



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.03.29 @ 02:20:16

End Date: 2012.03.29 @ 09:56:40

Job Ticket #: 46274 DST #: 1

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

Printed: 2012.04.04 @ 11:38:07

Murfin Drilling Co Inc
20-7s-8w Rooks,KS
Reed #1-20
DST # 1
Toronto- LKC "A"
2012.03.29



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 46274

DST#: 1

Test Start: 2012.03.29 @ 02:20:16

GENERAL INFORMATION:

Formation: **Toronto- LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:06:11
 Time Test Ended: 09:56:40
 Interval: **3067.00 ft (KB) To 3140.00 ft (KB) (TVD)**
 Total Depth: 3140.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

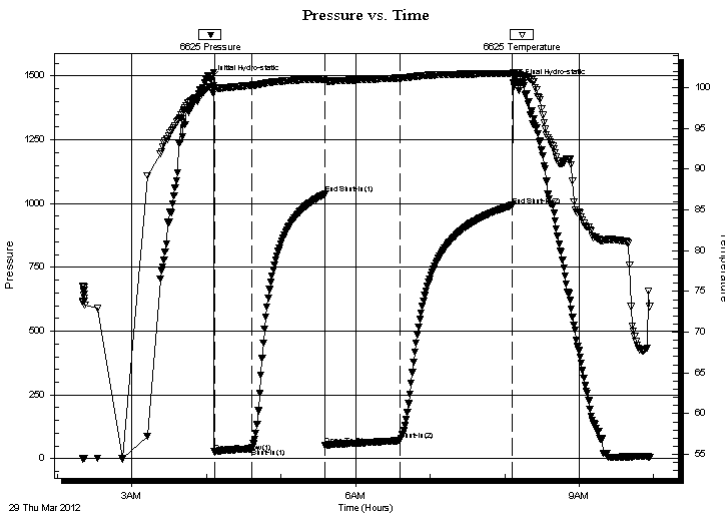
Serial #: 6625

Inside

Press @ Run Depth: 71.09 psig @ 3074.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.29 End Date: 2012.03.29 Last Calib.: 2012.03.29
 Start Time: 02:20:16 End Time: 09:56:40 Time On Btm: 2012.03.29 @ 04:03:41
 Time Off Btm: 2012.03.29 @ 08:10:40

TEST COMMENT: 30-IFP-w k bl thru-out 1/4" to 1" bl
 60-ISIP-no bl
 60-FFP-surface bl thru-out
 90-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1488.01	100.17	Initial Hydro-static
3	26.34	99.99	Open To Flow (1)
33	39.41	100.29	Shut-In(1)
92	1036.83	101.10	End Shut-In(1)
92	51.83	100.85	Open To Flow (2)
152	71.09	101.20	Shut-In(2)
243	993.43	101.77	End Shut-In(2)
247	1471.09	101.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	CO	0.10
70.00	O&GCM 10%G10%O80%M	0.34

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS
Reed #1-20
 Job Ticket: 46274 **DST#: 1**
 Test Start: 2012.03.29 @ 02:20:16

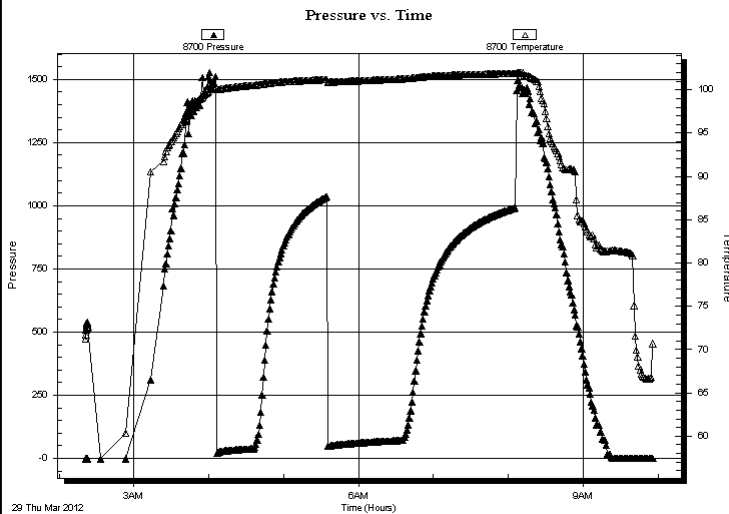
GENERAL INFORMATION:

Formation: **Toronto- LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 04:06:11 Tester: Ray Schwager
 Time Test Ended: 09:56:40 Unit No: 42
 Interval: **3067.00 ft (KB) To 3140.00 ft (KB) (TVD)** Reference Elevations: 1923.00 ft (KB)
 Total Depth: 3140.00 ft (KB) (TVD) 1912.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8700 Outside

Press @RunDepth: psig @ 3074.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.29 End Date: 2012.03.29 Last Calib.: 2012.03.29
 Start Time: 02:21:16 End Time: 09:56:10 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/4" to 1" bl
 60-ISIP-no bl
 60-FFP-surface bl thru-out
 90-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	CO	0.10
70.00	O&GCM 10%G10%O80%M	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

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 46274

DST#: 1

Test Start: 2012.03.29 @ 02:20:16

Tool Information

Drill Pipe:	Length: 2822.00 ft	Diameter: 3.80 inches	Volume: 39.59 bbl	Tool Weight: 2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 40.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3067.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.00 ft			
Tool Length:	101.00 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			3040.00	
Shut In Tool	5.00			3045.00	
Hydraulic tool	5.00			3050.00	
Jars	5.00			3055.00	
Safety Joint	2.00			3057.00	
Packer	5.00			3062.00	28.00 Bottom Of Top Packer
Packer	5.00			3067.00	
Stubb	1.00			3068.00	
Perforations	6.00			3074.00	
Recorder	0.00	6625	Inside	3074.00	
Recorder	0.00	8700	Outside	3074.00	
Blank Spacing	63.00			3137.00	
Bullnose	3.00			3140.00	73.00 Bottom Packers & Anchor

Total Tool Length: 101.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 46274

DST#: 1

Test Start: 2012.03.29 @ 02:20:16

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 55.00 sec/qt

Water Loss: 7.11 in³

Resistivity: ohm.m

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

34 deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	CO	0.098
70.00	O&GCM 10%G10%O80%M	0.344

Total Length: 90.00 ft Total Volume: 0.442 bbl

Num Fluid Samples: 0

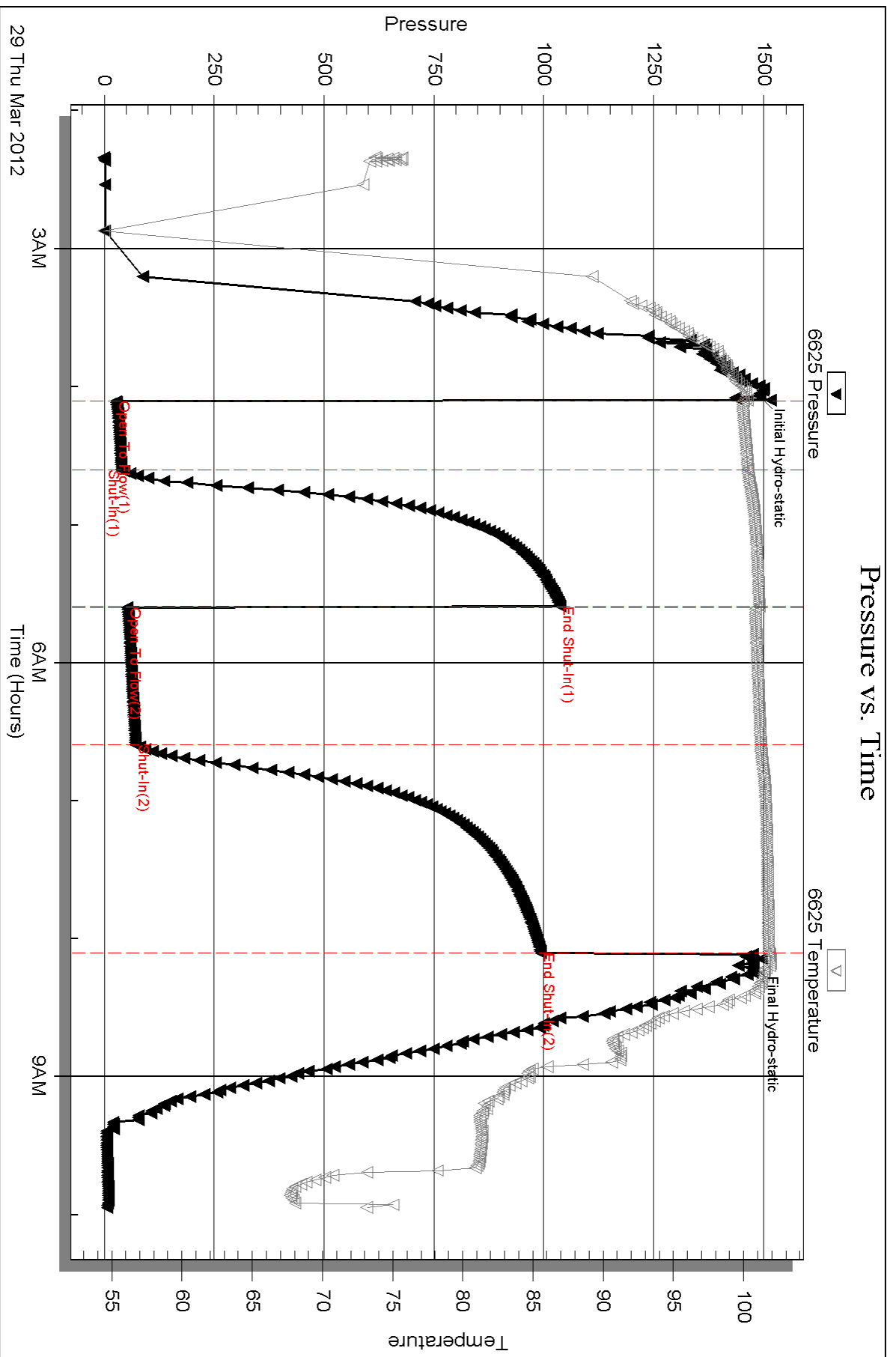
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

