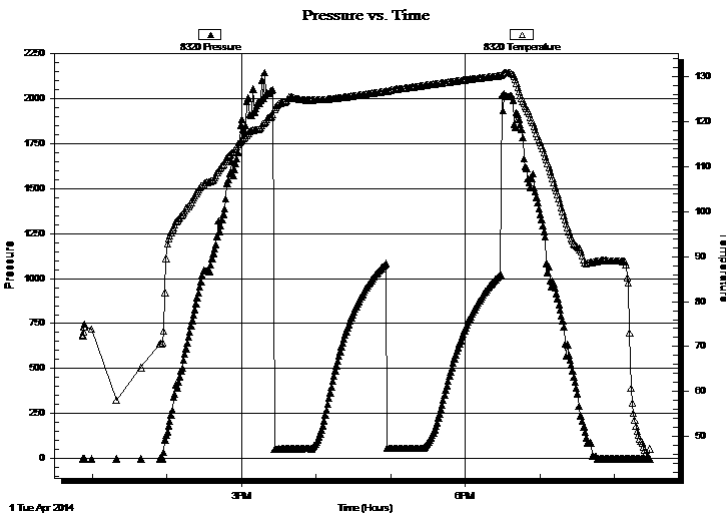
GENERAL INFORMATION:

Formation: LKC "A"		
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 15:25:00		Tester: James Winder
Time Test Ended: 20:27:45		Unit No: 57
Interval: 4180.00 ft (KB) To 4255.00 ft (KB) (TVD)		Reference Elevations: 3302.00 ft (KB)
Total Depth: 4255.00 ft (KB) (TVD)		3297.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 5.00 ft

Serial #: 8320 Outside

Press@RunDepth: psig @ 4181.00 ft (KB)	Capacity: 8000.00 psig	
Start Date: 2014.04.01	End Date: 2014.04.01	Last Calib.: 2014.04.01
Start Time: 12:52:05	End Time: 20:28:29	Time On Btm:
		Time Off Btm:

TEST COMMENT: 30 - IF: 2 1/2" surge blow at open, built to 3" in 20 min., died back to 2 1/2" at close
 60 - ISI: No blow back
 30 - FF: No blow
 60 - FS: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
80.00	Mud w /Oil spots 94%m, 3%o, 3%g	0.39

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 Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56981 **DST#: 1**
Test Start: 2014.04.01 @ 12:52:00

Tool Information

Drill Pipe:	Length: 3976.00 ft	Diameter: 3.80 inches	Volume: 55.77 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 56.69 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4180.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	103.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Tool chased 5' to bottom at open - Lost 10' of mud on topside - 2 1/2" surge blow at open

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4157.00	
Hydraulic tool	5.00			4162.00	
Jars	5.00			4167.00	
Safety Joint	3.00			4170.00	
Packer	5.00			4175.00	28.00 Bottom Of Top Packer
Packer	5.00			4180.00	
Stubb	1.00			4181.00	
Recorder	0.00	8671	Inside	4181.00	
Recorder	0.00	8320	Outside	4181.00	
Perforations	6.00			4187.00	
Blank Spacing	65.00			4252.00	
Bullnose	3.00			4255.00	75.00 Bottom Packers & Anchor

Total Tool Length: 103.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56981 **DST#: 1**
Test Start: 2014.04.01 @ 12:52:00

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: 65.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.17 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 2.00 inches			

