



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water STE 300
Wichita KS 67202-1216

ATTN: Tom Funk

Schertz #1-28

28-10s-34w Thomas,KS

Start Date: 2012.03.03 @ 10:00:00

End Date: 2012.03.03 @ 19:48:30

Job Ticket #: 45074 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.08 @ 15:53:18



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Company
 250 N Water STE 300
 Wichita KS 67202-1216
 ATTN: Tom Funk

28-10s-34w Thomas,KS

Schertz #1-28

Job Ticket: 45074

DST#: 1

Test Start: 2012.03.03 @ 10:00:00

GENERAL INFORMATION:

Formation: **Kansas City " H-I "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:21:15
 Time Test Ended: 19:48:30
 Interval: **4272.00 ft (KB) To 4340.00 ft (KB) (TVD)**
 Total Depth: 4340.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jace McKinney
 Unit No: 46
 Reference Elevations: 3209.00 ft (KB)
 3196.00 ft (CF)
 KB to GR/CF: 13.00 ft

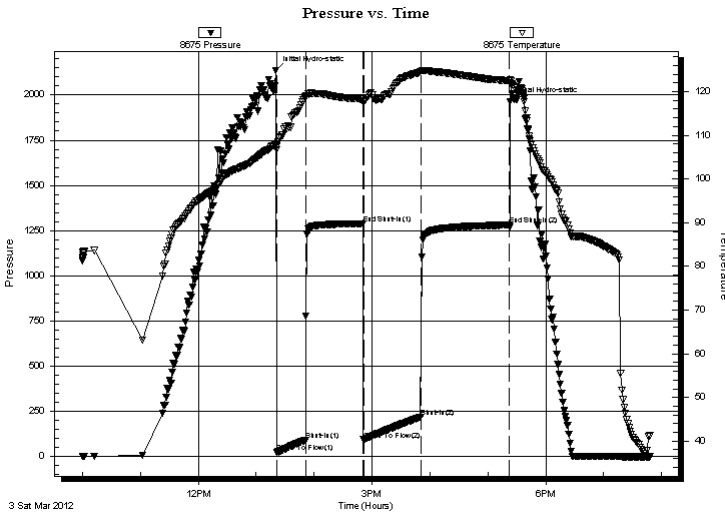
Serial #: 8675

Inside

Press @ Run Depth: 219.37 psig @ 4273.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.03 End Date: 2012.03.03 Last Calib.: 2012.03.03
 Start Time: 10:00:01 End Time: 19:48:30 Time On Btm: 2012.03.03 @ 13:20:15
 Time Off Btm: 2012.03.03 @ 17:23:00

TEST COMMENT: Built to 5" blow
 No return blow
 B.O.B. in 32 min.
 Bled off for 5 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2136.12	107.90	Initial Hydro-static
1	21.83	106.67	Open To Flow (1)
31	90.82	118.72	Shut-In(1)
91	1287.60	118.29	End Shut-In(1)
91	92.65	117.78	Open To Flow (2)
151	219.37	124.54	Shut-In(2)
243	1280.57	122.54	End Shut-In(2)
243	1962.10	122.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 10%M 90%W	0.84
380.00	w 100%W	5.33

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45074

DST#: 1

ATTN: Tom Funk

Test Start: 2012.03.03 @ 10:00:00

Tool Information

Drill Pipe:	Length: 4260.90 ft	Diameter: 3.80 inches	Volume: 59.77 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 59.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.90 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4272.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	88.00 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			4253.00	
Shut In Tool	5.00			4258.00	
Hydraulic tool	5.00			4263.00	
Packer	5.00			4268.00	20.00 Bottom Of Top Packer
Packer	4.00			4272.00	
Stubb	1.00			4273.00	
Recorder	0.00	8675	Inside	4273.00	
Recorder	0.00	8650	Outside	4273.00	
Perforations	30.00			4303.00	
Change Over Sub	1.00			4304.00	
Drill Pipe	32.00			4336.00	
Change Over Sub	1.00			4337.00	
Bullnose	3.00			4340.00	68.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45074

DST#: 1

ATTN: Tom Funk

Test Start: 2012.03.03 @ 10:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	mcw 10%M 90%W	0.842
380.00	w 100%W	5.330

Total Length: 440.00 ft Total Volume: 6.172 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .20 @ 50 F = 50,000



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water STE 300
Wichita KS 67202-1216

ATTN: Tom Funk

Schertz #1-28

28-10s-34w Thomas,KS

Start Date: 2012.03.04 @ 05:45:00

End Date: 2012.03.04 @ 14:11:30

Job Ticket #: 45075 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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**TRILOBITE
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DRILL STEM TEST REPORT

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45075

DST#: 2

ATTN: Tom Funk

Test Start: 2012.03.04 @ 05:45:00

GENERAL INFORMATION:

Formation: **Kansas City " K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:58:30

Time Test Ended: 14:11:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4358.00 ft (KB) To 4385.00 ft (KB) (TVD)

Reference Elevations: 3209.00 ft (KB)

Total Depth: 4385.00 ft (KB) (TVD)

3196.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8675

Inside

Press @ RunDepth: 205.03 psig @ 4359.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.04

End Date:

2012.03.04

Last Calib.: 2012.03.04

Start Time: 05:45:01

End Time:

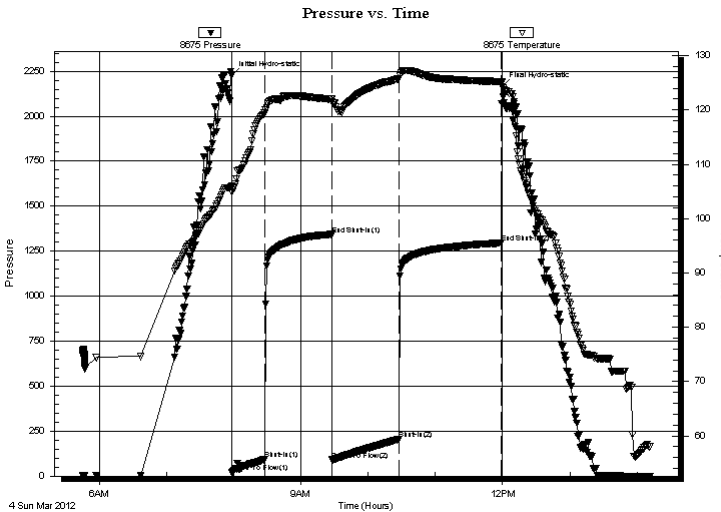
14:11:30

Time On Btm: 2012.03.04 @ 07:58:15

Time Off Btm: 2012.03.04 @ 11:59:30

TEST COMMENT: B.O.B. in 26 min.
Bled off for 5 min. No return blow
B.O.B. in 33 min.
Bled off for 5 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2225.65	105.93	Initial Hydro-static
1	21.42	104.93	Open To Flow (1)
30	95.25	119.43	Shut-In(1)
89	1343.21	121.96	End Shut-In(1)
90	90.18	121.46	Open To Flow (2)
149	205.03	125.74	Shut-In(2)
241	1295.19	125.22	End Shut-In(2)
242	2164.81	124.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	w cm 40%W 60%M	1.30
287.00	mcw 30%M 70%W	4.03

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 Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45075

DST#: 2

ATTN: Tom Funk

Test Start: 2012.03.04 @ 05:45:00

Tool Information

Drill Pipe:	Length: 4354.95 ft	Diameter: 3.80 inches	Volume: 61.09 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 61.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.95 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4358.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	47.00 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			4339.00	
Shut In Tool	5.00			4344.00	
Hydraulic tool	5.00			4349.00	
Packer	5.00			4354.00	20.00 Bottom Of Top Packer
Packer	4.00			4358.00	
Stubb	1.00			4359.00	
Recorder	0.00	8675	Inside	4359.00	
Recorder	0.00	8650	Outside	4359.00	
Perforations	23.00			4382.00	
Change Over Sub	0.00			4382.00	
Drill Pipe	0.00			4382.00	
Change Over Sub	0.00			4382.00	
Bullnose	3.00			4385.00	27.00 Bottom Packers & Anchor

Total Tool Length: 47.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45075

DST#: 2

ATTN: Tom Funk

Test Start: 2012.03.04 @ 05:45:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	w cm 40%W 60%M	1.305
287.00	mcw 30%M 70%W	4.026

Total Length: 380.00 ft Total Volume: 5.331 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .15 @ 65 F = 50,000

