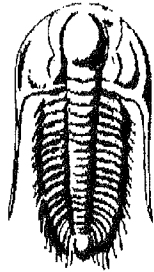


15-167-23488

10-11s-15w



**TRILOBITE**  
**TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

370 W Wichita  
Russell KS 67665

ATTN: Brad H.

**10 11 15W Russell KS**

**Bowlby-Maupin #1**

Start Date: 2008.03.07 @ 11:19:36

End Date: 2008.03.07 @ 17:08:06

Job Ticket #: 31785

DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Bowlby-Maupin #1

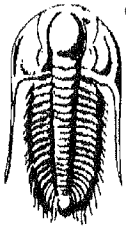
10 11 15W Russell KS

DST # 1

LKC

2008.03.07

CONFIDENTIAL  
MAY 05 2008  
KCC



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

John O Farmer

**Bowlby-Maupin #1**

370 W Wichita  
Russell KS 67665

**10 11 15W Russell KS**

ATTN: Brad H.

Job Ticket: 31785

**DST#: 1**

Test Start: 2008.03.07 @ 11:19:36

## GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:48:06

Time Test Ended: 17:08:06

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 31

**Interval: 3085.00 ft (KB) To 3140.00 ft (KB) (TVD)**

Total Depth: 3140.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1948.00 ft (KB)

1939.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 8369**

Inside

Press@RunDepth: 46.49 psig @ 3089.00 ft (KB)

Start Date: 2008.03.07

End Date:

2008.03.07

Capacity: 7000.00 psig

Last Calib.: 2008.03.07

Start Time: 11:19:41

End Time:

17:08:05

Time On Btm: 2008.03.07 @ 12:46:06

Time Off Btm: 2008.03.07 @ 15:49:06

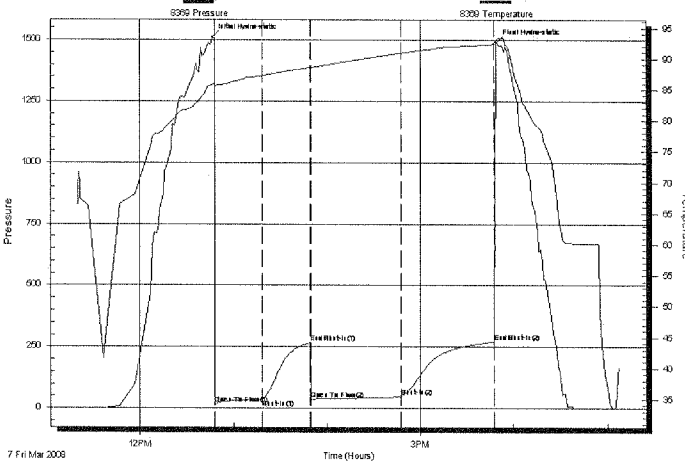
TEST COMMENT: IF 3 "

ISI Weak Surface

FF 3 "

FSI Weak Surface

Pressure vs. Time



PRESSURE SUMMARY

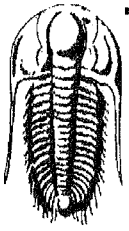
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1508.28	85.77	Initial Hydro-static
2	15.93	85.57	Open To Flow (1)
32	35.65	87.26	Shut-In(1)
63	265.31	88.55	End Shut-In(1)
64	36.14	88.56	Open To Flow (2)
122	46.49	90.94	Shut-In(2)
182	270.89	92.42	End Shut-In(2)
183	1488.60	93.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	OCM 5%O 95%M	0.71
0.00	Trace GIP	0.00

Gas Rates

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer  
370 W Wichita  
Russell KS 67665  
ATTN: Brad H.

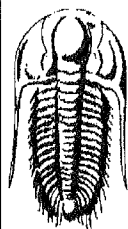
**Bowlby-Maupin #1**  
**10 11 15W Russell KS**  
Job Ticket: 31785      **DST#: 1**  
Test Start: 2008.03.07 @ 11:19:36

**Tool Information**

Drill Pipe:	Length: 3042.00 ft	Diameter: 3.82 inches	Volume: 43.12 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 43.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3085.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	75.00 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			3066.00	
Shut In Tool	5.00			3071.00	
Hydraulic tool	5.00			3076.00	
Packer	4.00			3080.00	20.00      Bottom Of Top Packer
Packer	5.00			3085.00	
Stubb	1.00			3086.00	
Perforations	2.00			3088.00	
Change Over Sub	1.00			3089.00	
Recorder	0.00	8369	Inside	3089.00	
Recorder	0.00	6669	Outside	3089.00	
Blank Spacing	32.00			3121.00	
Change Over Sub	1.00			3122.00	
Perforations	15.00			3137.00	
Bullnose	3.00			3140.00	55.00      Bottom Packers & Anchor

**Total Tool Length: 75.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer

**Bowlby-Maupin #1**

370 W Wichita  
Russell KS 67665

**10 11 15W Russell KS**

Job Ticket: 31785

**DST#: 1**

ATTN: Brad H.