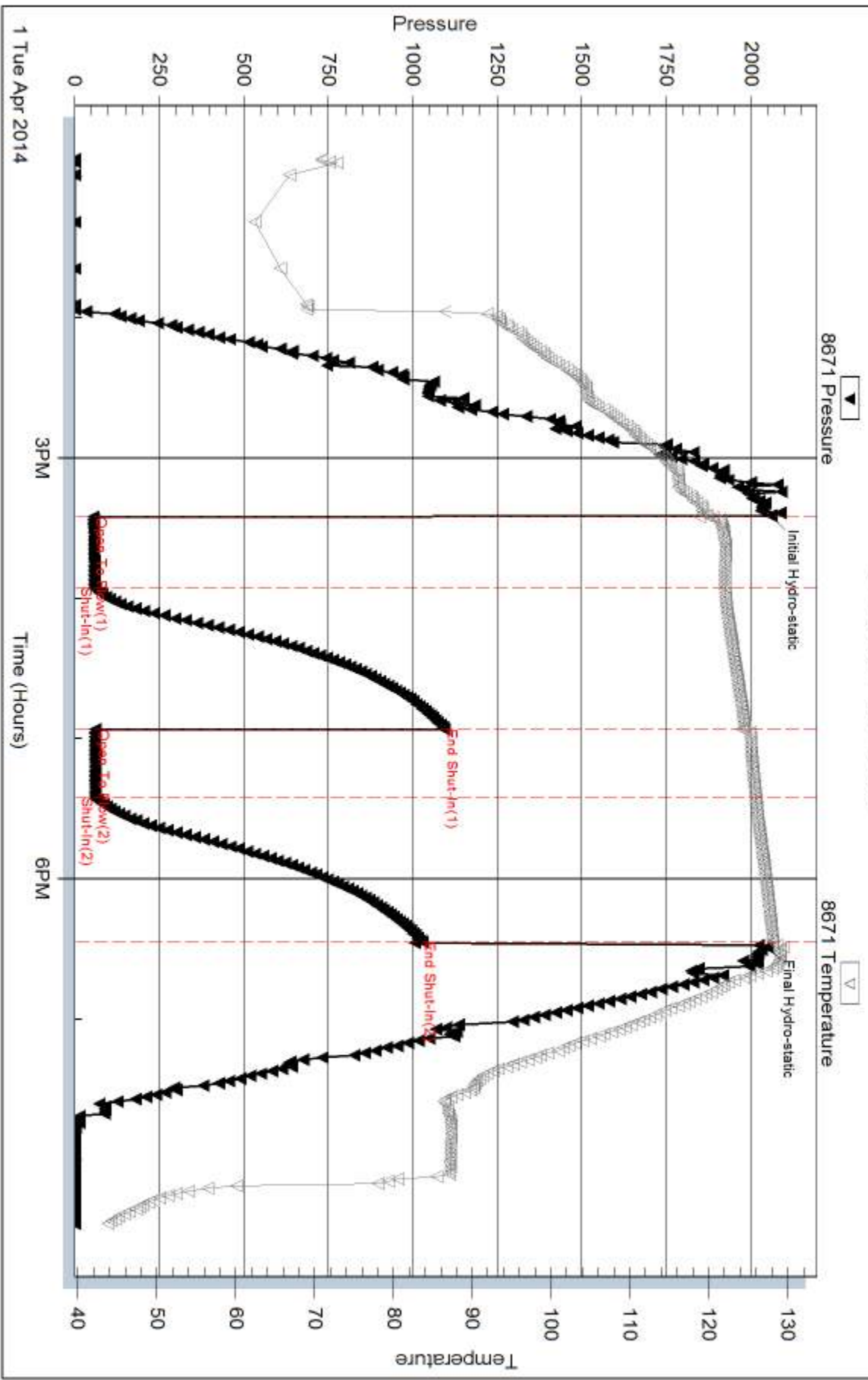
Recovery Information

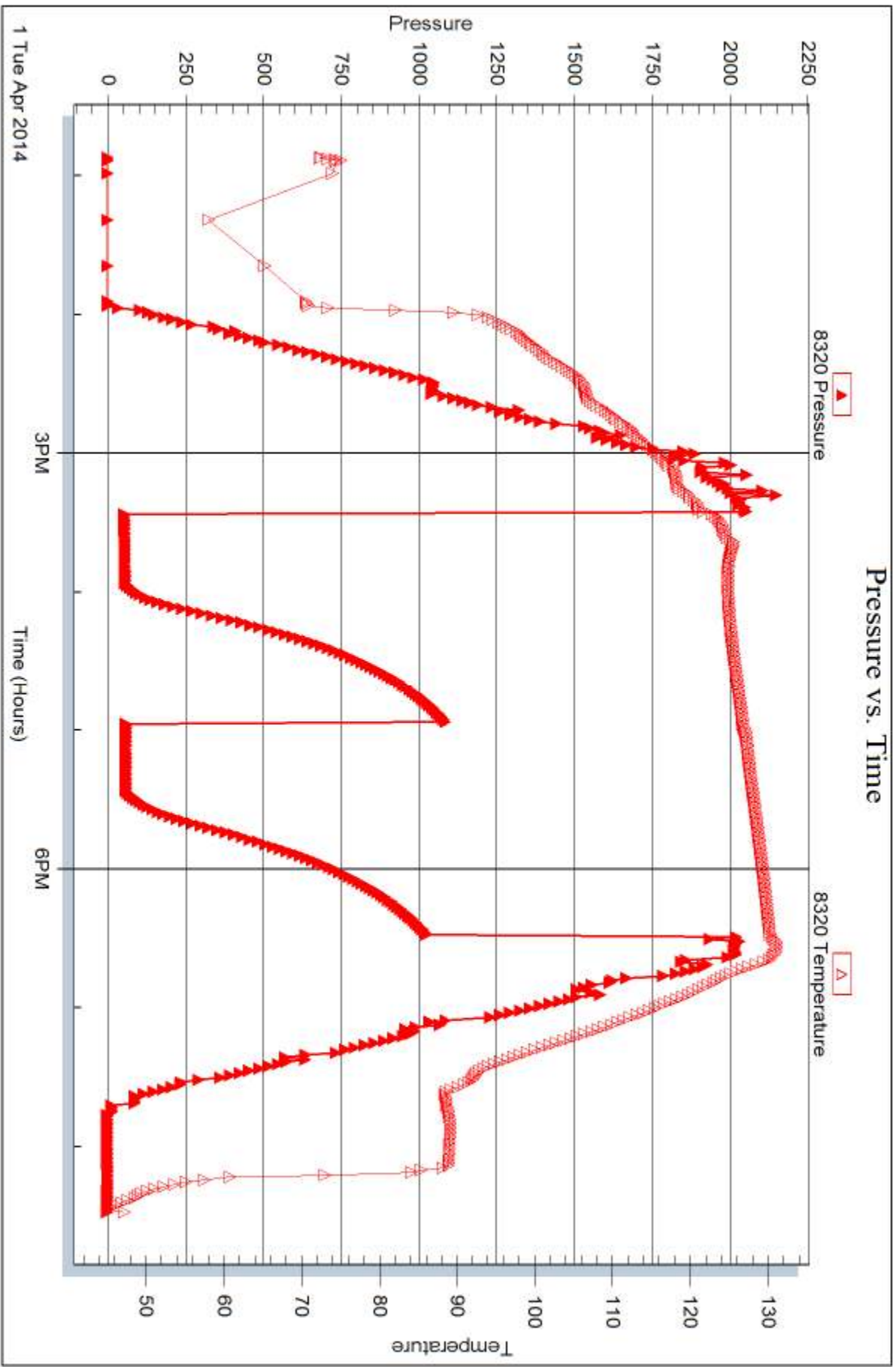
Recovery Table

Length ft	Description	Volume bbl
80.00	Mud w /Oil spots 94%m, 3%o, 3%g	0.393

Total Length: 80.00 ft Total Volume: 0.393 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: LCM 10#

Pressure vs. Time







DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Rocky Milford

Burk Trust 'A' #6-23

23-1s-36w Rawlins KS

Start Date: 2014.04.02 @ 05:27:00

End Date: 2014.04.02 @ 14:13:30

Job Ticket #: 56982 DST #: 2

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

Printed: 2014.04.04 @ 11:59:58

Murfin Drilling Co., Inc
23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
DST # 2
LKC "D"
2014.04.02



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
 Job Ticket: 56982 **DST#: 2**
 Test Start: 2014.04.02 @ 05:27:00

GENERAL INFORMATION:

Formation: **LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:53:45
 Time Test Ended: 14:13:30
 Interval: **4250.00 ft (KB) To 4310.00 ft (KB) (TVD)**
 Total Depth: 4310.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3302.00 ft (KB)
 3297.00 ft (CF)
 KB to GR/CF: 5.00 ft

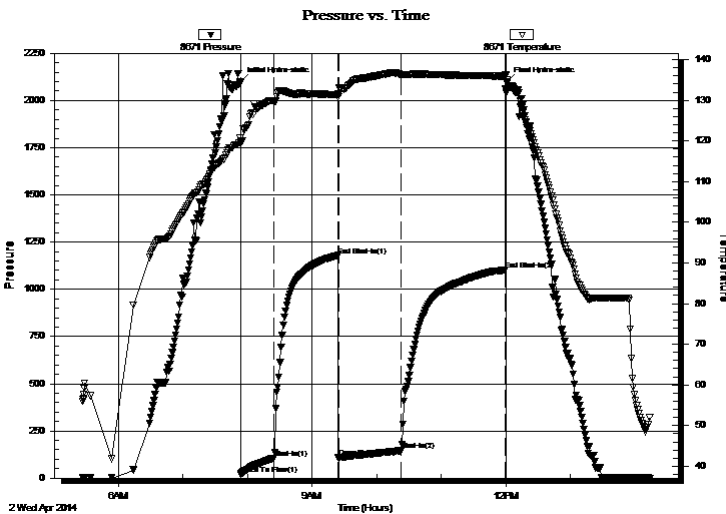
Serial #: 8671

Inside

Press@RunDepth: 145.37 psig @ 4251.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.02 End Date: 2014.04.02 Last Calib.: 2014.04.02
 Start Time: 05:27:05 End Time: 14:13:30 Time On Btm: 2014.04.02 @ 07:53:30
 Time Off Btm: 2014.04.02 @ 12:01:00

TEST COMMENT: 30 - IF: Blow built to 6"
 60 - IS: No blow back
 60 - FF: Blow built to 8"
 90 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2102.07	120.62	Initial Hydro-static
1	21.18	119.31	Open To Flow (1)
32	106.30	129.71	Shut-In(1)
91	1179.21	131.33	End Shut-In(1)
91	108.81	131.55	Open To Flow (2)
150	145.37	136.33	Shut-In(2)
246	1102.73	135.97	End Shut-In(2)
248	2098.19	134.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MCW w/OS 64%w, 35%m, 1%o	0.61
62.00	SO/WCM 63%m, 32%w, 3%o, 2%g	0.30
73.00	OCM 92%m, 6%o, 2%g	1.02
10.00	MCO 85%o, 15%m	0.14

* Recovery from multiple tests

Gas Rates

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



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 Wichita, KS 67202
 ATTN: Rocky Milford