Serial #: 8675

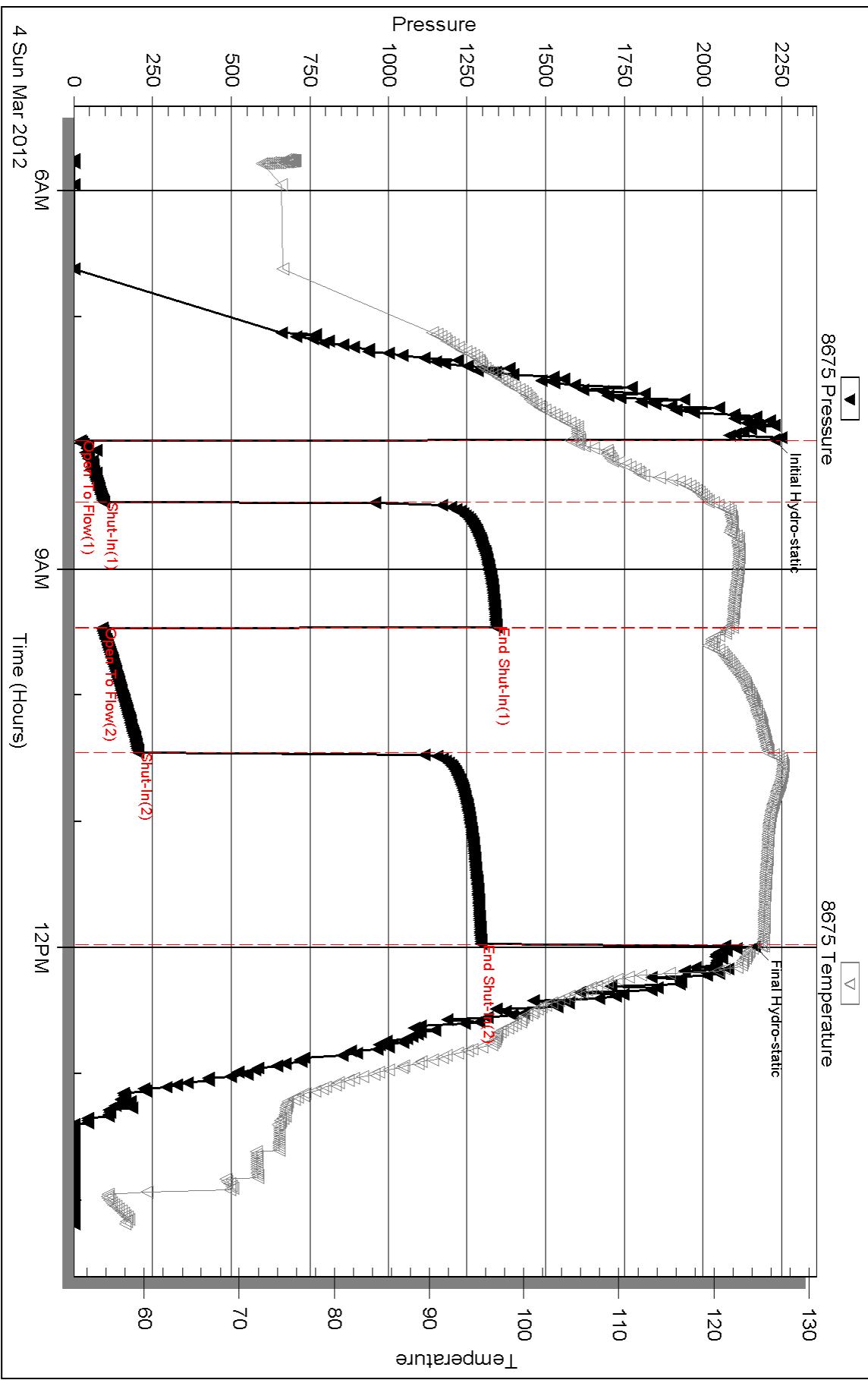
Inside

Murfin Drilling Company

Schertz #1-28

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45075

Printed: 2012.03.08 @ 15:52:29



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water STE 300
Wichita KS 67202-1216

ATTN: Tom Funk

Schertz #1-28

28-10s-34w Thomas,KS

Start Date: 2012.03.05 @ 11:10:00

End Date: 2012.03.05 @ 18:10:15

Job Ticket #: 45926 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45926

DST#: 3

ATTN: Tom Funk

Test Start: 2012.03.05 @ 11:10:00

GENERAL INFORMATION:

Formation: **Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:10:30

Time Test Ended: 18:10:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4580.00 ft (KB) To 4620.00 ft (KB) (TVD)

Reference Elevations: 3209.00 ft (KB)

Total Depth: 4620.00 ft (KB) (TVD)

3196.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8675 Inside

Press @ Run Depth: 25.56 psig @ 4581.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.05

End Date:

2012.03.05

Last Calib.: 2012.03.05

Start Time: 11:10:01

End Time:

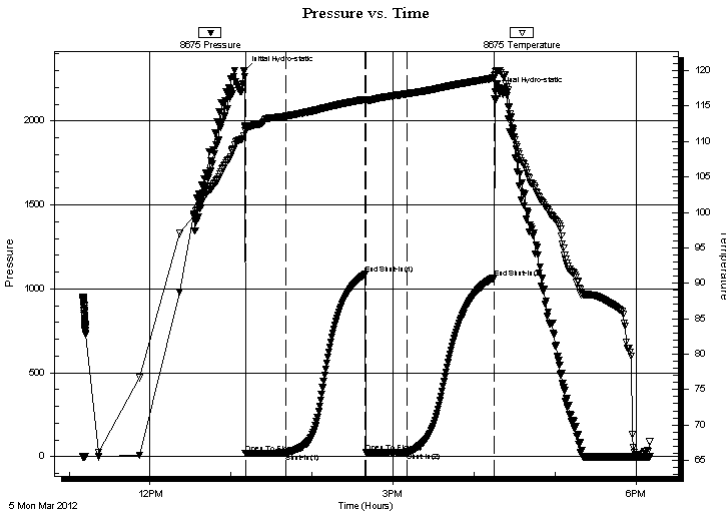
18:10:15

Time On Btm: 2012.03.05 @ 13:10:15

Time Off Btm: 2012.03.05 @ 16:15:30

TEST COMMENT: Built to 1" blow
No return blow
No blow
No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2301.06	112.19	Initial Hydro-static
1	19.75	111.55	Open To Flow (1)
30	23.36	113.57	Shut-In(1)
89	1086.32	115.94	End Shut-In(1)
90	24.39	115.66	Open To Flow (2)
120	25.56	116.71	Shut-In(2)
185	1067.30	118.96	End Shut-In(2)
186	2173.68	119.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100%M	0.42

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 Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45926

DST#: 3

ATTN: Tom Funk

Test Start: 2012.03.05 @ 11:10:00

Tool Information

Drill Pipe:	Length: 4575.77 ft	Diameter: 3.80 inches	Volume: 64.19 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 64.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.77 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4580.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	60.00 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			4561.00	
Shut In Tool	5.00			4566.00	
Hydraulic tool	5.00			4571.00	
Packer	5.00			4576.00	20.00 Bottom Of Top Packer
Packer	4.00			4580.00	
Stubb	1.00			4581.00	
Recorder	0.00	8675	Inside	4581.00	
Recorder	0.00	8650	Outside	4581.00	
Perforations	36.00			4617.00	
Change Over Sub	0.00			4617.00	
Drill Pipe	0.00			4617.00	
Change Over Sub	0.00			4617.00	
Bullnose	3.00			4620.00	40.00 Bottom Packers & Anchor

Total Tool Length: 60.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45926

DST#: 3

ATTN: Tom Funk

Test Start: 2012.03.05 @ 11:10:00

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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	100%M	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