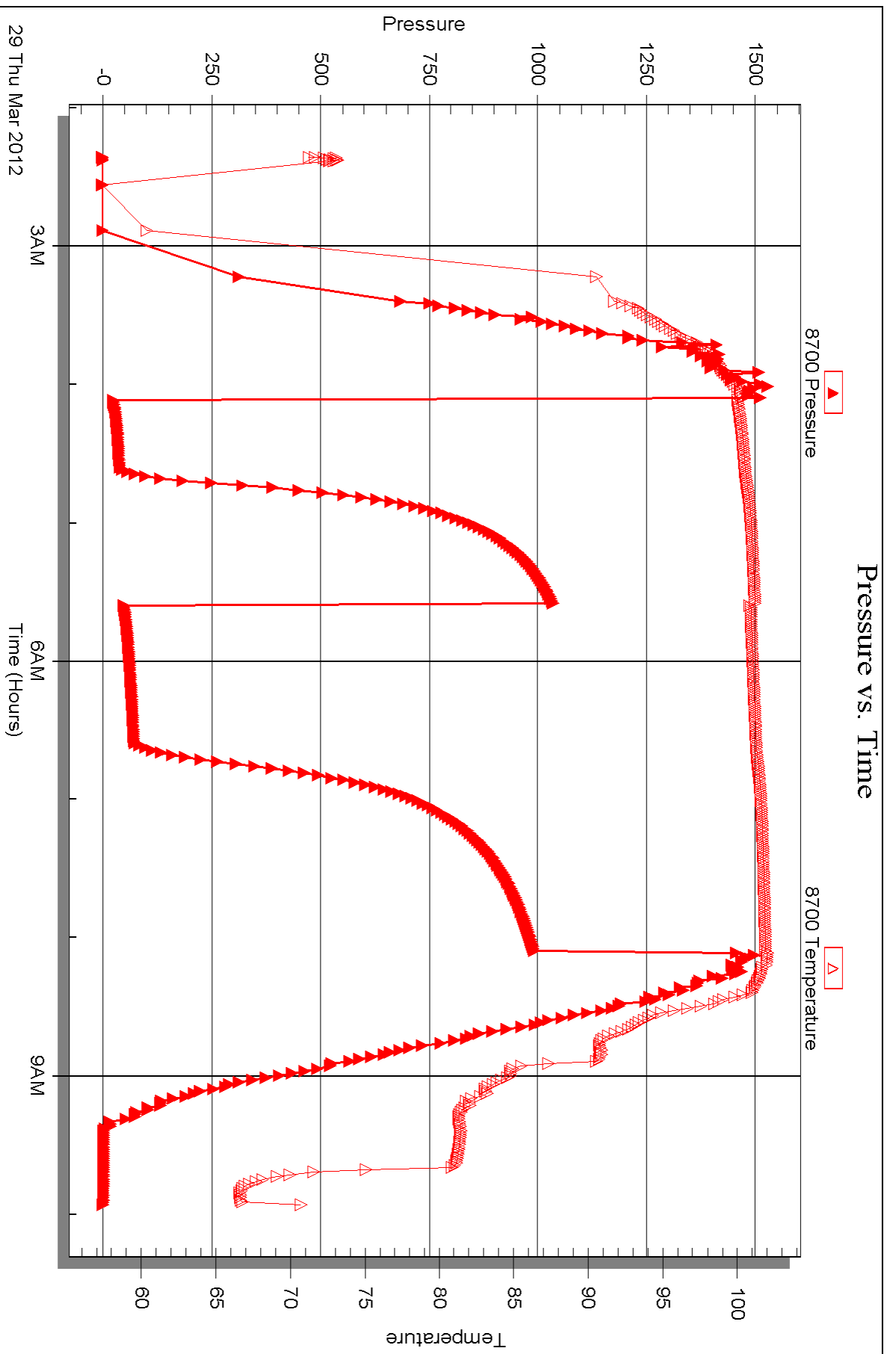


Serial #: 8700

Outside Murfin Drilling Co Inc

Reed #1-20

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 46274

Printed: 2012.04.04 @ 11:38:10



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.03.29 @ 17:05:16

End Date: 2012.03.29 @ 23:13:40

Job Ticket #: 46275 DST #: 2

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

Printed: 2012.04.04 @ 11:37:13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 46275

DST#: 2

Test Start: 2012.03.29 @ 17:05:16

GENERAL INFORMATION:

Formation: **LKC B-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:42:11
 Time Test Ended: 23:13:40
 Interval: **3136.00 ft (KB) To 3180.00 ft (KB) (TVD)**
 Total Depth: 3180.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

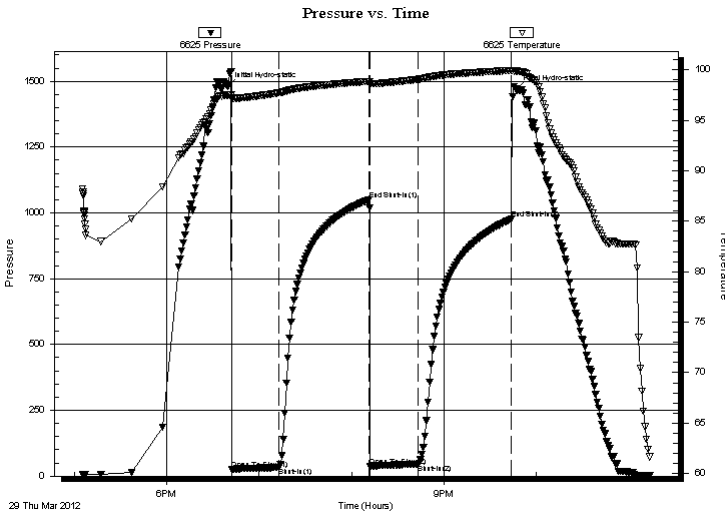
Serial #: 6625

Inside

Press @ Run Depth: 44.74 psig @ 3144.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.29 End Date: 2012.03.29 Last Calib.: 2012.03.29
 Start Time: 17:05:16 End Time: 23:13:40 Time On Btm: 2012.03.29 @ 18:39:41
 Time Off Btm: 2012.03.29 @ 21:47:10

TEST COMMENT: 30-IFP-surface bl thru-out
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1479.33	97.49	Initial Hydro-static
3	26.12	97.21	Open To Flow (1)
33	32.54	97.70	Shut-In(1)
92	1049.58	98.85	End Shut-In(1)
93	37.85	98.64	Open To Flow (2)
124	44.74	99.05	Shut-In(2)
184	975.76	99.93	End Shut-In(2)
188	1467.43	99.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	SOCM 2%O98%M	0.15

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 46275 **DST#: 2**

Test Start: 2012.03.29 @ 17:05:16

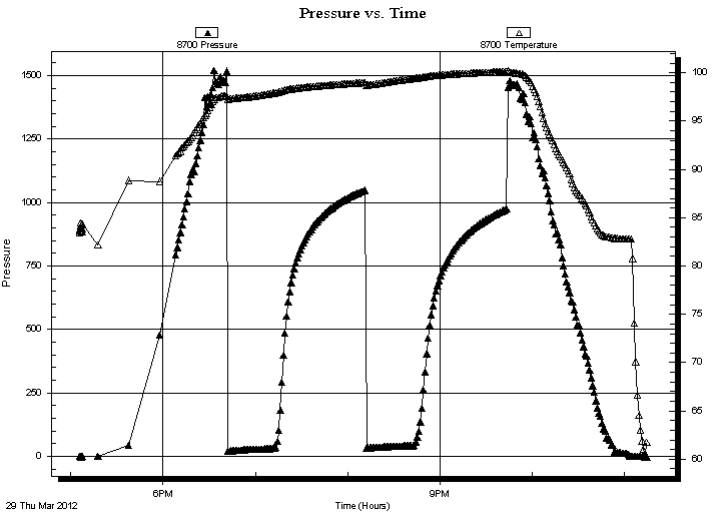
GENERAL INFORMATION:

Formation: **LKC B-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:42:11
 Time Test Ended: 23:13:40
Interval: 3136.00 ft (KB) To 3180.00 ft (KB) (TVD)
 Total Depth: 3180.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8700 Outside

Press @RunDepth: psig @ 3144.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.29 End Date: 2012.03.29 Last Calib.: 2012.03.29
 Start Time: 17:05:46 End Time: 23:14:40 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP-surface bl thru-out
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
30.00	SOCM 2%O98%M	0.15

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc
250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS
Reed #1-20
Job Ticket: 46275 **DST#: 2**
Test Start: 2012.03.29 @ 17:05:16

Tool Information

Drill Pipe:	Length: 2888.00 ft	Diameter: 3.80 inches	Volume: 40.51 bbl	Tool Weight: 2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 41.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3136.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 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			3109.00	
Shut In Tool	5.00			3114.00	
Hydraulic tool	5.00			3119.00	
Jars	5.00			3124.00	
Safety Joint	2.00			3126.00	
Packer	5.00			3131.00	28.00 Bottom Of Top Packer
Packer	5.00			3136.00	
Stubb	1.00			3137.00	
Perforations	7.00			3144.00	
Recorder	0.00	6625	Inside	3144.00	
Recorder	0.00	8700	Outside	3144.00	
Blank Spacing	33.00			3177.00	
Bullnose	3.00			3180.00	44.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 46275

DST#: 2

Test Start: 2012.03.29 @ 17:05:16

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 7.87 in³

Resistivity: ohm.m

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	SOCM2%O98%M	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

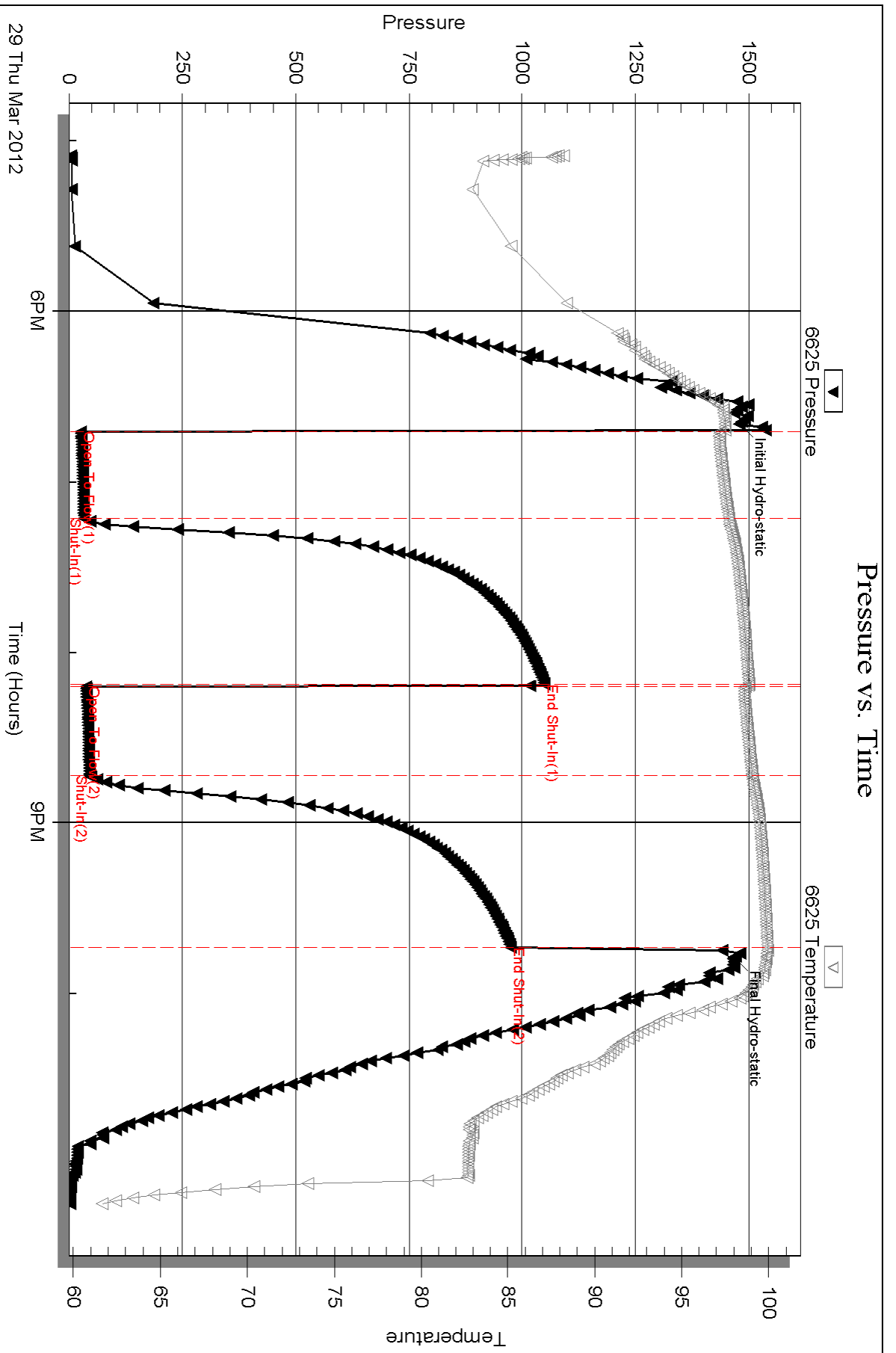
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