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

Job Ticket: 56982 **DST#: 2**
 Test Start: 2014.04.02 @ 05:27:00

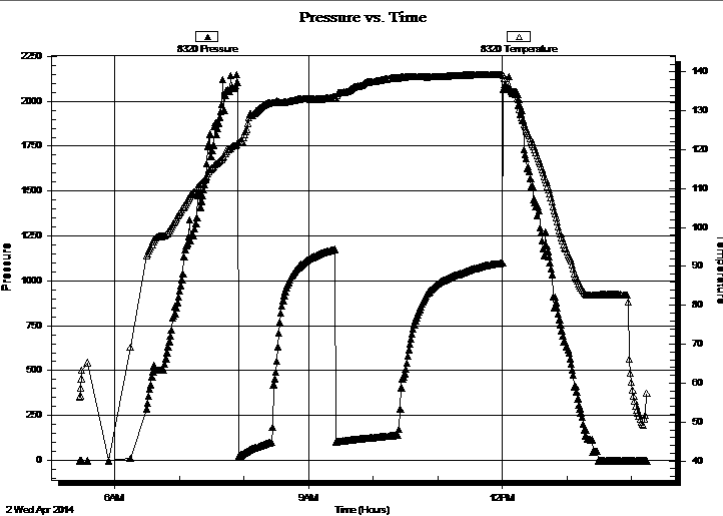
GENERAL INFORMATION:

Formation: **LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:53:45
 Time Test Ended: 14:13:30
 Interval: **4250.00 ft (KB) To 4310.00 ft (KB) (TVD)**
 Total Depth: 4310.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3302.00 ft (KB)
 3297.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8320 Outside

Press@RunDepth: psig @ 4251.00 ft (KB)
 Start Date: 2014.04.02 End Date: 2014.04.02
 Start Time: 05:27:05 End Time: 14:14:15
 Capacity: 8000.00 psig
 Last Calib.: 2014.04.03
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to 6"
 60 - ISI: No blow back
 60 - FF: Blow built to 8"
 90 - FSI: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MCW w/OS 64%w , 35%m, 1%o	0.61
62.00	SO/WCM 63%m, 32%w , 3%o, 2%g	0.30
73.00	OCM 92%m, 6%o, 2%g	1.02
10.00	MCO 85%o, 15%m	0.14

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56982 **DST#: 2**
Test Start: 2014.04.02 @ 05:27:00

Tool Information

Drill Pipe:	Length: 4039.00 ft	Diameter: 3.80 inches	Volume: 56.66 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 57.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4250.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Tool slid 6' to bottom before open - No mud loss

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4227.00	
Hydraulic tool	5.00			4232.00	
Jars	5.00			4237.00	
Safety Joint	3.00			4240.00	
Packer	5.00			4245.00	28.00 Bottom Of Top Packer
Packer	5.00			4250.00	
Stubb	1.00			4251.00	
Recorder	0.00	8671	Inside	4251.00	
Recorder	0.00	8320	Outside	4251.00	
Perforations	20.00			4271.00	
Blank Spacing	33.00			4304.00	
Perforations	3.00			4307.00	
Bullnose	3.00			4310.00	60.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56982 **DST#: 2**
Test Start: 2014.04.02 @ 05:27:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 24.4 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 23000 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.58 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1000.00 ppm		
Filter Cake: 2.00 inches		

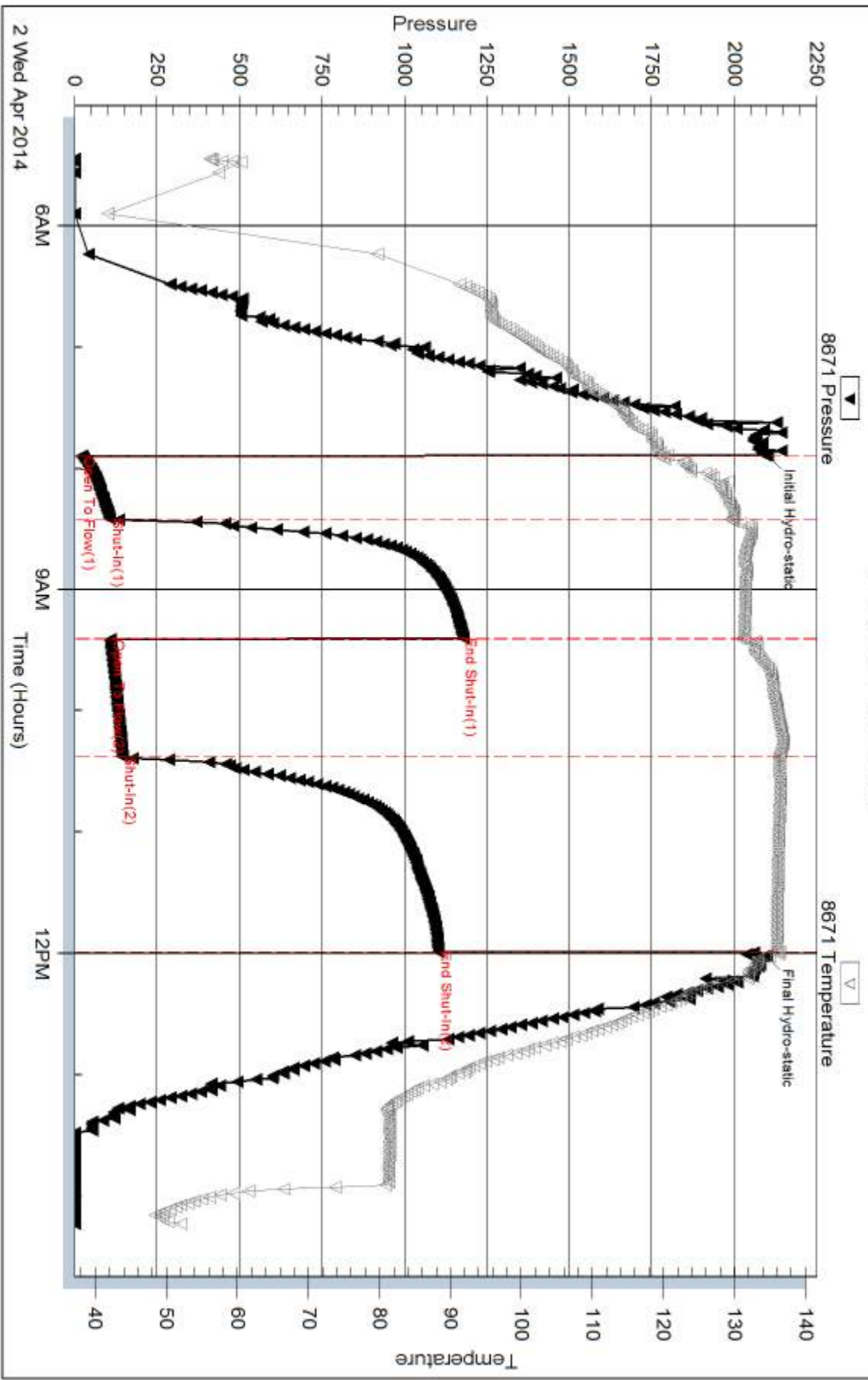
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	MCW w/OS 64%w , 35%m, 1%o	0.615
62.00	SO/WCM 63%m, 32%w , 3%o, 2%g	0.305
73.00	OCM 92%m, 6%o, 2%g	1.024
10.00	MCO 85%o, 15%m	0.140

Total Length: 270.00 ft Total Volume: 2.084 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: Gravity = 25 api @ 66 deg F Corrected Gravity = 24.4 api
RW = .311 ohms @ 67.7 deg F Chlorides = 23,000 ppm