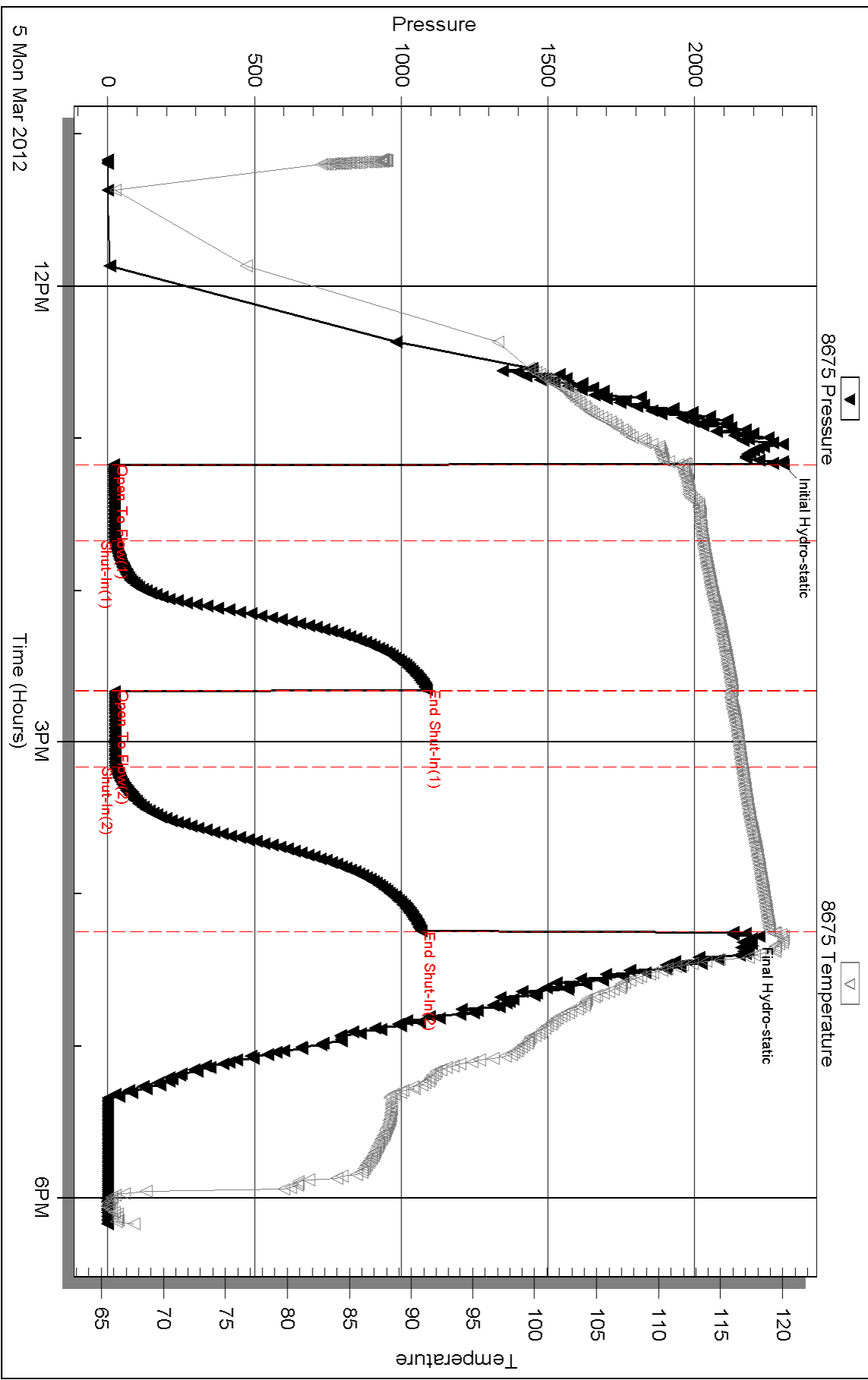
Inside

Murfin Drilling Company

Schertz #1-28

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45926

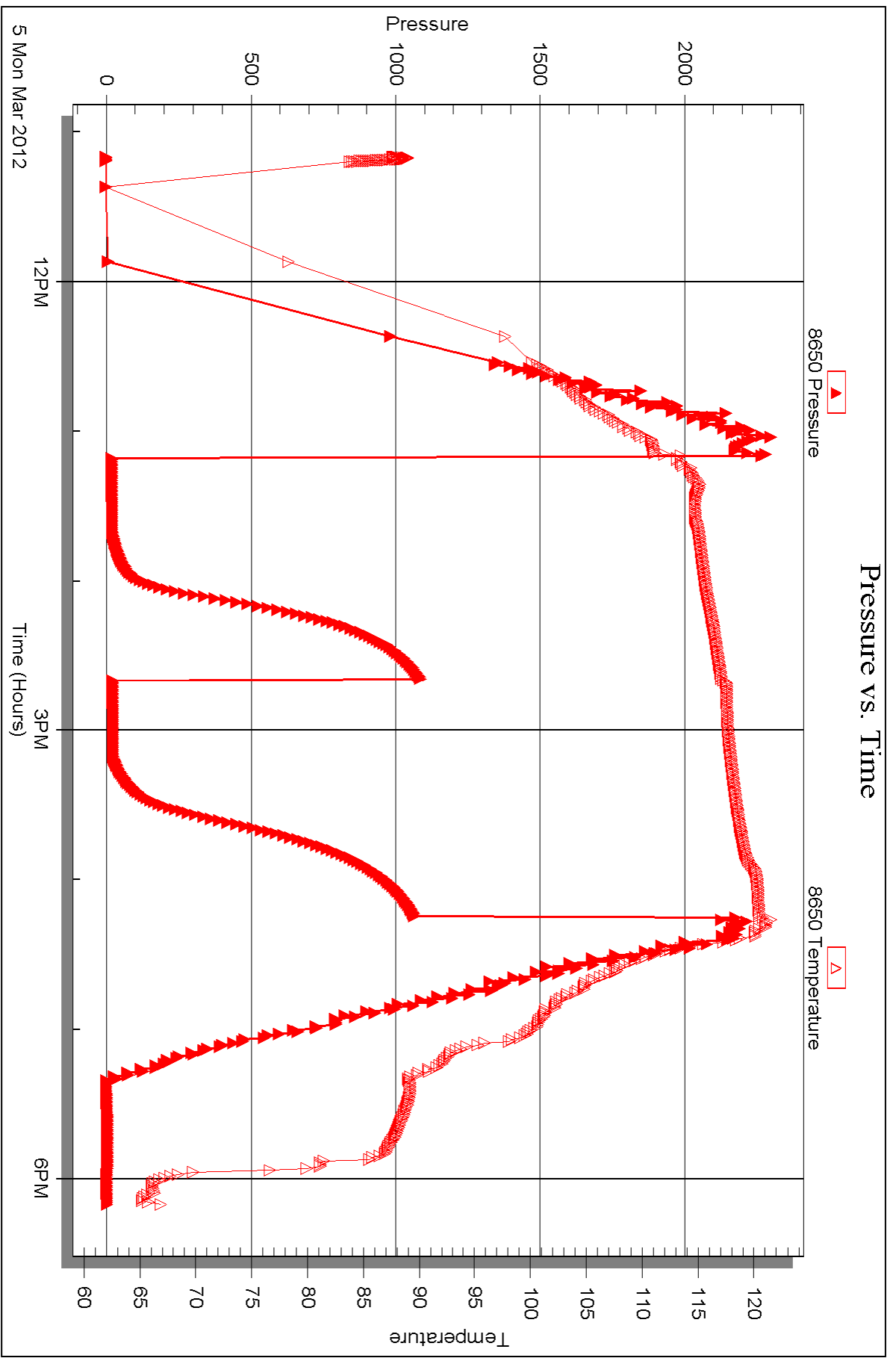
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Serial #: 8650

Outside Murfin Drilling Company

Schertz #1-28

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 45926

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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water STE 300
Wichita KS 67202-1216

ATTN: Tom Funk

Schertz #1-28

28-10s-34w Thomas,KS

Start Date: 2012.03.06 @ 05:15:00

End Date: 2012.03.06 @ 13:29:58

Job Ticket #: 45927 DST #: 4

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

Printed: 2012.03.08 @ 15:40:20



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Company
 250 N Water STE 300
 Wichita KS 67202-1216
 ATTN: Tom Funk

28-10s-34w Thomas,KS

Schertz #1-28

Job Ticket: 45927

DST#: 4

Test Start: 2012.03.06 @ 05:15:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:46:43
 Time Test Ended: 13:29:58