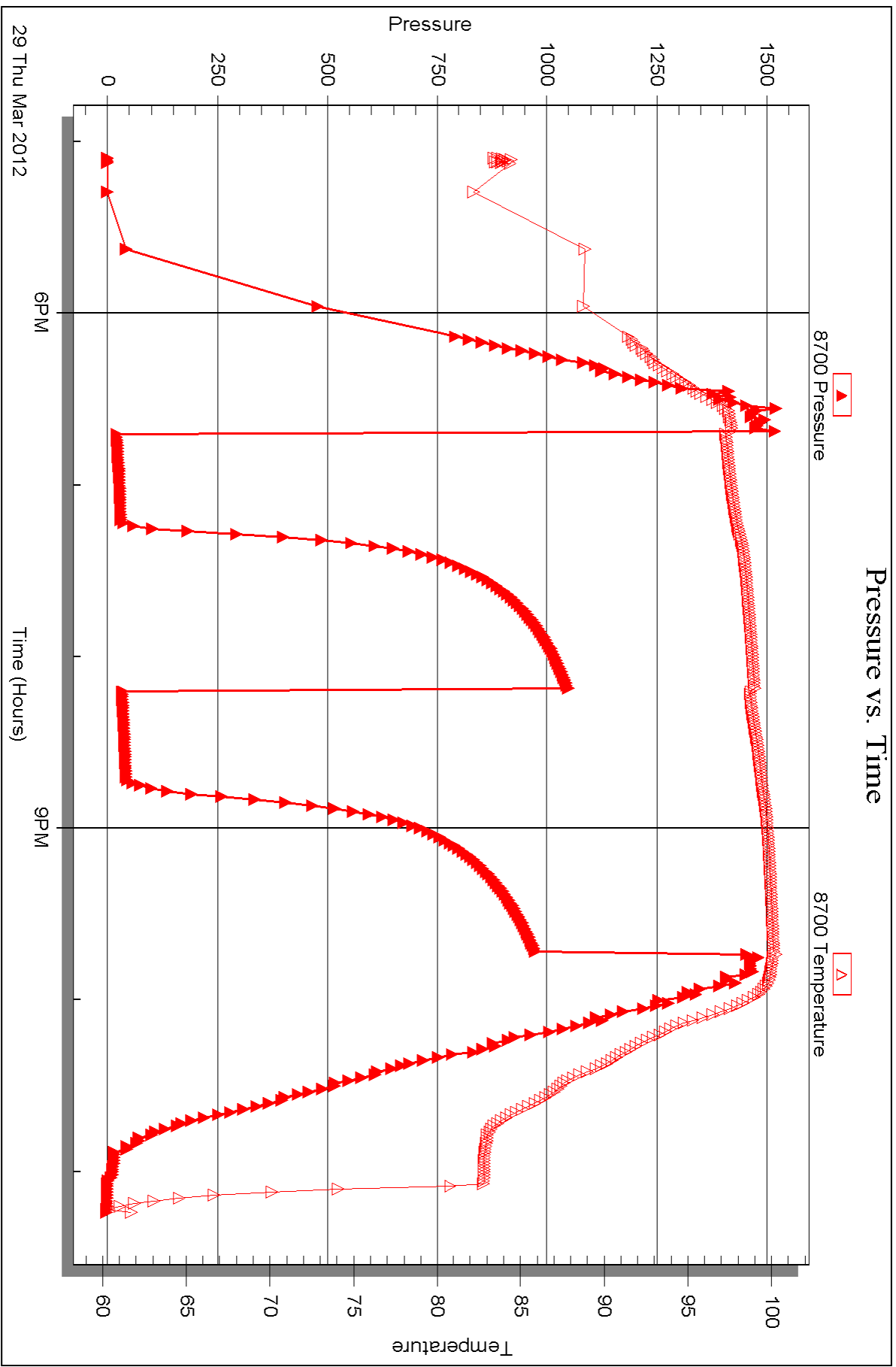


Serial #: 8700

Outside Murfin Drilling Co Inc

Reed #1-20

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.03.30 @ 04:55:11

End Date: 2012.03.30 @ 12:10:05

Job Ticket #: 47351 DST #: 3

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

Printed: 2012.04.04 @ 11:35:23



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47351

DST#: 3

Test Start: 2012.03.30 @ 04:55:11

GENERAL INFORMATION:

Formation: **LKC E-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:23:06
 Time Test Ended: 12:10:05
 Interval: **3177.00 ft (KB) To 3203.00 ft (KB) (TVD)**
 Total Depth: 3203.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

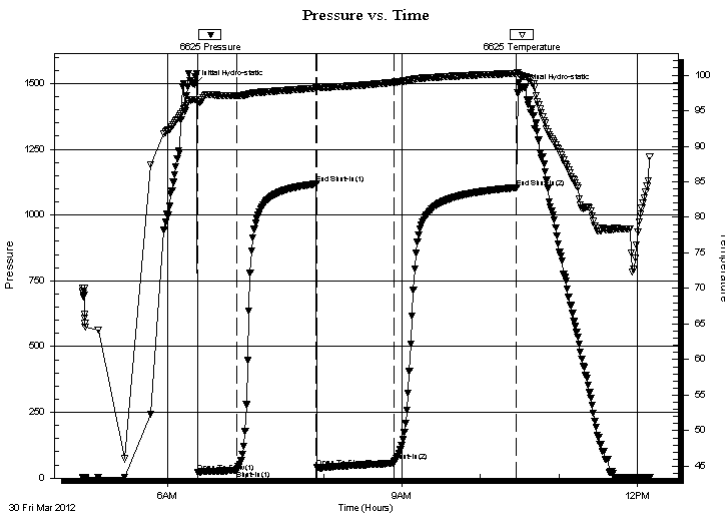
Serial #: 6625

Inside

Press @ Run Depth: 62.98 psig @ 3178.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.30 End Date: 2012.03.30 Last Calib.: 2012.03.30
 Start Time: 04:55:11 End Time: 12:10:05 Time On Btm: 2012.03.30 @ 06:20:36
 Time Off Btm: 2012.03.30 @ 10:31:35

TEST COMMENT: 30-IFP-w k bl 1/4"to 3/4"bl
 60-ISIP-no bl
 60-FFP-surface to 1/4"bl
 90-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1495.38	96.53	Initial Hydro-static
3	21.88	96.28	Open To Flow (1)
33	30.95	97.09	Shut-In(1)
94	1118.63	98.15	End Shut-In(1)
94	40.31	98.12	Open To Flow (2)
154	62.98	98.99	Shut-In(2)
247	1104.49	100.23	End Shut-In(2)
251	1480.12	99.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	CO	0.02
65.00	OCM 10%O90%M	0.32

* 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
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS
Reed #1-20
Job Ticket: 47351 **DST#: 3**
Test Start: 2012.03.30 @ 04:55:11

Tool Information

Drill Pipe:	Length: 2919.00 ft	Diameter: 3.80 inches	Volume: 40.95 bbl	Tool Weight:	2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 42.13 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	3177.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	54.00 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			3150.00	
Shut In Tool	5.00			3155.00	
Hydraulic tool	5.00			3160.00	
Jars	5.00			3165.00	
Safety Joint	2.00			3167.00	
Packer	5.00			3172.00	28.00 Bottom Of Top Packer
Packer	5.00			3177.00	
Stubb	1.00			3178.00	
Recorder	0.00	6625	Inside	3178.00	
Recorder	0.00	8700	Outside	3178.00	
Perforations	22.00			3200.00	
Bullnose	3.00			3203.00	26.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47351

DST#: 3

Test Start: 2012.03.30 @ 04:55:11

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.89 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	CO	0.025
65.00	OCM 10%O90%M	0.320