Pressure vs. Time

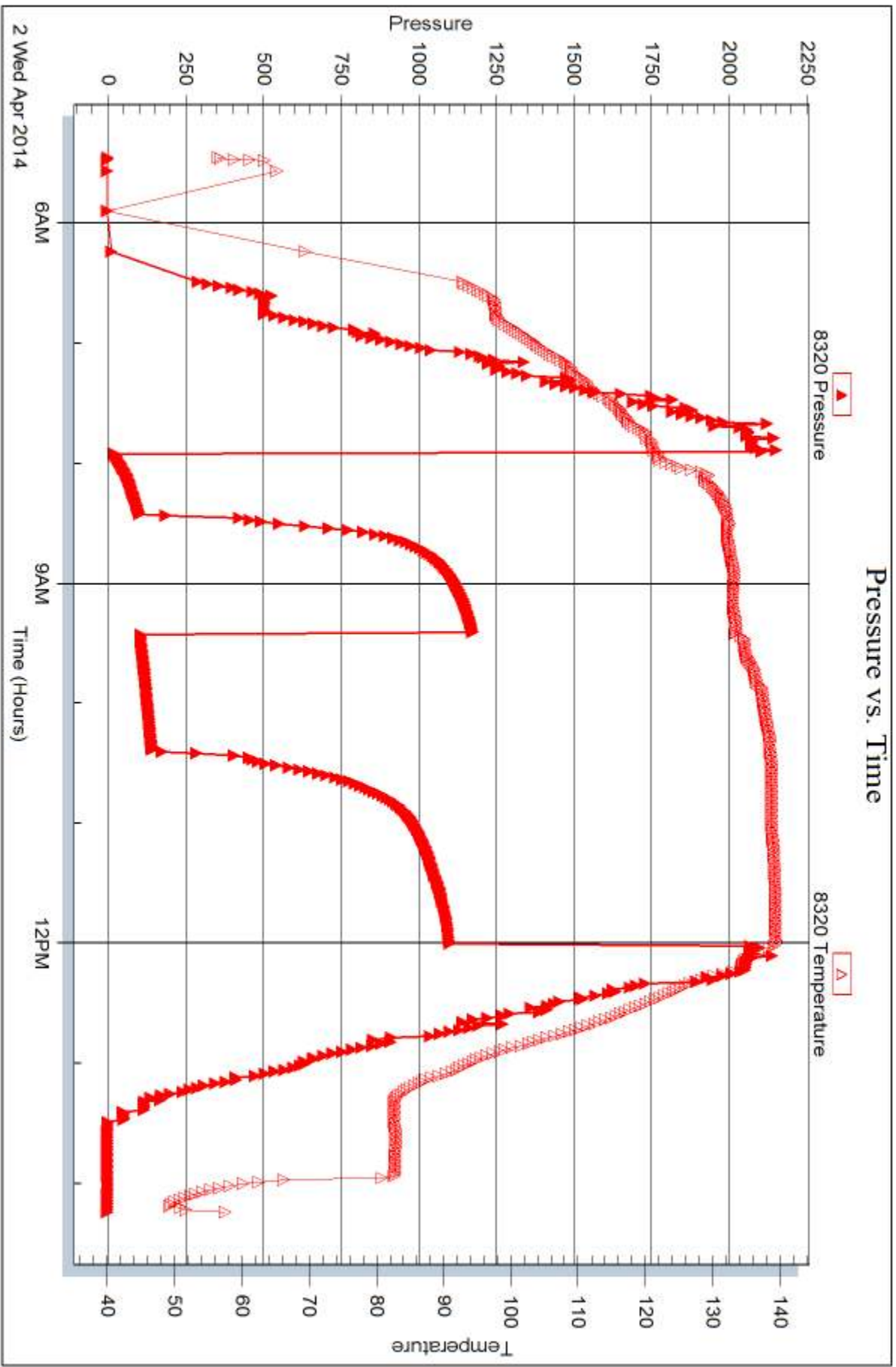


Serial #: 8320

Outside Murfin Drilling Co., Inc

Burk Trust 'A' #6-23

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 56982

Printed: 2014.04.04 @ 12:00:00



DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Rocky Milford

Burk Trust 'A' #6-23

23-1s-36w Rawlins KS

Start Date: 2014.04.02 @ 23:53:00

End Date: 2014.04.03 @ 09:39:15

Job Ticket #: 56983 DST #: 3

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

Printed: 2014.04.04 @ 11:59:23



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Rocky Milford

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

Job Ticket: 56983

DST#: 3

Test Start: 2014.04.02 @ 23:53:00

GENERAL INFORMATION:

Formation: **LKC "G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:01:15
 Time Test Ended: 09:39:15
 Interval: **4303.00 ft (KB) To 4370.00 ft (KB) (TVD)**
 Total Depth: 4370.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3302.00 ft (KB)
 3297.00 ft (CF)
 KB to GR/CF: 5.00 ft

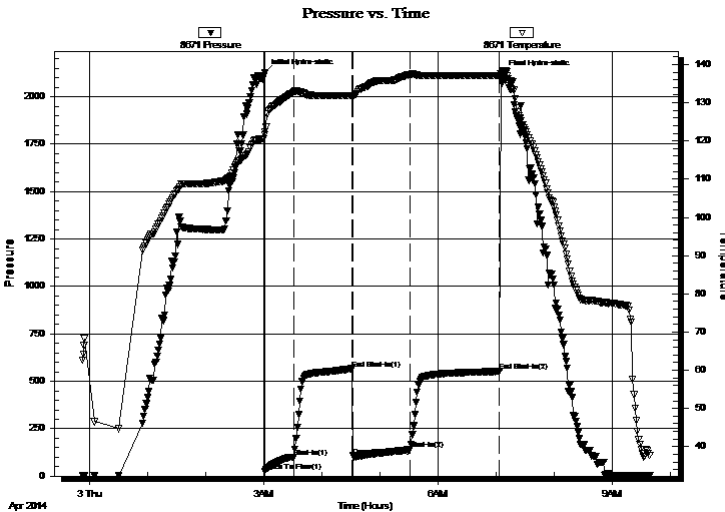
Serial #: 8671

Inside

Press@RunDepth: 140.15 psig @ 4304.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.02 End Date: 2014.04.03 Last Calib.: 2014.04.03
 Start Time: 23:53:05 End Time: 09:39:15 Time On Btm: 2014.04.03 @ 03:01:00
 Time Off Btm: 2014.04.03 @ 07:06:30

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 23 min.
 60 - IS: Blow back built to 3/4"
 60 - FF: Blow built to BOB in 20 min.
 90 - FS: Blow back built to 2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2124.57	122.48	Initial Hydro-static
1	24.56	121.67	Open To Flow (1)
31	99.56	132.90	Shut-In(1)
91	566.53	131.92	End Shut-In(1)
91	106.62	131.72	Open To Flow (2)
151	140.15	137.32	Shut-In(2)
243	552.17	137.12	End Shut-In(2)
246	2117.56	138.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	GOCM 49% m, 29% o, 22% g	0.61
75.00	OM 50% m, 43% o, 7% g	0.49
110.00	CGO 79% o, 17% g, 4% m	1.54
0.00	GIP = 380'	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., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56983 **DST#: 3**
Test Start: 2014.04.02 @ 23:53:00

Tool Information

Drill Pipe:	Length: 4103.00 ft	Diameter: 3.80 inches	Volume: 57.55 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 58.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4303.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	67.00 ft			
Tool Length:	95.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Tool slid around 5' to bottom before open - no mud loss

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4280.00	
Hydraulic tool	5.00			4285.00	
Jars	5.00			4290.00	
Safety Joint	3.00			4293.00	
Packer	5.00			4298.00	28.00 Bottom Of Top Packer
Packer	5.00			4303.00	
Stubb	1.00			4304.00	
Recorder	0.00	8671	Inside	4304.00	
Recorder	0.00	8320	Outside	4304.00	
Perforations	27.00			4331.00	
Blank Spacing	33.00			4364.00	
Perforations	3.00			4367.00	
Bullnose	3.00			4370.00	67.00 Bottom Packers & Anchor