 Interval: **4662.00 ft (KB) To 4720.00 ft (KB) (TVD)**
 Total Depth: 4720.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jace McKinney
 Unit No: 46
 Reference Elevations: 3209.00 ft (KB)
 3196.00 ft (CF)
 KB to GR/CF: 13.00 ft

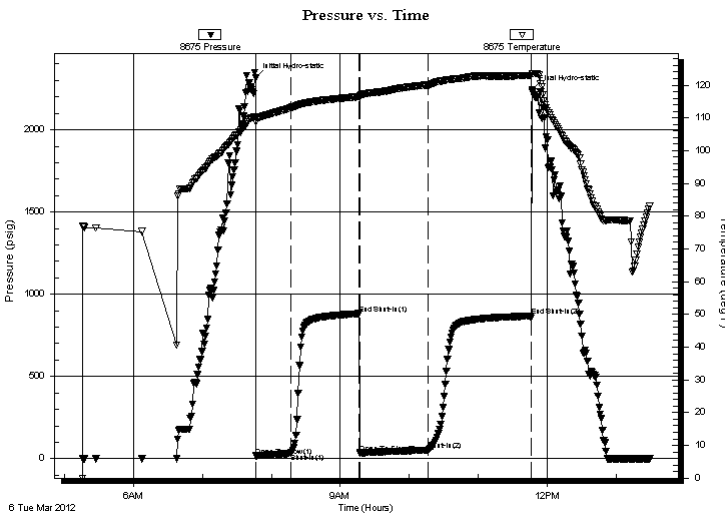
Serial #: 8675

Inside

Press @ Run Depth: 52.53 psig @ 4663.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.06 End Date: 2012.03.06 Last Calib.: 2012.03.06
 Start Time: 05:15:34 End Time: 13:29:58 Time On Btm: 2012.03.06 @ 07:46:28
 Time Off Btm: 2012.03.06 @ 11:47:13

TEST COMMENT: Built to 2 1/2" blow
 No return blow
 Built to 2 1/2" blow
 No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2314.51	110.32	Initial Hydro-static
1	18.05	108.75	Open To Flow (1)
31	32.56	113.05	Shut-In(1)
90	882.55	116.48	End Shut-In(1)
91	35.42	116.30	Open To Flow (2)
151	52.53	119.91	Shut-In(2)
240	867.97	122.93	End Shut-In(2)
241	2241.53	123.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	ocm 10%O 90%M	1.12

* 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 Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45927