Total Length: 70.00 ft Total Volume: 0.345 bbl

Num Fluid Samples: 0

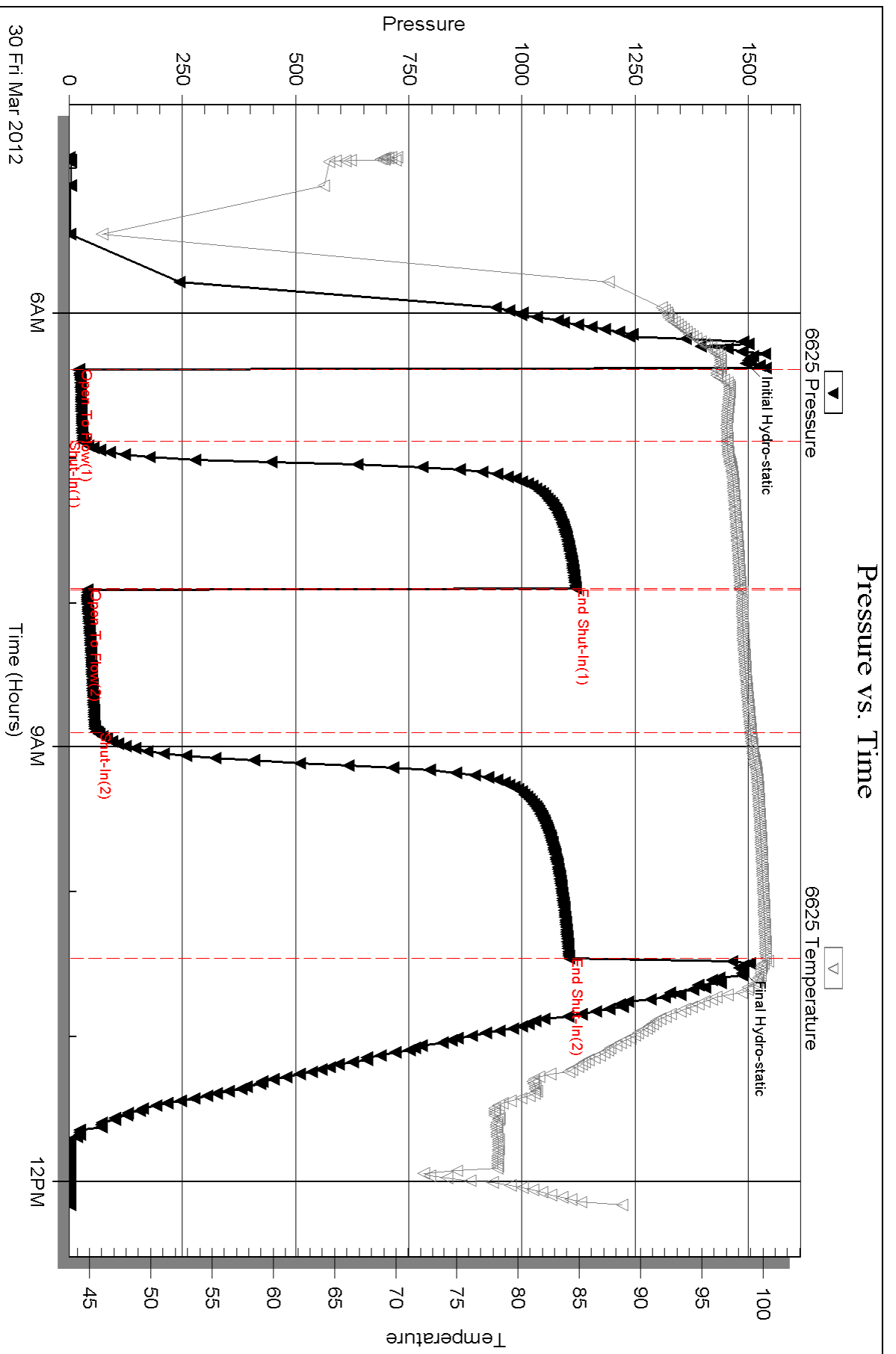
Num Gas Bombs: 0

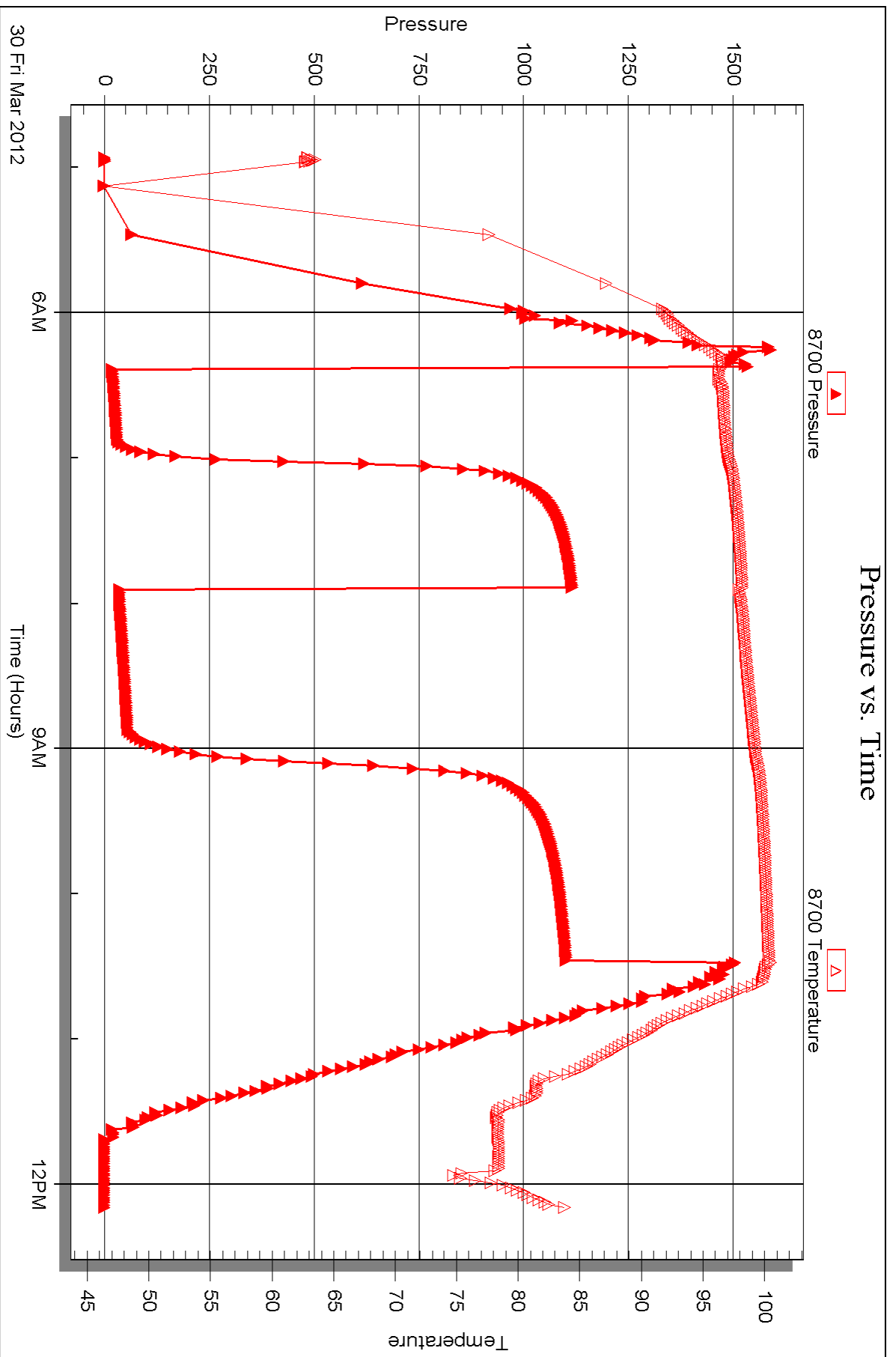
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.03.31 @ 01:05:59

End Date: 2012.03.31 @ 07:16:53

Job Ticket #: 47352 DST #: 4

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

Printed: 2012.04.04 @ 11:33:47



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47352

DST#: 4

Test Start: 2012.03.31 @ 01:05:59

GENERAL INFORMATION:

Formation: **LKC I,J,K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:44:54
 Time Test Ended: 07:16:53
 Interval: **3255.00 ft (KB) To 3326.00 ft (KB) (TVD)**
 Total Depth: 3326.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

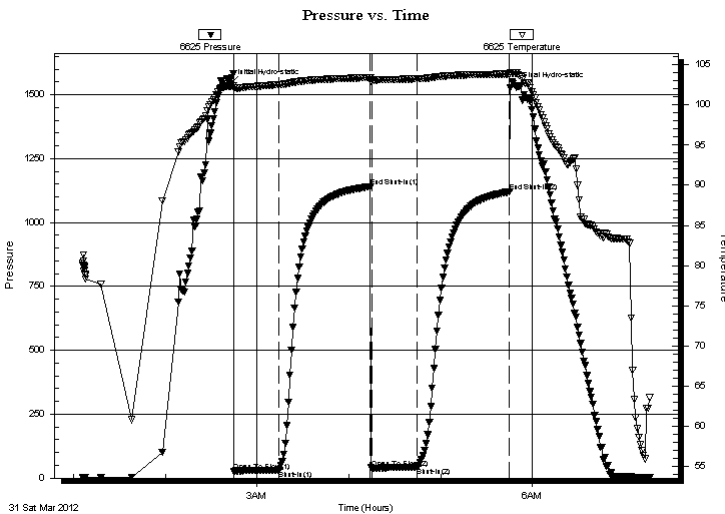
Serial #: 6625

Inside

Press @ Run Depth: 44.19 psig @ 3260.00 ft (KB)
 Start Date: 2012.03.31 End Date: 2012.03.31
 Start Time: 01:05:59 End Time: 07:16:53
 Capacity: 8000.00 psig
 Last Calib.: 2012.03.31
 Time On Btm: 2012.03.31 @ 02:42:54
 Time Off Btm: 2012.03.31 @ 05:48:53

TEST COMMENT: 30-IFP-surface bl died in 27 min
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1542.80	102.38	Initial Hydro-static
2	25.58	102.19	Open To Flow (1)
32	31.94	102.55	Shut-In(1)
91	1140.84	103.43	End Shut-In(1)
92	39.38	103.18	Open To Flow (2)
122	44.19	103.28	Shut-In(2)
182	1120.09	103.88	End Shut-In(2)
186	1532.27	104.01	Final Hydro-static

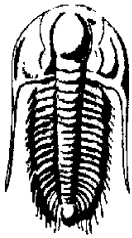
Recovery

Length (ft)	Description	Volume (bbl)
30.00	OCM 10%O90%M	0.15

* Recovery from multiple tests

Gas Rates

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



TRILLOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47352

DST#: 4

Test Start: 2012.03.31 @ 01:05:59

GENERAL INFORMATION:

Formation: LKC I,J,K

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:44:54

Time Test Ended: 07:16:53

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3255.00 ft (KB) To 3326.00 ft (KB) (TVD)

Reference Elevations: 1923.00 ft (KB)

Total Depth: 3326.00 ft (KB) (TVD)

1912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8700 Outside

Press @RunDepth: psig @ 3260.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.31

End Date:

2012.03.31

Last Calib.:

2012.03.31

Start Time: 01:06:59

End Time:

07:15:53

Time On Btm:

Time Off Btm:

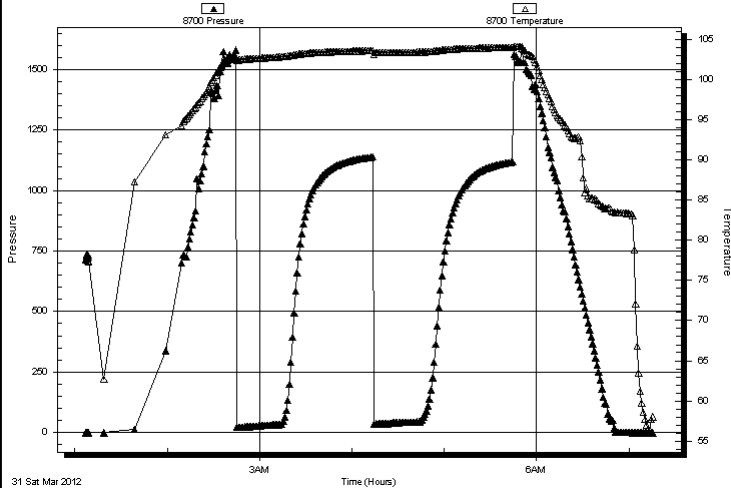
TEST COMMENT: 30-IFP-surface bl died in 27 min

60-ISIP-no bl

30-FFP-no bl

60-FSIP-no bl

Pressure vs. Time



PRESSURE SUMMARY

Table with 4 columns: Time (Min.), Pressure (psig), Temp (deg F), Annotation. The table is currently empty.

Recovery

Table with 3 columns: Length (ft), Description, Volume (bbl). Row 1: 30.00, OCM 10%O90%M, 0.15. Other rows are empty.

Gas Rates

Table with 4 columns: Choke (inches), Pressure (psig), Gas Rate (Mcf/d). The table is currently empty.

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47352

DST#: 4

Test Start: 2012.03.31 @ 01:05:59

Tool Information

Drill Pipe:	Length: 3012.00 ft	Diameter: 3.80 inches	Volume: 42.25 bbl	Tool Weight:	2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 43.43 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	66000.00 lb
Depth to Top Packer:	3255.00 ft			Final	66000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	71.00 ft				
Tool Length:	99.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3228.00	
Shut In Tool	5.00			3233.00	
Hydraulic tool	5.00			3238.00	
Jars	5.00			3243.00	
Safety Joint	2.00			3245.00	
Packer	5.00			3250.00	28.00 Bottom Of Top Packer
Packer	5.00			3255.00	
Stubb	1.00			3256.00	
Perforations	4.00			3260.00	
Recorder	0.00	6625	Inside	3260.00	
Recorder	0.00	8700	Outside	3260.00	
Blank Spacing	63.00			3323.00	
Bullnose	3.00			3326.00	71.00 Bottom Packers & Anchor

Total Tool Length: 99.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47352

DST#: 4

Test Start: 2012.03.31 @ 01:05:59

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 55.00 sec/qt

Water Loss: 6.76 in³

Resistivity: ohm.m

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OCM 10%O90%M	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