Total Tool Length: 95.00



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FLUID SUMMARY

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56983 **DST#: 3**
Test Start: 2014.04.02 @ 23:53:00

Mud and Cushion Information

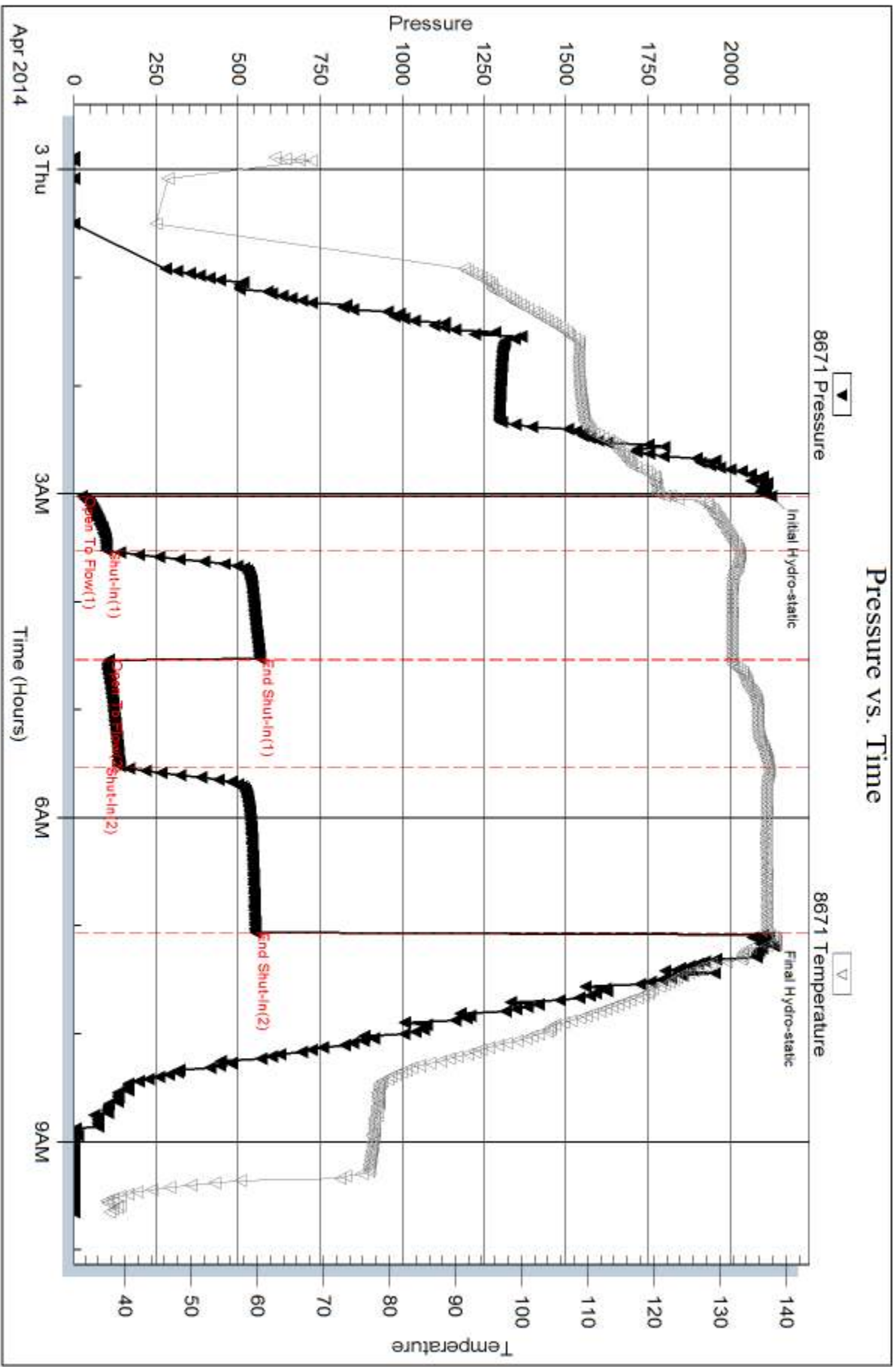
Mud Type: Gel Chem	Cushion Type:	Oil API: 32 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.57 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1000.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	GOCM 49%m, 29%o, 22%g	0.615
75.00	OM 50%m, 43%o, 7%g	0.487
110.00	CGO 79%o, 17%g, 4%m	1.543
0.00	GIP = 380'	0.000

Total Length: 310.00 ft Total Volume: 2.645 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Gravity = 29.6 api @ 36 deg F
 Corrected Gravity = 32 api