DST#: 4

ATTN: Tom Funk

Test Start: 2012.03.06 @ 05:15:00

Tool Information

Drill Pipe:	Length: 4669.24 ft	Diameter: 3.80 inches	Volume: 65.50 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 65.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.24 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4662.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	78.00 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			4643.00	
Shut In Tool	5.00			4648.00	
Hydraulic tool	5.00			4653.00	
Packer	5.00			4658.00	20.00 Bottom Of Top Packer
Packer	4.00			4662.00	
Stubb	1.00			4663.00	
Recorder	0.00	8675	Inside	4663.00	
Recorder	0.00	8650	Outside	4663.00	
Perforations	20.00			4683.00	
Change Over Sub	1.00			4684.00	
Drill Pipe	32.00			4716.00	
Change Over Sub	1.00			4717.00	
Bullnose	3.00			4720.00	58.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

28-10s-34w Thomas,KS

250 N Water STE 300
Wichita KS 67202-1216

Schertz #1-28

Job Ticket: 45927

DST#: 4

ATTN: Tom Funk

Test Start: 2012.03.06 @ 05:15:00

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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
80.00	ocm 10%O 90%M	1.122

Total Length: 80.00 ft Total Volume: 1.122 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

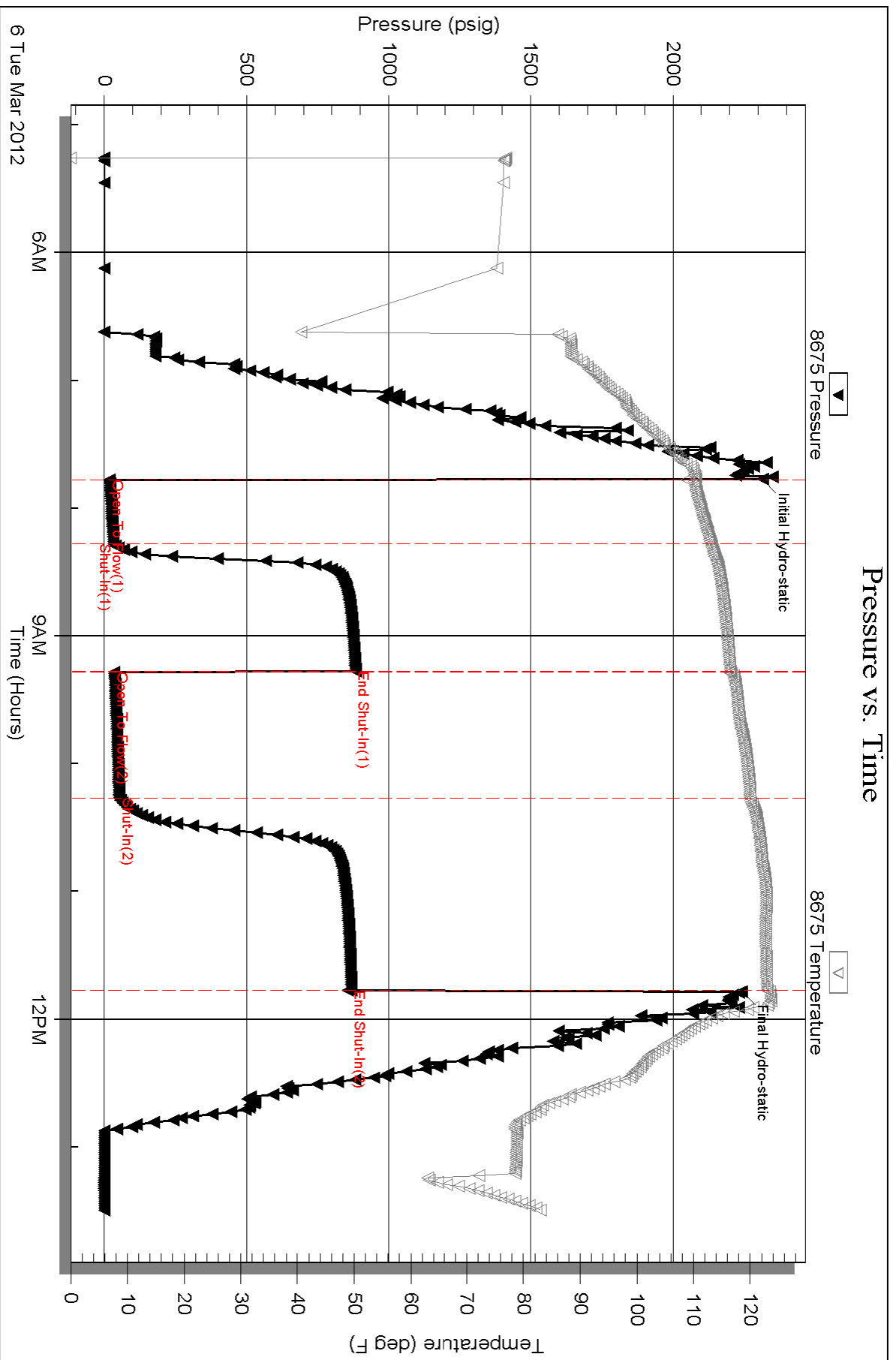
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