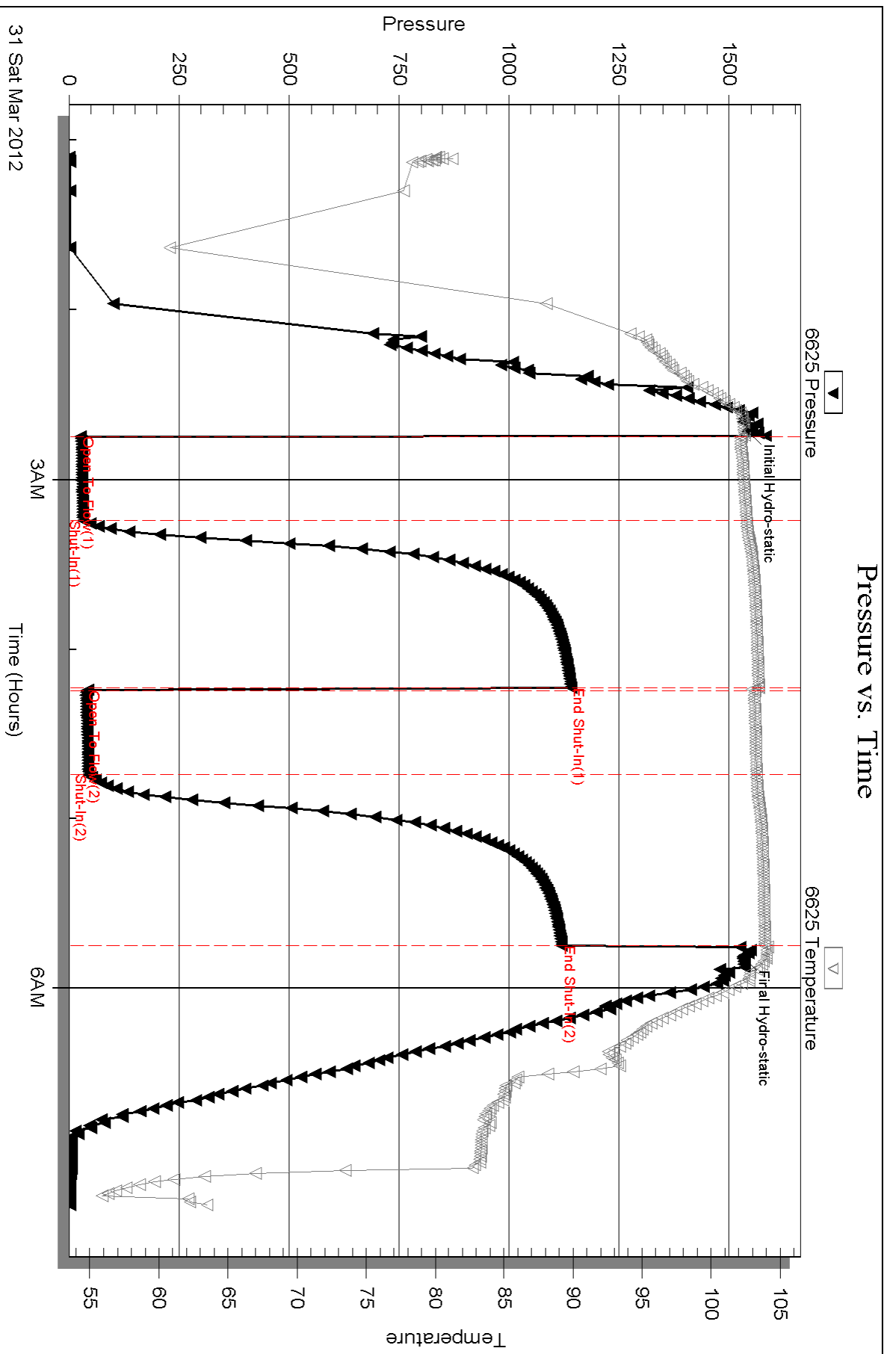
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

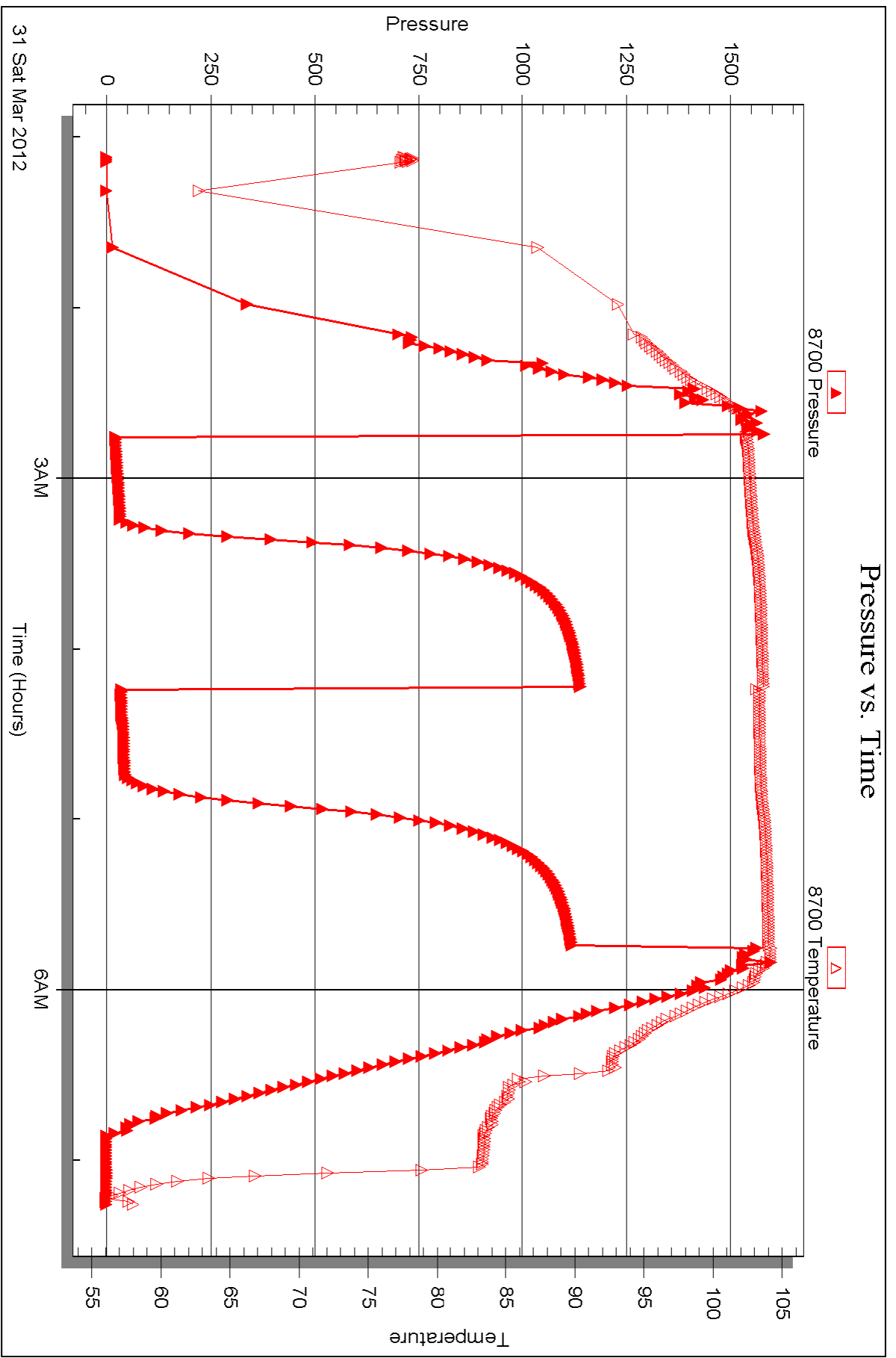


Serial #: 8700

Outside Murfin Drilling Co Inc

Reed #1-20

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 47352

Printed: 2012.04.04 @ 11:33:53



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.03.31 @ 16:25:39

End Date: 2012.03.31 @ 22:43:33

Job Ticket #: 47353 DST #: 5

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

Printed: 2012.04.04 @ 11:28:07



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47353

DST#: 5

Test Start: 2012.03.31 @ 16:25:39

GENERAL INFORMATION:

Formation: **Congl, Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 18:11:34
 Tester: Ray Schwager
 Time Test Ended: 22:43:33
 Unit No: 42
 Interval: **3377.00 ft (KB) To 3420.00 ft (KB) (TVD)**
 Reference Elevations: 1923.00 ft (KB)
 Total Depth: 3420.00 ft (KB) (TVD)
 1912.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 11.00 ft

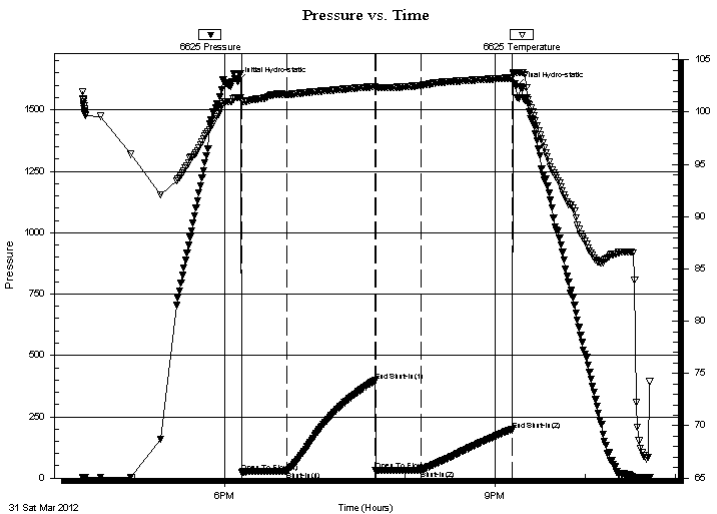
Serial #: 6625

Inside

Press @ RunDepth: 32.27 psig @ 3384.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.31 End Date: 2012.03.31 Last Calib.: 2012.03.31
 Start Time: 16:25:39 End Time: 22:43:33 Time On Btm: 2012.03.31 @ 18:09:04
 Time Off Btm: 2012.03.31 @ 21:14:03

TEST COMMENT: 30-IFP-w k bl 1/8" to 1/4" bl
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1616.32	101.39	Initial Hydro-static
3	24.85	101.03	Open To Flow (1)
33	28.81	101.67	Shut-In(1)
91	396.48	102.43	End Shut-In(1)
92	30.27	102.34	Open To Flow (2)
122	32.27	102.56	Shut-In(2)
183	196.48	103.27	End Shut-In(2)
185	1595.50	103.76	Final Hydro-static

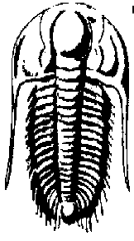
Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM1%O99%M	0.10

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS
Reed #1-20
Job Ticket: 47353 **DST#: 5**
Test Start: 2012.03.31 @ 16:25:39

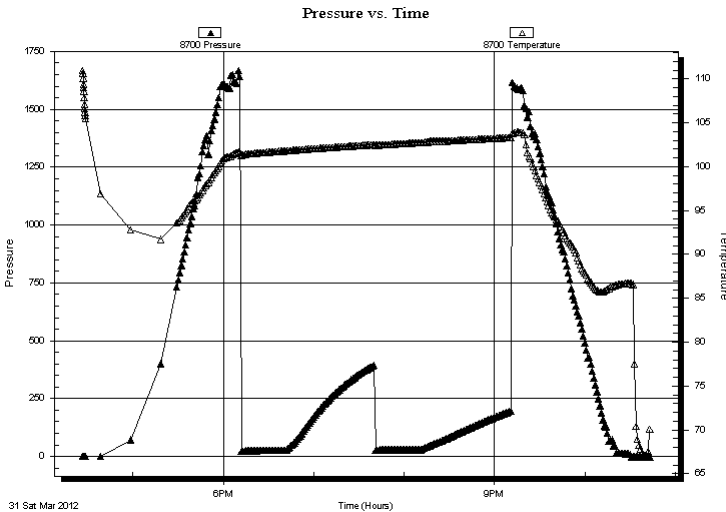
GENERAL INFORMATION:

