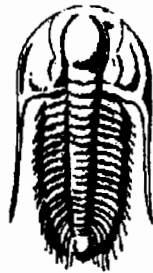


15-115-21347

32-18s-1E

Range is East,  
not West as  
printed.



**TRILOBITE  
TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **Range Oil Company Inc**

125 N Market  
Suite 1120  
Wichita KS 67202

ATTN: Roger Martin

<sup>E</sup>  
**32-18s-1w-Marion**

**BCW Farms #4**

Start Date: 2006.03.01 @ 13:16:08

End Date: 2006.03.02 @ 00:03:08

Job Ticket #: 23701                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Range Oil Company Inc

BCW Farms #4

32-18s-1w-Marion  
<sup>E</sup>

DST # 1

Mississippi-Warsaw

2006.03.01



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Range Oil Company Inc

125 N Market  
Suite 1120  
Wichita KS 67202  
ATTN: Roger Martin

**BCW Farms #4**

**32-18s-1w-Marion**

Job Ticket: 23701      **DST#: 1**  
Test Start: 2006.03.01 @ 13:16:08

### GENERAL INFORMATION:

Formation: **Mississippi-Warsaw**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:17:53

Time Test Ended: 00:03:08

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **2788.00 ft (KB) To 2852.00 ft (KB) (TVD)**

Total Depth: 2852.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1552.00 ft (KB)

1540.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 6719**      Inside

Press@RunDepth: 358.76 psig @ 2791.00 ft (KB)

Start Date: 2006.03.01

End Date:

2006.03.02

Start Time: 13:16:10

End Time:

00:03:08

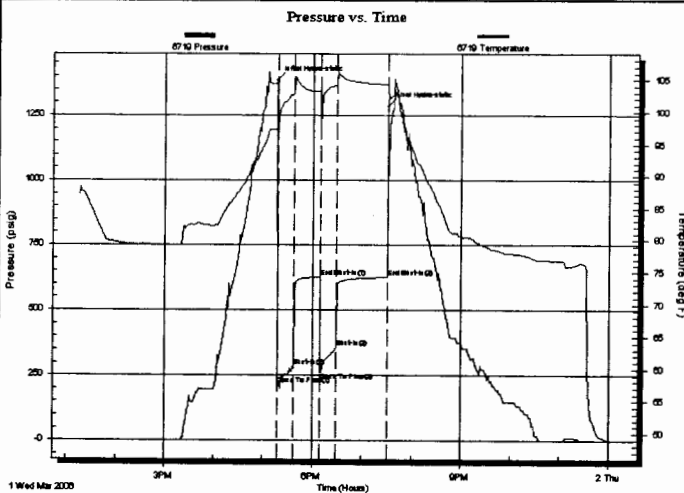
Capacity: 7000.00 psig

Last Calib.: 2006.03.02

Time On Btrm: 2006.03.01 @ 17:17:23

Time Off Btrm: 2006.03.01 @ 19:30:53

**TEST COMMENT:** FFP-Strong, BOB in 25 Seconds, Gaging Gas  
ISI-Blow back Built to 9"  
FFP-BOB on Opening, Gaging Gas  
FSI Bleed Down n 35 Min. Blow back BOB and Strong



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1383.92	97.70	Initial Hydro-static
1	215.24	97.29	Open To Flow (1)
21	283.80	103.02	Shut-In(1)
52	626.86	103.23	End Shut-In(1)
53	260.90	97.95	Open To Flow (2)
72	358.76	104.23	Shut-In(2)
133	624.53	104.31	End Shut-In(2)
134	1284.72	103.67	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
279.00	SOMCW-10%O-85%W-5%M	1.37
218.00	SOMCW-5%G-10%O-75%W-10%M	1.54
62.00	SOCM-10%G-10%O-80%M	0.44
155.00	HOCM-20G-30%O-50%M	1.10
45.00	Mud	0.32

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	33.00	319.75
Last Gas Rate	0.63	18.00	346.70
Max. Gas Rate	0.50	33.00	319.75



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Range Oil Company Inc

**BCW Farms #4**

125 N Market  
Suite 1120  
Wichita KS 67202  
ATTN: Roger Martin

**32-18s-1w-Marion**  
Job Ticket: 23701      **DST#: 1**  
Test Start: 2006.03.01 @ 13:16:08

**Tool Information**

Drill Pipe:	Length: 2495.00 ft	Diameter: 2.70 inches	Volume: 17.67 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 280.00 ft	Diameter: 2.25 inches	Volume: 1.38 bbl	Weight to Pull Loose: 50000.00 lb
			<b>Total Volume: 19.05 bbl</b>	Tool Chased 1.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2788.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2761.00	
Shut In Tool	5.00			2766.00	
Hydraulic tool	5.00			2771.00	
Jars	5.00			2776.00	
Safety Joint	2.00			2778.00	
Packer	5.00			2783.00	28.00      Bottom Of Top Packer
Packer	5.00			2788.00	
Stubb	1.00			2789.00	
Perforations	2.00			2791.00	
Recorder	0.00	6719	Inside	2791.00	
Change Over Sub	1.00			2792.00	
Blank Spacing	31.00			2823.00	
Change Over Sub	1.00			2824.00	
Perforations	25.00			2849.00	
Recorder	0.00	13221	Outside	2849.00	
Bullnose	3.00			2852.00	64.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>92.00</b>				