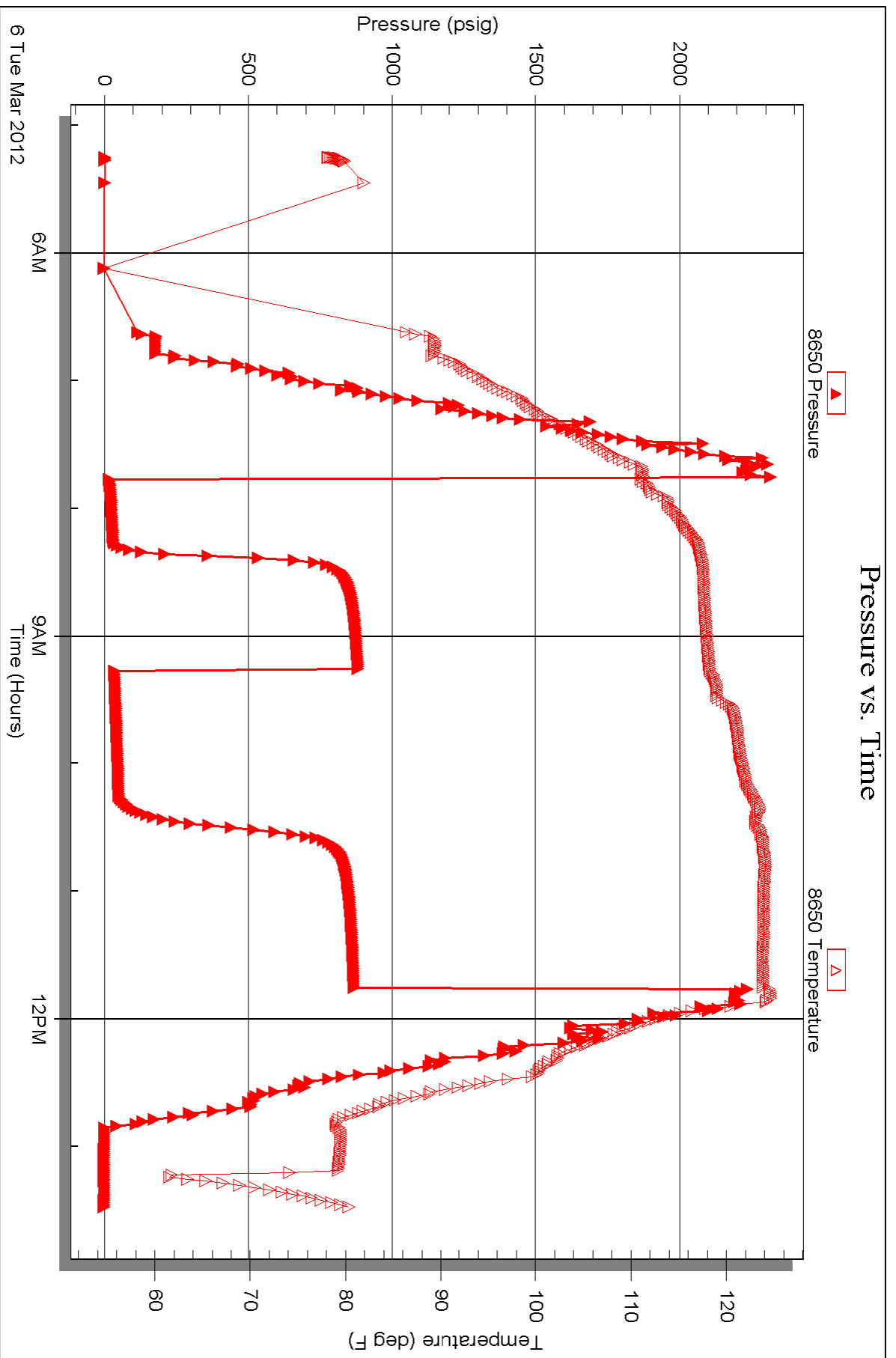


Serial #: 8650

Outside Murfin Drilling Company

Schertz #1-28

DST Test Number: 4





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

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Test Ticket

NO. 45074

BY: _____

Well Name & No. Schertz 1-28 Test No. 1 Date 3/3/12
 Company Martin Drilling Company Inc Elevation 3209 KB 3196 GL
 Address 250 N Water STE 300 Wichita KS 67202-1216
 Co. Rep / Geo. Tom Funk Rig Martin 25
 Location: Sec. 28 Twp. 10S Rge. 34w Co. Thomas State KS

Interval Tested 4272 - 4340 Zone Tested Kansas City "H-I"
 Anchor Length 68 Drill Pipe Run 4260 Mud Wt. 9.1
 Top Packer Depth 4268 Drill Collars Run 0 Vis 44
 Bottom Packer Depth 4272 Wt. Pipe Run 0 WL 8.0
 Total Depth 4340 Chlorides 9,400 ppm System LCM 8#
 Blow Description Built to 5" below
No return below
B.O.B. in 32 mins.

Bled off for 5 mins. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>mcw</u>		<u>90</u>	<u>10</u>	
<u>380</u>	<u>w</u>		<u>100</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 440 BHT 123 Gravity — API RW 0.28 @ 50 ° F Chlorides 50,000 ppm

- (A) Initial Hydrostatic 2,136
- (B) First Initial Flow 22
- (C) First Final Flow 91
- (D) Initial Shut-In 1,188
- (E) Second Initial Flow 93
- (F) Second Final Flow 219
- (G) Final Shut-In 1,281
- (H) Final Hydrostatic 1,962

- Test 1225
- Jars
- Safety Joint w/c wrong thing
- Circ Sub w/c
- Hourly Standby 2 3/4 hrs 275
- Mileage 132 RT 184.80
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility

- T-On Location 7:00
- T-Started 10:00
- T-Open 13:21
- T-Pulled 17:22
- T-Out 19:49

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

- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 6
- Total 1684.80
- MP/DST Disc't

Approved By [Signature] Our Representative [Signature]
 Sub Total 1684.80

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RECEIVED Test Ticket

MAR 07 2012

NO. 45075

BY: _____

Well Name & No. Schertz 1-28 Test No. 2 Date 3/4/12
 Company Marfin Drilling Company Inc Elevation 3209 KB 3196 GL
 Address 250 N Water STE 300 Wichita KS 67202 - 1216
 Co. Rep / Geo. Tom Funk Rig Marfin 25
 Location: Sec. 28 Twp. 10s Rge. 34w Co. Thomas State KS