Test Start: 2008.03.07 @ 11:19:36

## 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: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	OCM 5%O 95%M	0.715
0.00	Trace GIP	0.000

Total Length: 70.00 ft      Total Volume: 0.715 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

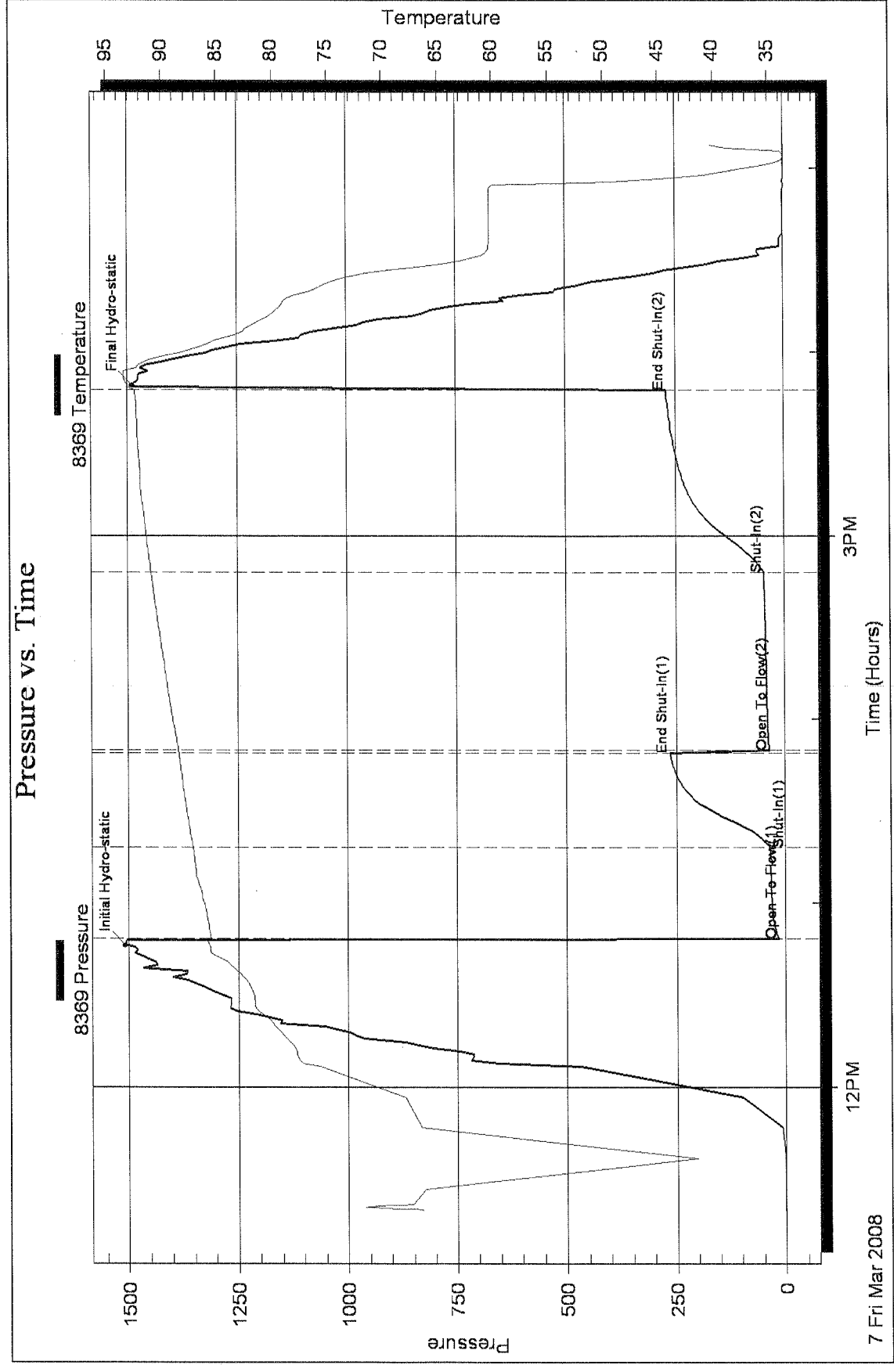
Serial #: 8369

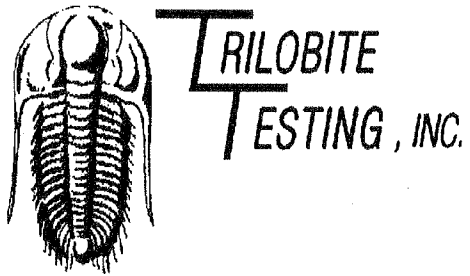
Inside

John O Farmer

10 11 15W Russell KS

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

370 W Wichita  
Russell KS 67665

ATTN: Brad H.

**10 11 15W Russell KS**

**Bowlby-Maupin #1**

Start Date: 2008.03.09 @ 01:11:19

End Date: 2008.03.09 @ 08:59:49

Job Ticket #: 30204                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

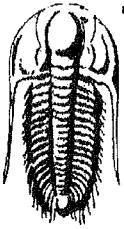
Bowlby-Maupin #1

10 11 15W Russell KS

DST # 2

Arbuckle

2008.03.09



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

John O Farmer  
370 W Wichita  
Russell KS 67665  
ATTN: Brad H.