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Range Oil Company Inc

**BCW Farms #4**

125 N Market  
Suite 1120  
Wichita KS 67202  
ATTN: Roger Martin

**32-18s-1w-Marion**

Job Ticket: 23701

**DST#: 1**

Test Start: 2006.03.01 @ 13:16:08

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

23000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
279.00	SOMCW-10%O-85%W-5%M	1.372
218.00	SOMCW-5%G-10%O-75%W-10%M	1.542
62.00	SOCM-10%G-10%O-80%M	0.439
155.00	HOCM-20G-30%O-50%M	1.098
45.00	Mud	0.319

Total Length: 759.00 ft

Total Volume: 4.770 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

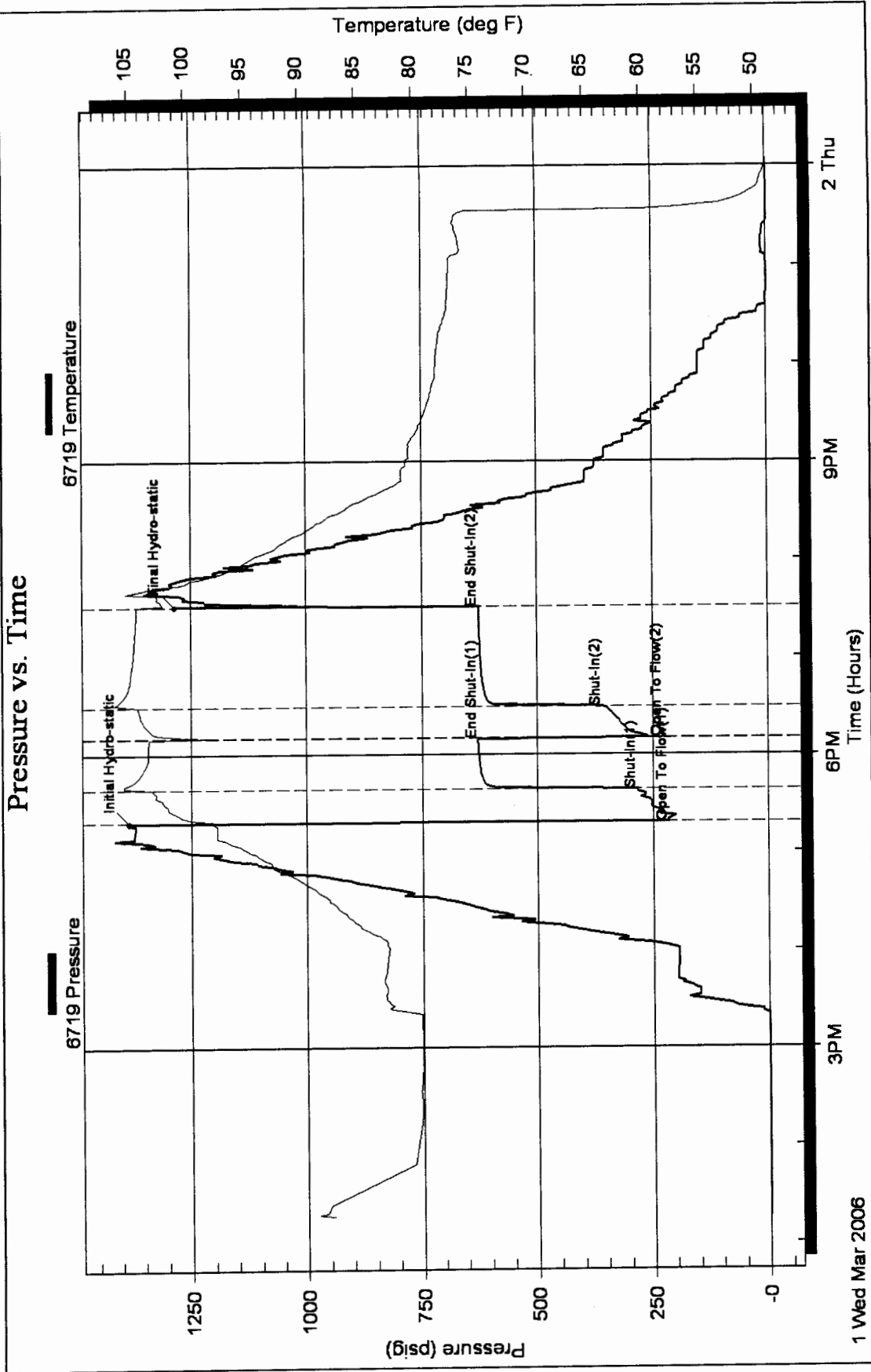
Inside

Range Oil Company Inc

32-18s-1w-Marion

DST Test Number: 1

### Pressure vs. Time







**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