Interval Tested 4358 - 4385 Zone Tested Kansas City "K"
 Anchor Length 27 Drill Pipe Run 4354 Mud Wt. 9.2
 Top Packer Depth 4354 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 4358 Wt. Pipe Run 0 WL 6.8
 Total Depth 4385 Chlorides 8,000 ppm System LCM 6#

Blow Description B.O.B. in 26min.
Bled off for 5 mins. No return below
B.O.B. in 33min.
Bled off for 5 mins. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>93</u>	<u>Feet of wcm</u>			<u>40</u>	<u>60</u>
<u>287</u>	<u>Feet of MCW</u>			<u>70</u>	<u>30</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

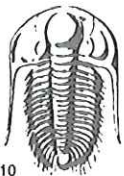
Rec Total 380 BHT 125 Gravity _____ API RW .15 @ 165 °F Chlorides 50,000 ppm

(A) Initial Hydrostatic 2,226 Test 1225' T-On Location 4:40
 (B) First Initial Flow 21 Jars _____ T-Started 5:45
 (C) First Final Flow 95 Safety Joint _____ T-Open 7:58
 (D) Initial Shut-In 1,343 Circ Sub w/c T-Pulled 11:58
 (E) Second Initial Flow 90 Hourly Standby _____ T-Out 14:11
 (F) Second Final Flow 205 Mileage 132 RT 184.80 Comments _____
 (G) Final Shut-In 1,295 Sampler _____
 (H) Final Hydrostatic 2,165 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer 320

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Recorder _____ Sub Total 320
 Final Flow 60 Day Standby _____ Total 1729.80
 Final Shut-In 90 Accessibility _____ MP/DST Disc't _____
 Sub Total 1409.80

Approved By [Signature] Our Representative [Signature]

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Test Ticket

NO. 45926

Well Name & No. Schertz 1-28 Test No. 3 Date 3/5/12
 Company Murfin Drilling Company Inc Elevation 3209 KB 3196 GL
 Address 250 W Water STE 300 Wichita KS 67202 - 1216
 Co. Rep / Geo. Tom Funk Rig Murfin 25
 Location: Sec. 28 Twp. 10s Rge. 34w Co. Thomas State KS

Interval Tested 4580 - 4620 Zone Tested Myric Station
 Anchor Length 40 Drill Pipe Run 4575 Mud Wt. 9.2
 Top Packer Depth 4576 Drill Collars Run 0 Vis 46
 Bottom Packer Depth 4580 Wt. Pipe Run 0 WL 7.2
 Total Depth 4620 Chlorides 8,800 ppm System LCM 7

Blow Description Built to 1" below
No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 119 Gravity — API RW — @ — ° F Chlorides — ppm

- (A) Initial Hydrostatic 2,301
- (B) First Initial Flow 20
- (C) First Final Flow 23
- (D) Initial Shut-In 1,086
- (E) Second Initial Flow 24
- (F) Second Final Flow 26
- (G) Final Shut-In 1,067
- (H) Final Hydrostatic 2,174

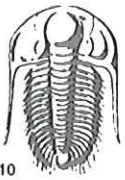
- Test 1225
- Jars
- Safety Joint
- Circ Sub N/C
- Hourly Standby
- Mileage 132 RT 184.80
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1409.80

- T-On Location 10:00
- T-Started 11:10
- T-Open 13:10
- T-Pulled 16:15
- T-Out 18:10
- Comments
- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 1409.80
- MP/DST Disc't

Initial Open 30
 Initial Shut-In 600
 Final Flow 30
 Final Shut-In 600

Approved By [Signature] Our Representative [Signature]

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MAR 07 2012

Test Ticket

NO. 45927

Well Name & No. Schertz 1-28 Test No. 4 Date 3/6/12
 Company Martin Drilling Company Elevation 3209 KB 3196 GL
 Address 250 N Water STE 300 Wichita KS 67202-1216
 Co. Rep / Geo. Tom Funk Rig Martin 25
 Location: Sec. 28 Twp. 103 Rge. 34w Co. Thomas State KS

Interval Tested 4662 - 4720 Zone Tested Johnson
 Anchor Length 58 Drill Pipe Run 4669 Mud Wt. 9.2
 Top Packer Depth 4658 Drill Collars Run 0 Vis 1/6
 Bottom Packer Depth 4662 Wt. Pipe Run 0 WL 7.2
 Total Depth 4720 Chlorides 8,800 ppm System LCM 7#

Blow Description Built to 2 1/2" below
No return below
Built to 2 1/2" below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</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 80 BHT 123 Gravity — API RW — @ — F Chlorides — ppm
 (A) Initial Hydrostatic 2,315 Test 1225 T-On Location 4:45
 (B) First Initial Flow 18 Jars T-Started 5:15
 (C) First Final Flow 33 Safety Joint T-Open 7:46
 (D) Initial Shut-In 883 Circ Sub N/C T-Pulled 11:46
 (E) Second Initial Flow 35 Hourly Standby T-Out 13:30
 (F) Second Final Flow 53 Mileage 132 RT 184.80 Comments _____
 (G) Final Shut-In 868 Sampler _____
 (H) Final Hydrostatic 2,242 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 60 Ruined Packer _____
 Final Flow 60 Extra Copies _____
 Final Shut-In 90 Sub Total 0
 Sub Total 1409.80 Total 1409.80
 MP/DST Disc't _____

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