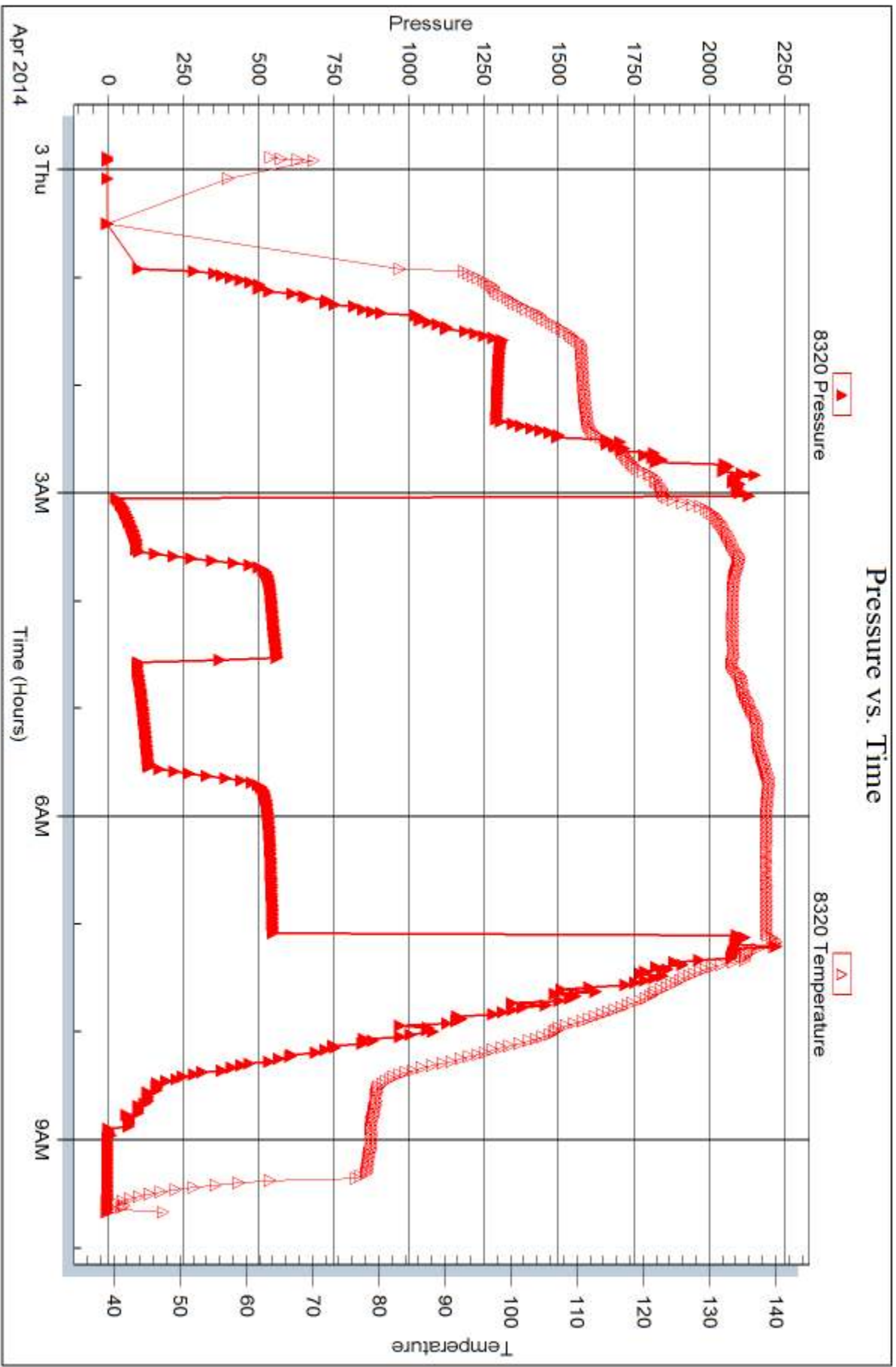


Serial #: 8320

Outside Murfin Drilling Co., Inc

Burk Trust 'A' #6-23

DST Test Number: 3





DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Rocky Milford

Burk Trust 'A' #6-23

23-1s-36w Rawlins KS

Start Date: 2014.04.03 @ 21:45:00

End Date: 2014.04.04 @ 07:55:30

Job Ticket #: 56984 DST #: 4

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

Printed: 2014.04.04 @ 11:48:32



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Rocky Milford

23-1s-36w Rawlins KS

Burk Trust 'A' #6-23

Job Ticket: 56984 **DST#: 4**
 Test Start: 2014.04.03 @ 21:45:00

GENERAL INFORMATION:

Formation: **LKC "J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:35:15
 Time Test Ended: 07:55:30
 Interval: **4405.00 ft (KB) To 4460.00 ft (KB) (TVD)**
 Total Depth: 4460.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3302.00 ft (KB)
 3297.00 ft (CF)
 KB to GR/CF: 5.00 ft

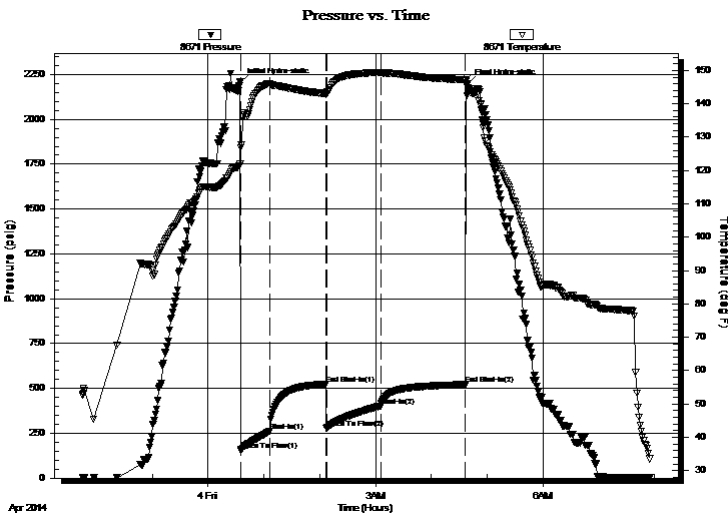
Serial #: 8671

Inside

Press@RunDepth: 402.13 psig @ 4406.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.03 End Date: 2014.04.04 Last Calib.: 2014.04.04
 Start Time: 21:45:05 End Time: 07:55:30 Time On Btm: 2014.04.04 @ 00:34:30
 Time Off Btm: 2014.04.04 @ 04:39:30

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 8 1/4 min.
 60 - IS: Blow back built to 2"
 60 - FF: Blow built to BOB in 11 1/4 min.
 90 - FS: Blow back built to 1/2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.68	121.92	Initial Hydro-static
1	152.98	126.79	Open To Flow (1)
32	261.21	146.08	Shut-In(1)
93	524.70	143.08	End Shut-In(1)
93	278.30	142.94	Open To Flow (2)
151	402.13	149.41	Shut-In(2)
242	521.58	147.17	End Shut-In(2)
245	2201.31	144.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
437.00	MCW w/Trace Oil 94%w, 6%m	4.43
190.00	WM w/Oil spots 49%m, 45%w, 3%o, 3%g	2.67
180.00	OCM 87%m, 10%o, 3%g	2.52
20.00	SMCO 91%o, 7%m, 2%g	0.28

* 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
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56984 **DST#: 4**
Test Start: 2014.04.03 @ 21:45:00

Tool Information

Drill Pipe:	Length: 4196.00 ft	Diameter: 3.80 inches	Volume: 58.86 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 59.78 bbl</u>	Tool Chased	13.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	67000.00 lb
Depth to Top Packer:	4405.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	55.00 ft				
Tool Length:	83.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: Tool chased 13' to bottom at open, Lost 15' o mud

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4382.00	
Hydraulic tool	5.00			4387.00	
Jars	5.00			4392.00	
Safety Joint	3.00			4395.00	
Packer	5.00			4400.00	28.00 Bottom Of Top Packer
Packer	5.00			4405.00	
Stubb	1.00			4406.00	
Recorder	0.00	8671	Inside	4406.00	
Recorder	0.00	8320	Outside	4406.00	
Perforations	15.00			4421.00	
Blank Spacing	33.00			4454.00	
Perforations	3.00			4457.00	
Bullnose	3.00			4460.00	55.00 Bottom Packers & Anchor

Total Tool Length: 83.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Rocky Milford

23-1s-36w Rawlins KS
Burk Trust 'A' #6-23
Job Ticket: 56984 **DST#: 4**
Test Start: 2014.04.03 @ 21:45:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 32.6 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 25000 ppm
Viscosity: 64.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.39 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1100.00 ppm		
Filter Cake: 2.00 inches		