Formation: **Congl, Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:11:34
Time Test Ended: 22:43:33
Interval: **3377.00 ft (KB) To 3420.00 ft (KB) (TVD)**
Total Depth: 3420.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 42
Reference Elevations: 1923.00 ft (KB)
1912.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8700 Outside
Press @ Run Depth: psig @ 3384.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.03.31 End Date: 2012.03.31 Last Calib.: 2012.03.31
Start Time: 16:26:36 End Time: 22:43:00 Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl 1/8" to 1/4" bl
60-ISIP-no bl
30-FFP-no bl
60-FSIP-no bl

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM1%O99%M	0.10

* 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
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS
Reed #1-20
Job Ticket: 47353 **DST#: 5**
Test Start: 2012.03.31 @ 16:25:39

Tool Information

Drill Pipe:	Length: 3137.00 ft	Diameter: 3.80 inches	Volume: 44.00 bbl	Tool Weight: 2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 45.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3377.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	71.00 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			3350.00	
Shut In Tool	5.00			3355.00	
Hydraulic tool	5.00			3360.00	
Jars	5.00			3365.00	
Safety Joint	2.00			3367.00	
Packer	5.00			3372.00	28.00 Bottom Of Top Packer
Packer	5.00			3377.00	
Stubb	1.00			3378.00	
Perforations	6.00			3384.00	
Recorder	0.00	6625	Inside	3384.00	
Recorder	0.00	8700	Outside	3384.00	
Blank Spacing	33.00			3417.00	
Bullnose	3.00			3420.00	43.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47353

DST#: 5

Test Start: 2012.03.31 @ 16:25:39

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 6.78 in³

Resistivity: ohm.m

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	SOCM1%O99%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

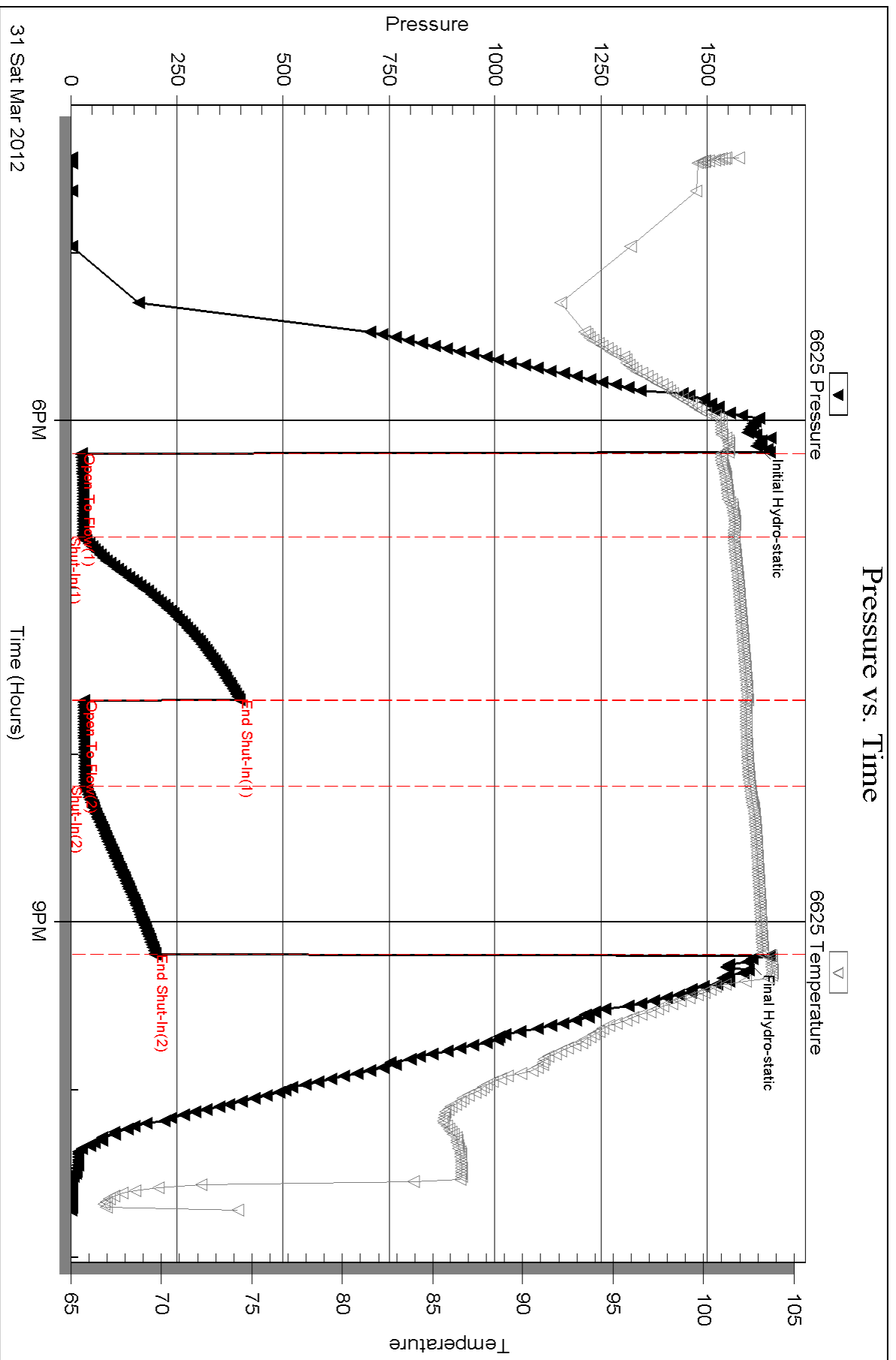
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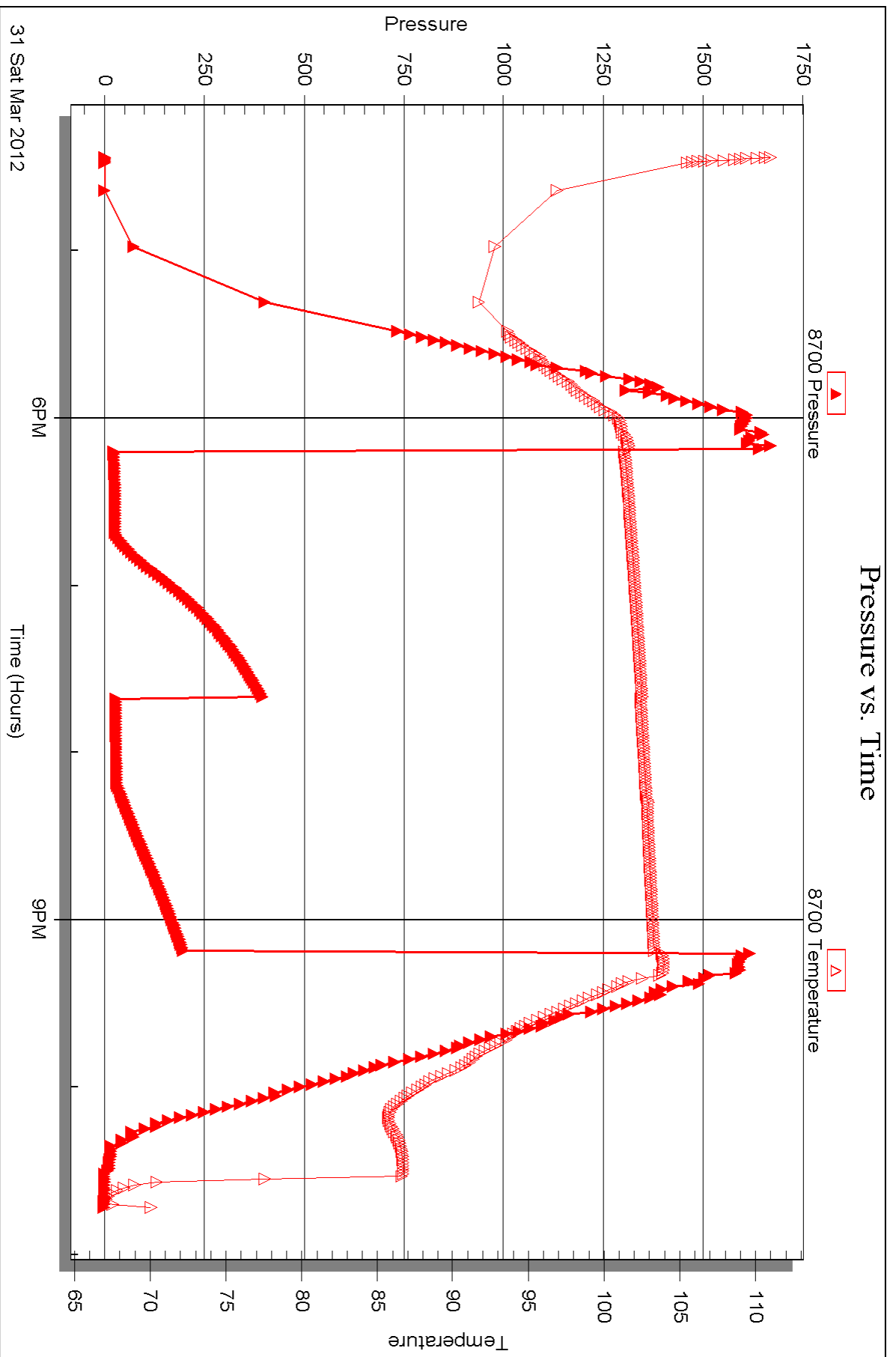
Laboratory Name:

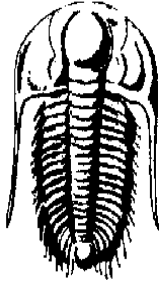
Laboratory Location:

Recovery Comments:

Pressure vs. Time







TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water
Ste 300
Wichita KS 67202-1216

ATTN: Ken Dean

Reed #1-20

20-7s-8w Rooks,KS

Start Date: 2012.04.01 @ 04:25:13

End Date: 2012.04.01 @ 10:43:37

Job Ticket #: 47354 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.04.04 @ 11:26:59



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water
 Ste 300
 Wichita KS 67202-1216
 ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47354

DST#: 6

Test Start: 2012.04.01 @ 04:25:13

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:58:08
 Time Test Ended: 10:43:37
 Interval: **3421.00 ft (KB) To 3436.00 ft (KB) (TVD)**
 Total Depth: 3436.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 1923.00 ft (KB)
 1912.00 ft (CF)
 KB to GR/CF: 11.00 ft

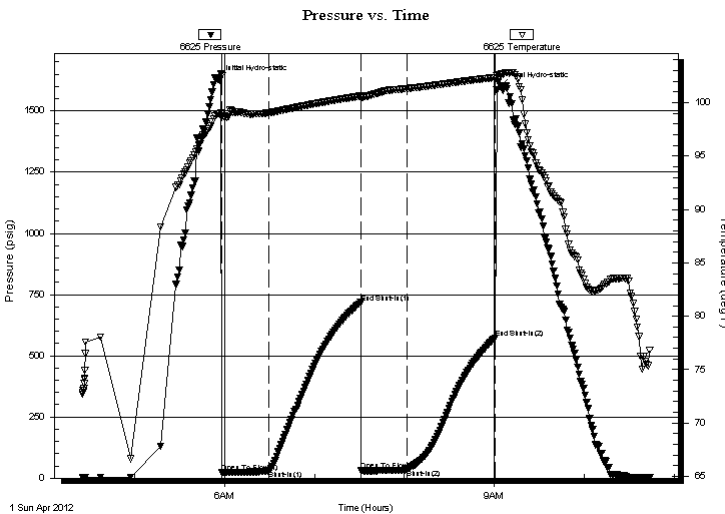
Serial #: 6625

Inside

Press @ Run Depth: 37.04 psig @ 3428.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.04.01 End Date: 2012.04.01 Last Calib.: 2012.04.01
 Start Time: 04:25:13 End Time: 10:43:37 Time On Btm: 2012.04.01 @ 05:56:08
 Time Off Btm: 2012.04.01 @ 09:04:07