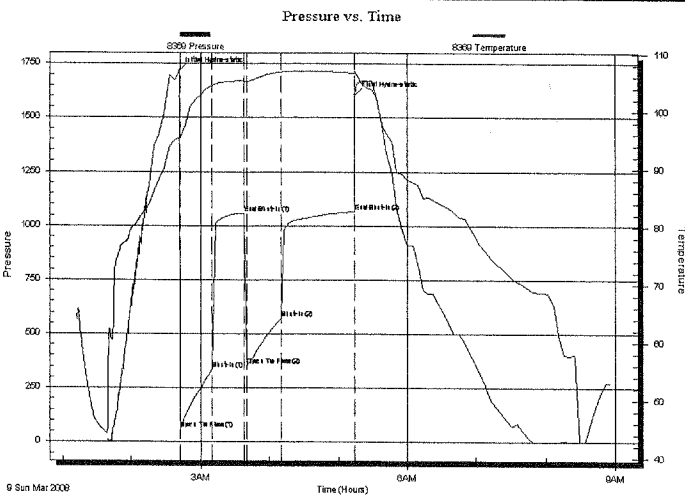
**Bowlby-Maupin #1**  
**10 11 15W Russell KS**  
Job Ticket: 30204      **DST#: 2**  
Test Start: 2008.03.09 @ 01:11:19

**GENERAL INFORMATION:**

Formation: **Arbuckle**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 02:42:19  
Time Test Ended: 08:59:49  
Interval: **3395.00 ft (KB) To 3438.00 ft (KB) (TVD)**  
Total Depth: 3501.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Fair  
Test Type: Conventional Straddle  
Tester: John Schmidt  
Unit No: 31  
Reference Elevations: 1948.00 ft (KB)  
1939.00 ft (CF)  
KB to GR/CF: 9.00 ft

**Serial #: 8369      Inside**  
Press@RunDepth: 571.80 psig @ 3399.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2008.03.09      End Date: 2008.03.09      Last Calib.: 2008.03.09  
Start Time: 01:11:24      End Time: 08:59:48      Time On Btm: 2008.03.09 @ 02:41:49  
Time Off Btm: 2008.03.09 @ 05:14:19

**TEST COMMENT:** IF Strong BOB 2 min.  
ISI Very weak surface blow back  
FF Strong BOB 2 min.  
FSI Dead



**PRESSURE SUMMARY**

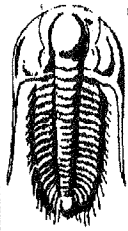
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.43	95.57	Initial Hydro-static
1	57.54	95.33	Open To Flow (1)
29	333.74	104.32	Shut-In(1)
57	1058.71	105.29	End Shut-In(1)
59	351.76	105.01	Open To Flow (2)
88	571.80	106.89	Shut-In(2)
152	1064.87	106.72	End Shut-In(2)
153	1605.93	107.03	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
370.00	MCO 30%M 70%O	4.97
1020.00	Clean Oil	14.46

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer

**Bowlby-Maupin #1**

370 W Wichita  
Russell KS 67665

**10 11 15W Russell KS**

Job Ticket: 30204

**DST#: 2**

ATTN: Brad H.

Test Start: 2008.03.09 @ 01:11:19

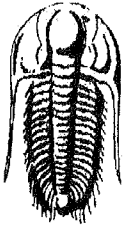
### Tool Information

Drill Pipe:	Length: 3358.00 ft	Diameter: 3.82 inches	Volume: 47.60 bbl	Tool Weight: 2000.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 47.75 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3395.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	3438.00 ft			
Interval between Packers:	43.00 ft			
Tool Length:	126.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3376.00	
Shut In Tool	5.00			3381.00	
Hydraulic tool	5.00			3386.00	
Packer	4.00			3390.00	20.00 Bottom Of Top Packer
Packer	5.00			3395.00	
Stubb	1.00			3396.00	
Perforations	2.00			3398.00	
Change Over Sub	1.00			3399.00	
Recorder	0.00	8369	Inside	3399.00	
Blank Spacing	31.00			3430.00	
Change Over Sub	1.00			3431.00	
Perforations	6.00			3437.00	
Recorder	0.00	13308	Outside	3437.00	
Blank Off Sub	1.00			3438.00	43.00 Tool Interval
Packer	0.00			3438.00	
Stubb	1.00			3439.00	
Perforations	1.00			3440.00	
Change Over Sub	1.00			3441.00	
Recorder	0.00	6669	Below	3441.00	
Blank Spacing	60.00			3501.00	63.00 Bottom Packers & Anchor

**Total Tool Length: 126.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O Farmer

**Bowlby-Maupin #1**

370 W Wichita  
Russell KS 67665

**10 11 15W Russell KS**

Job Ticket: 30204

**DST#: 2**

ATTN: Brad H.

Test Start: 2008.03.09 @ 01:11:19

**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: 4.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
370.00	MCO 30%M 70%O	4.967
1020.00	Clean Oil	14.459

Total Length: 1390.00 ft

Total Volume: 19.426 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