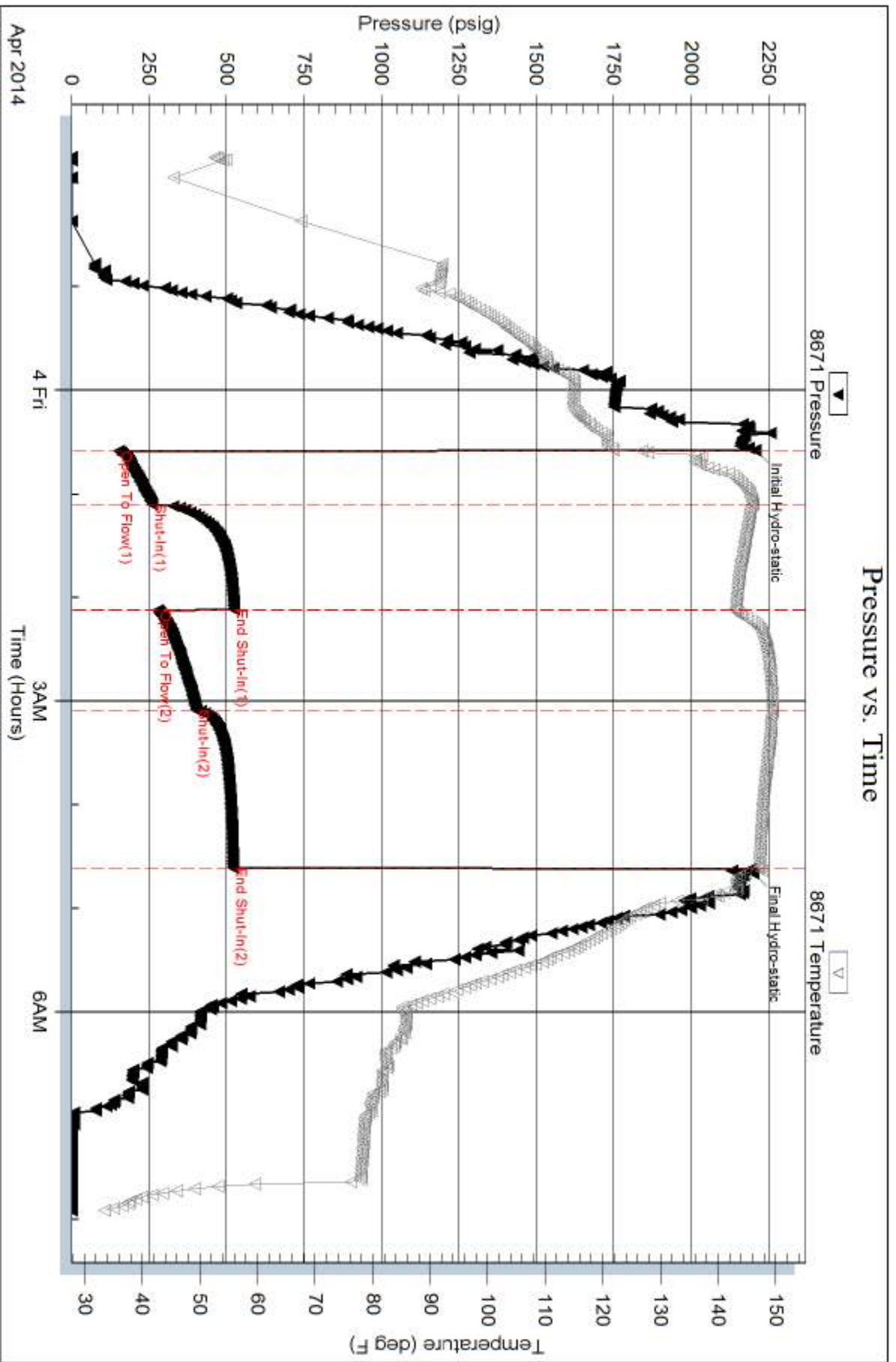
Recovery Information

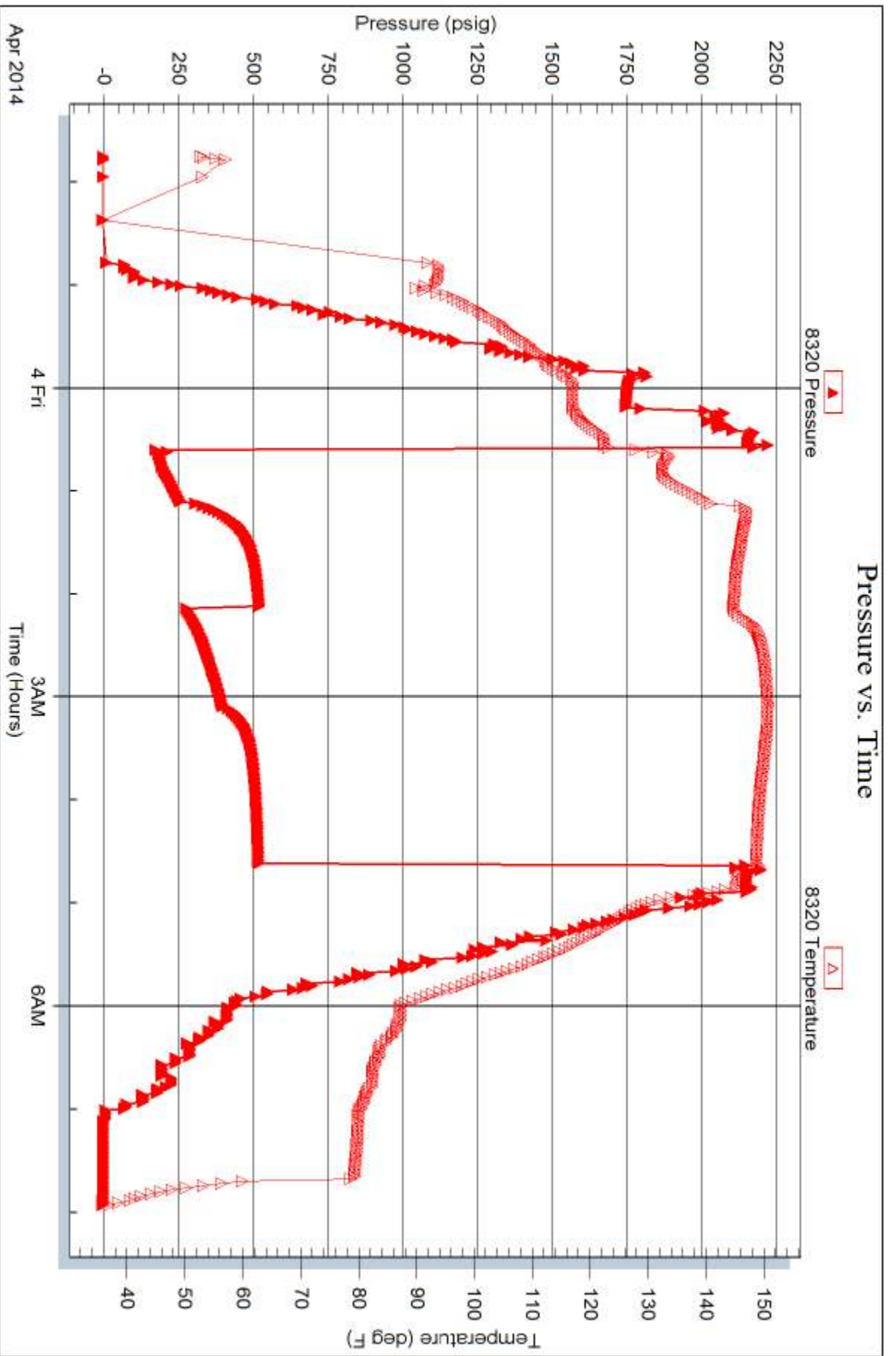
Recovery Table

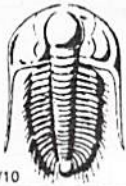
Length ft	Description	Volume bbl
437.00	MCW w /Trace Oil 94%w , 6%m	4.426
190.00	WM w /Oil spots 49%m, 45%w , 3%o, 3%g	2.665
180.00	OCM 87%m, 10%o, 3%g	2.525
20.00	SMCO 91%o, 7%m, 2%g	0.281

Total Length: 827.00 ft Total Volume: 9.897 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: Gravity = 29.4 api @ 28 deg F Corrected Gravity = 32.6 api
RW = .618 ohms @ 31.1 deg F Chlorides = 25,000 ppm

Pressure vs. Time







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56981

4/10

Well Name & No. Buck Trust A #6-23 Test No. 1 Date 4-1-14
 Company murfin Drilling Co. Inc Elevation 3302 KB 3297 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Rocky milford Rig murfin #8
 Location: Sec. 23 Twp. 1s Rge. 36w Co. Rawlins State KS