TEST COMMENT: 30-IFP-surface bl thru-out
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.20	98.97	Initial Hydro-static
2	23.13	98.58	Open To Flow (1)
34	31.28	99.05	Shut-In(1)
95	717.68	100.61	End Shut-In(1)
95	31.24	100.49	Open To Flow (2)
126	37.04	101.31	Shut-In(2)
185	572.94	102.35	End Shut-In(2)
188	1601.54	102.64	Final Hydro-static

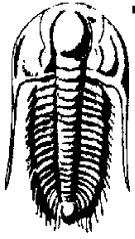
Recovery

Length (ft)	Description	Volume (bbl)
20.00	WM 40%W60%M	0.10

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

20-7s-8w Rooks,KS

Reed #1-20

Job Ticket: 47354

DST#: 6

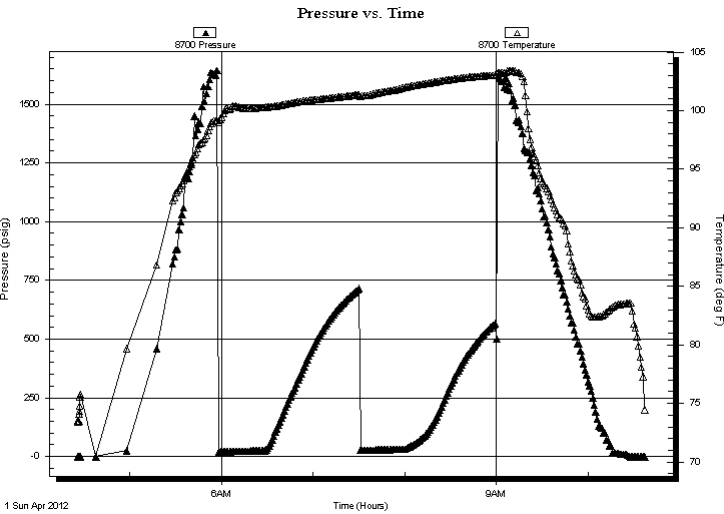
Test Start: 2012.04.01 @ 04:25:13

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:58:08
 Tester: Ray Schwager
 Time Test Ended: 10:43:37
 Unit No: 42
 Interval: **3421.00 ft (KB) To 3436.00 ft (KB) (TVD)**
 Reference Elevations: 1923.00 ft (KB)
 Total Depth: 3436.00 ft (KB) (TVD)
 1912.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 11.00 ft

Serial #: 8700 Outside
 Press @ Run Depth: psig @ 3428.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.04.01 End Date: 2012.04.01 Last Calib.: 2012.04.01
 Start Time: 04:25:45 End Time: 10:37:39 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP-surface bl thru-out
 60-ISIP-no bl
 30-FFP-no bl
 60-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	WM 40%W60%M	0.10

* 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

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47354

DST#: 6

Test Start: 2012.04.01 @ 04:25:13

Tool Information

Drill Pipe:	Length: 3168.00 ft	Diameter: 3.80 inches	Volume: 44.44 bbl	Tool Weight: 2200.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 45.62 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3421.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	43.00 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			3394.00	
Shut In Tool	5.00			3399.00	
Hydraulic tool	5.00			3404.00	
Jars	5.00			3409.00	
Safety Joint	2.00			3411.00	
Packer	5.00			3416.00	28.00 Bottom Of Top Packer
Packer	5.00			3421.00	
Stubb	1.00			3422.00	
Perforations	6.00			3428.00	
Recorder	0.00	6625	Inside	3428.00	
Recorder	0.00	8700	Outside	3428.00	
Perforations	5.00			3433.00	
Bullnose	3.00			3436.00	15.00 Bottom Packers & Anchor

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

20-7s-8w Rooks,KS

250 N Water
Ste 300
Wichita KS 67202-1216
ATTN: Ken Dean

Reed #1-20

Job Ticket: 47354

DST#: 6

Test Start: 2012.04.01 @ 04:25:13

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: 28000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume: bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	WM 40%W60%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

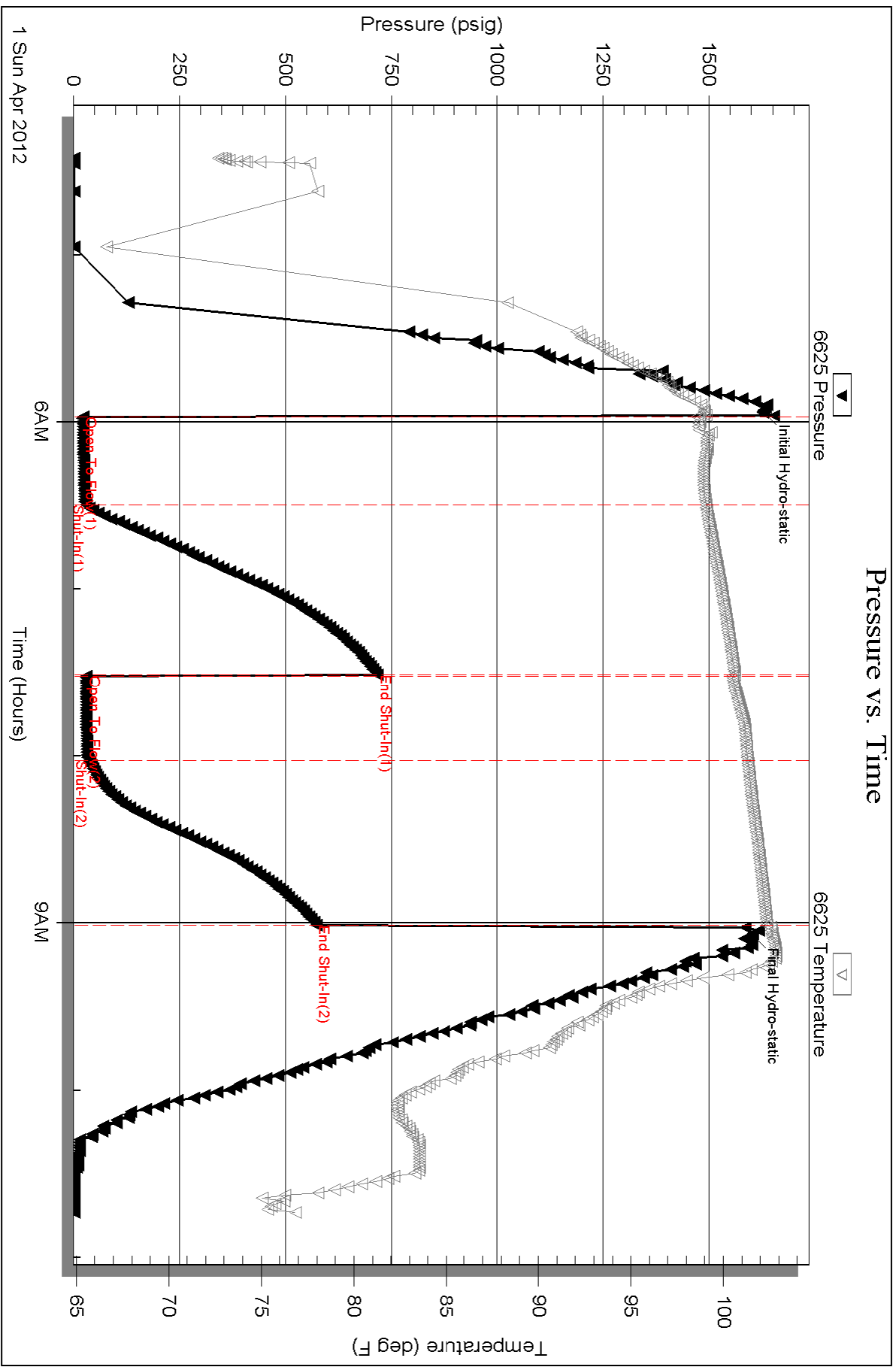
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .23@70F

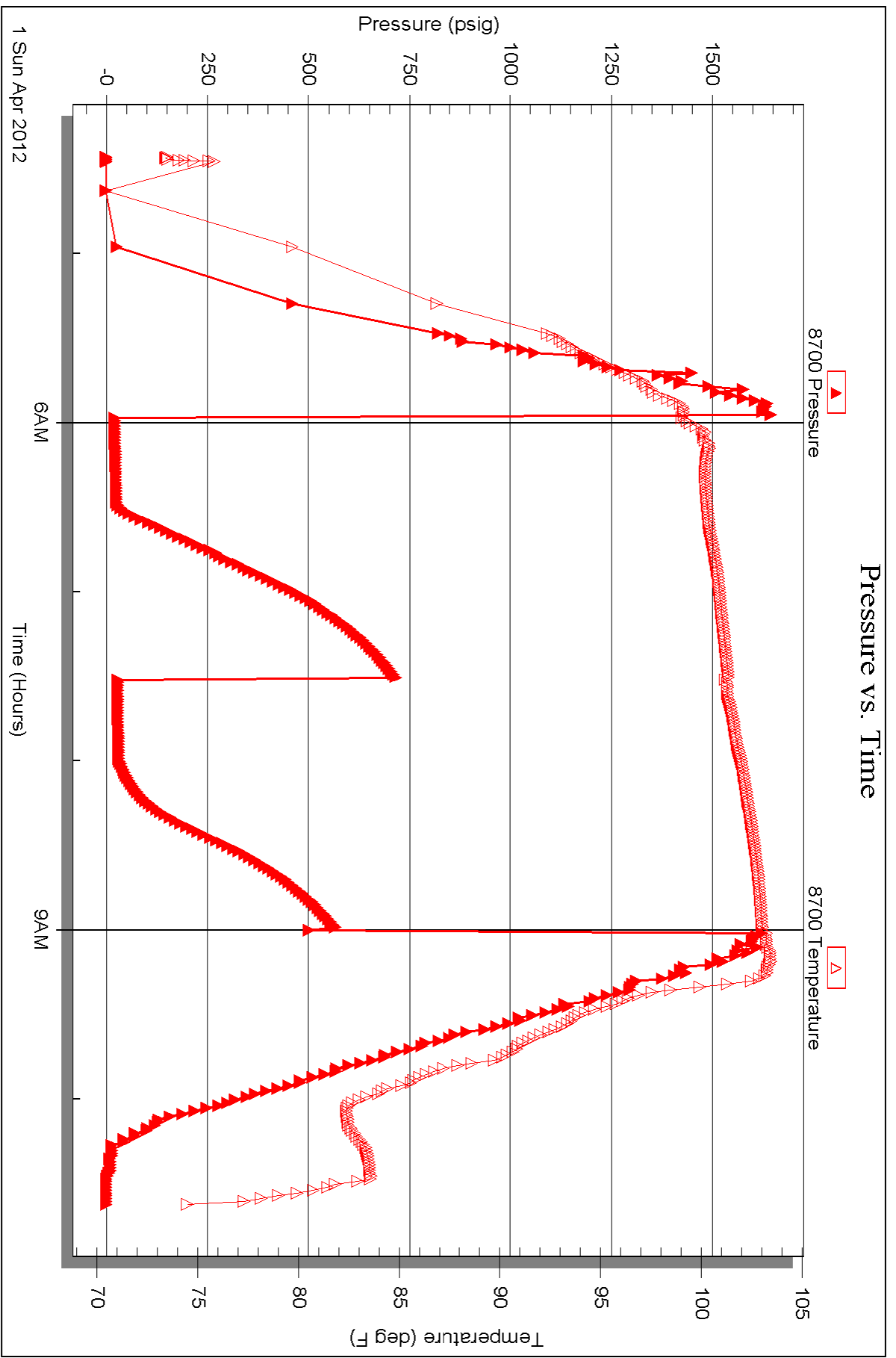


Serial #: 8700

Outside Murfin Drilling Co Inc

Reed #1-20

DST Test Number: 6





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

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Test Ticket

NO. 46274

Well Name & No. Reed #1-20 Test No. 1 Date 3-29-12
 Company MURFIN DRILLING CO INC Elevation 1923 KB 1912 GL
 Address 250 N. WATER, STE. 300 WICHITA, KS 67202-1216
 Co. Rep / Geo. BRAD RINE Rig MURFIN 1921
 Location: Sec. 20 Twp. 7^S Rge. 18^W Co. ROCK State Ks

Interval Tested 3067-3140 Zone Tested TORONTO - LKC "A"
 Anchor Length 73 Drill Pipe Run 2822 Mud Wt. 9.1
 Top Packer Depth 3062 Drill Collars Run 240 Vis 55
 Bottom Packer Depth 3067 Wt. Pipe Run - WL 7.2
 Total Depth 3140 Chlorides 2400 ppm System LCM -
 Blow Description IFP - WEAK BLOW THRU-OUT 1/4" TO 1" BLOW
ISIP - NO BLOW
FFP - SURFACE BLOW THRU-OUT
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>CO</u>				
<u>70</u>	<u>0 & 6 CM</u>	<u>10</u>	<u>10</u>	<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 90 BHT 101 Gravity 34 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1488</u>	<input checked="" type="checkbox"/> Test <u>1125</u>	T-On Location <u>0030</u>
(B) First Initial Flow <u>26</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0220</u>
(C) First Final Flow <u>39</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0405</u>
(D) Initial Shut-In <u>1036</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0805</u>
(E) Second Initial Flow <u>51</u>	<input type="checkbox"/> Hourly Standby <u>1/2 hr 50</u>	T-Out <u>0956</u>
(F) Second Final Flow <u>71</u>	<input checked="" type="checkbox"/> Mileage <u>96 RT 134.40</u>	Comments
(G) Final Shut-In <u>993</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1471</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>11634.40</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>11634.40</u>	

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

Approved By Brad Rine Our Representative Ray Schwager Thank 404

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.

P.O. Box 1733 • Hays, Kansas 67601

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APR 02 2012
BY: _____

Test Ticket

NO. 46275

Well Name & No. Reed #1-20 Test No. 2 Date 3-29-12
 Company Murfin Drilling Co. Inc Elevation 1923 KB 1912 GL
 Address 250 N. WATER, STE 300 WICHITA, KS 67202-1216
 Co. Rep / Geo. Brad Rine Rig Murfin rig 21
 Location: Sec. 20 Twp. 7^s Rge. 18^w Co. Rooks State Ks

Interval Tested 3136-3180 Zone Tested LKC B-0
 Anchor Length 44 Drill Pipe Run 2888 Mud Wt. 9.1
 Top Packer Depth 3131 Drill Collars Run 240 Vis 57
 Bottom Packer Depth 3136 Wt. Pipe Run - WL 8
 Total Depth 3180 Chlorides 4000 ppm System LCM -

Blow Description TFP - SURFACE BLOW THROUGH
TSIP - NO BLOW
FFP - NO BLOW
FSIP - NO BLOW

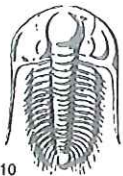
Rec	Feet of	%gas	%oil	%water	%mud
30	50 CM	2		98	

Rec Total 30 BHT 100 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1479</u>	<input checked="" type="checkbox"/> Test <u>1125</u>	T-On Location <u>1600</u>
(B) First Initial Flow <u>26</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1705</u>
(C) First Final Flow <u>32</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1840</u>
(D) Initial Shut-In <u>1049</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2140</u>
(E) Second Initial Flow <u>37</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2313</u>
(F) Second Final Flow <u>44</u>	<input checked="" type="checkbox"/> Mileage <u>96RT 134.40</u>	Comments _____
(G) Final Shut-In <u>925</u>	<input type="checkbox"/> Sampler	_____
(H) Final Hydrostatic <u>1467</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>1584.40</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1584.40</u>	

Approved By Brad Rine Our Representative Ray Schwager *THANK YOU*

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.

P.O. Box 1733 • Hays, Kansas 67601

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APR 02 2012
BY: _____

Test Ticket

NO. 47351

Well Name & No. Reed # 1-20 Test No. 3 Date 3-30-12
 Company Murfin Drilling Co Inc Elevation 1923 KB 1912 GL
 Address 250 N. WATER ST. 300 WICHITA, KS 67202-1216
 Co. Rep / Geo. BRAD RINE Rig Murfin rig 21
 Location: Sec. 20 Twp. 7^s Rge. 18^w Co. ROOKS State KS

Interval Tested 3177-3203 Zone Tested LKC E-F
 Anchor Length 26 Drill Pipe Run 2919 Mud Wt. 9.1
 Top Packer Depth 3172 Drill Collars Run 240 Vis 51
 Bottom Packer Depth 3177 Wt. Pipe Run - WL 8
 Total Depth 3203 Chlorides 4000 ppm System LCM -
 Blow Description IFP - WEAK BLOW 1/4" To 3/4" BLOW
ISTP - NO BLOW
FFP - SURFACE TO 1/4" BLOW
FSTP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Co</u>				
<u>65</u>	<u>OCM</u>		<u>10</u>		<u>90</u>
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 100 Gravity 28 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1495</u>	<input checked="" type="checkbox"/> Test <u>1125'</u>	T-On Location <u>0420</u>
(B) First Initial Flow <u>21</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>0455</u>
(C) First Final Flow <u>30</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>0625</u>
(D) Initial Shut-In <u>1118</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1025</u>
(E) Second Initial Flow <u>40</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1210</u>
(F) Second Final Flow <u>62</u>	<input checked="" type="checkbox"/> Mileage <u>96 RT 134140</u>	Comments _____
(G) Final Shut-In <u>1104</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>1480</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<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>1584.40</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1584.40</u>	

Approved By Brad Rine Our Representative Ray Schwager Thank you

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.

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Test Ticket

NO. 47352

4/10

BY: _____

Well Name & No. Reed #1-20 Test No. 4 Date 3-30-12
 Company MURFIN DRILLING Co INC Elevation 1923 KB 1912 GL
 Address 250 N. WATER, STE 300 WICHITA, KS 67202-1216
 Co. Rep / Geo. BRAD RINE Rig MURFIN Rig 21
 Location: Sec. 20 Twp. 7^s Rge. 18^w Co. ROOKS State Ks

Interval Tested 3255-3326 Zone Tested LKC I, J, K
 Anchor Length 71 Drill Pipe Run 3012 Mud Wt. 9.1
 Top Packer Depth 3250 Drill Collars Run 240 Vis 55
 Bottom Packer Depth 3255 Wt. Pipe Run - WL 6.8
 Total Depth 3326 Chlorides 4000 ppm System LCM TRACE

Blow Description IFP - SURFACE Blow, died in 27 min
TSIP - NO BLOW
FFP - NO BLOW
FSIP - NO BLOW

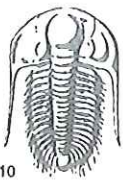
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>OCM</u>	<u>10</u>		<u>90</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 103 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1542</u>	<input checked="" type="checkbox"/> Test <u>1125</u>	T-On Location <u>2350</u>
(B) First Initial Flow <u>25</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0105</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0245</u>
(D) Initial Shut-In <u>1140</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0545</u>
(E) Second Initial Flow <u>39</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0716</u>
(F) Second Final Flow <u>44</u>	<input checked="" type="checkbox"/> Mileage <u>96 RT 134.40</u>	Comments _____
(G) Final Shut-In <u>1120</u>	<input type="checkbox"/> Sampler	_____
(H) Final Hydrostatic <u>1532</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>1584.40</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1584.40</u>	

Approved By Brad Rine Our Representative Ray Schwager Thank you

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TRILOBITE TESTING INC.

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BY: _____

Test Ticket

NO. 47353

Well Name & No. Reed #1-20 Test No. 5 Date 3-31-12
 Company Murfin Drilling Co Inc Elevation 1923 KB 1912 GL
 Address 250 N. WATER, STE 300 WICH. TA, KS 67202-1216
 Co. Rep / Geo. BRAD RINE Rig Murfin rig 21
 Location: Sec. 20 Twp. 7^s Rge. 18^w Co. Rooks State Ks

Interval Tested 3377-3420 Zone Tested Cond. - Arbuckle
 Anchor Length 43 Drill Pipe Run 3137 Mud Wt. 9.1
 Top Packer Depth 3372 Drill Collars Run 240 Vis 51
 Bottom Packer Depth 3377 Wt. Pipe Run - WL 6.8
 Total Depth 3420 Chlorides 4000 ppm System LCM 2#
 Blow Description IFP - WEAK BLOW Thru-out 1/8" To 1/4" BLOW
ISIP - NO BLOW
FFP - NO BLOW
FSTIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>50 CM</u>		<u>1</u>		<u>99</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 20 BHT 103 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic <u>1616</u>	<input checked="" type="checkbox"/> Test <u>1125'</u>	T-On Location <u>1530</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1625</u>
(C) First Final Flow <u>28</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>1810</u>
(D) Initial Shut-In <u>396</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2110</u>
(E) Second Initial Flow <u>30</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2243</u>
(F) Second Final Flow <u>32</u>	<input checked="" type="checkbox"/> Mileage <u>96 RT 13440</u>	Comments _____
(G) Final Shut-In <u>196</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>1595</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<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>1584.40</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility	

Approved By Brad Rine Our Representative Ray Schwager Thank you 409
 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.

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BY: _____

Test Ticket

NO. 47354

Well Name & No. Reed #1-20 Test No. 6 Date 4-1-12
 Company MURFIN DRILLING CO INC Elevation 1923 KB 1912 GL
 Address 250 N. WATER ST. 300 WICHITA, KS 67202-1216
 Co. Rep / Geo. BRAD RINE Rig MURFIN RIG 21
 Location: Sec. 20 Twp. 7^s Rge. 18^w Co. ROCKS State KO

Interval Tested 3421-3436 Zone Tested ARBuckle
 Anchor Length 15 Drill Pipe Run 3168 Mud Wt. 9.2
 Top Packer Depth 3416 Drill Collars Run 240 Vis 58
 Bottom Packer Depth 3421 Wt. Pipe Run — WL 6.4
 Total Depth 3436 Chlorides 5000 ppm System LCM 1 1/2 #
 Blow Description IFP - SURFACE Blow thru-out
ISTP - NO BLOW
FFP - NO BLOW
FSTP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>WM</u>		<u>40</u>	<u>60</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT 102 Gravity — API RW .23 @ 70° F Chlorides 28000 ppm

(A) Initial Hydrostatic <u>1627</u>	<input checked="" type="checkbox"/> Test <u>1125</u>	T-On Location <u>0350</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0425</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0600</u>
(D) Initial Shut-In <u>717</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0900</u>
(E) Second Initial Flow <u>31</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1043</u>
(F) Second Final Flow <u>37</u>	<input checked="" type="checkbox"/> Mileage <u>96 RT 134.40</u>	Comments _____
(G) Final Shut-In <u>572</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>1601</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<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>1584.40</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1584.40</u>	

Approved By Brad Rine Our Representative RAY SCHWAGER Thank you

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