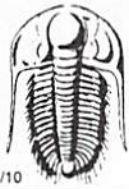
Interval Tested 4180 - 4255 Zone Tested Lans. "A"
 Anchor Length 75 Drill Pipe Run 3976 Mud Wt. 8.7
 Top Packer Depth 4175 Drill Collars Run 187 Vis 65
 Bottom Packer Depth 4180 Wt. Pipe Run - WL 5.2
 Total Depth ~~4255~~ 4255 Chlorides 700 ppm System LCM 10
 Blow Description IF: 2 1/2" surge blow at open, built to 3" in 20 min, died back to 2 1/2" at close
ISI: No blowback
FF: No blow
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>Mud w/oil spots</u>	<u>3</u>	<u>3</u>	<u>-</u>	<u>94</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 80 BHT 128 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic <u>2061</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>12:00</u>
(B) First Initial Flow <u>55</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>12:52</u>
(C) First Final Flow <u>60</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>15:25</u>
(D) Initial Shut-In <u>1092</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>18:27</u>
(E) Second Initial Flow <u>61</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>20:20</u>
(F) Second Final Flow <u>62</u>	<input checked="" type="checkbox"/> Mileage <u>108 RT</u> <u>167.40</u>	Comments <u>Tool slid 5' at open - lost</u>
(G) Final Shut-In <u>1026</u>	<input type="checkbox"/> Sampler	<u>10' mud - 2 1/2" surge blow</u>
(H) Final Hydrostatic <u>2049</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>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1742.40</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1742.40</u>	

Approved By Rocky Milford Our Representative James Winder
 Trilobite Testing Inc. shall not be liable for damaged or any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56982

Well Name & No. Burk Trust 'A' #6-23 Test No. 2 Date 4-2-14
 Company Murfin Drilling Co. Inc. Elevation 3302 KB 3297 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 1s Rge. 36w Co. Rawlins State KS

Interval Tested 4250 - 4310 Zone Tested LKC "D"
 Anchor Length 60 Drill Pipe Run 4039 Mud Wt. 9.2
 Top Packer Depth 4245 Drill Collars Run 187 Vis 60
 Bottom Packer Depth 4250 Wt. Pipe Run - WL 5.6
 Total Depth 4310 Chlorides 1000 ppm System LCM 10
 Blow Description IF: Blow built to 6"
ISI: No blowback
FF: Blow built to 8"
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>MCO</u>	<u>-</u>	<u>85</u>	<u>-</u>	<u>15</u>
<u>73</u>	<u>OCM</u>	<u>2</u>	<u>6</u>	<u>-</u>	<u>92</u>
<u>62</u>	<u>SO/WCM</u>	<u>2</u>	<u>3</u>	<u>32</u>	<u>63</u>
<u>125</u>	<u>MCW w/oil spots</u>	<u>-</u>	<u>1</u>	<u>64</u>	<u>35</u>
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 270 BHT 136 Gravity 24.4 API RW 311 @ 67.7 °F Chlorides 23,000 ppm

(A) Initial Hydrostatic 2102 Test 1250 T-On Location 4:15
 (B) First Initial Flow 21 Jars 250 T-Started 5:27
 (C) First Final Flow 106 Safety Joint 75 T-Open 7:53
 (D) Initial Shut-In 1179 Circ Sub _____ T-Pulled 11:59
 (E) Second Initial Flow 109 Hourly Standby _____ T-Out 14:10
 (F) Second Final Flow 145 Mileage 108 RT 167.40 Comments Tool slid 6' to bottom
 (G) Final Shut-In 1103 Sampler _____ before open - No mud loss
 (H) Final Hydrostatic 2098 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

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

Sub Total 1742.40

Sub Total 1742.40
 Total 1742.40
 MP/DST Disc't _____

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56983

Well Name & No. Burk Trust 'A' #6-23 Test No. 3 Date 4-2-14
 Company Murfin Drilling Co. Inc Elevation 3302 KB 3297 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 15 Rge. 36W Co. Rawlins State KS

Interval Tested 4303 - 4370 Zone Tested LKC "G"
 Anchor Length 67 Drill Pipe Run 4103 Mud Wt. 9.0
 Top Packer Depth 4298 Drill Collars Run 187 Vis 63
 Bottom Packer Depth 4303 Wt. Pipe Run - WL 5.6
 Total Depth 4370 Chlorides 1000 ppm System LCM 10

Blow Description IF: Blow built to BOB(11") in 23 min.
ISI: Blowback built to 3/4"
FF: Blow built to BOB in 20 min.
FSI: Blowback built to 2"

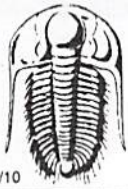
Rec	Feet of	%gas	%oil	%water	%mud
<u>110</u>	<u>60</u>	<u>17</u>	<u>79</u>	<u>-</u>	<u>4</u>
<u>75</u>	<u>0M</u>	<u>7</u>	<u>43</u>	<u>-</u>	<u>50</u>
<u>125</u>	<u>60cm</u>	<u>22</u>	<u>29</u>	<u>-</u>	<u>49</u>
<u> </u>	<u>GIP=380'</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Rec Total 310 BHT 137 Gravity 32 API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 2125 Test 1250 T-On Location 22:45 4/2
 (B) First Initial Flow 25 Jars 250 T-Started 23:53
 (C) First Final Flow 100 Safety Joint 75 T-Open 3:01
 (D) Initial Shut-In 567 Circ Sub T-Pulled 7:03
 (E) Second Initial Flow 107 Hourly Standby T-Out 9:35 4/3
 (F) Second Final Flow 140 Mileage 108RT 167.40 Comments
 (G) Final Shut-In 552 Sampler
 (H) Final Hydrostatic 2118 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 1742.40
 Accessibility MP/DST Disc't
 Sub Total 1742.40

Approved By Robert Milford Our Representative James Winder
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56984

4/10

Well Name & No. Burk Trust 'A' #6-23 Test No. 4 Date 4-3-14
 Company Murfin Drilling Co. Inc Elevation 3302 KB 3297 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 23 Twp. 1s Rge. 36w Co. Rawlins State KS

Interval Tested 4405-4460 Zone Tested LKC "J"
 Anchor Length 55 Drill Pipe Run 4196 Mud Wt. 9.3
 Top Packer Depth 4400 Drill Collars Run 187 Vis 64
 Bottom Packer Depth 4405 Wt. Pipe Run - WL 6.4
 Total Depth 4460 Chlorides 1100 ppm System LCM 8

Blow Description IF: Blow built to BOB (11") in 8 1/4 min.
ISI: Blowback built to 2"
FF: Blow built to BOB in 11 1/4 min.
FSI: Blowback built to 1/2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>MCO</u>	<u>2</u>	<u>91</u>	<u>-</u>	<u>7</u>
<u>180</u>	<u>OCM</u>	<u>3</u>	<u>10</u>	<u>-</u>	<u>87</u>
<u>190</u>	<u>WM w/oilspots</u>	<u>3</u>	<u>3</u>	<u>45</u>	<u>49</u>
<u>437</u>	<u>MCW w/trace oil</u>	<u>%gas</u>	<u>trace</u>	<u>94</u>	<u>6</u>
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 827 BHT 147 Gravity 32.6 API RW .618 @ 31.1 °F Chlorides 25000 ppm

(A) Initial Hydrostatic <u>2208</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>20:45 4/3</u>
(B) First Initial Flow <u>153</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>21:45</u>
(C) First Final Flow <u>261</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>00:35</u>
(D) Initial Shut-In <u>525</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>4:36</u>
(E) Second Initial Flow <u>278</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>7:50 4/4</u>
(F) Second Final Flow <u>402</u>	<input checked="" type="checkbox"/> Mileage <u>108 RT</u> 167.40	Comments <u>Tool chased 13' to bottom at open - lost 15' of mud</u>
(G) Final Shut-In <u>521</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2201</u>	<input type="checkbox"/> Straddle	<input checked="" type="checkbox"/> Ruined Packer <u>320</u>
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
	<input type="checkbox"/> Extra Recorder	Total <u>2062.40</u>
	<input type="checkbox"/> Day Standby	MP/DST Disc't
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1742.40</u>	

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

Approved By Rocky Milford Our Representative James Winder

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