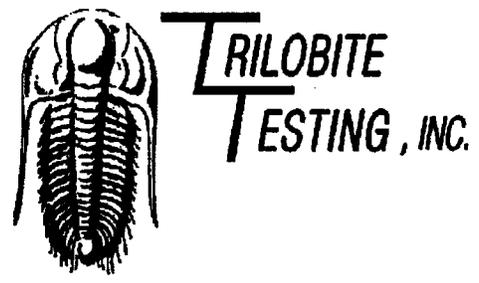


32-10s-20w

IND



### DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**  
 7154 W State St  
 PMB 302  
 Boise ID 83714

ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**

**Mary B Unit #2**

Start Date: 2011.07.23 @ 00:21:21  
 End Date: 2011.07.23 @ 06:51:21  
 Job Ticket #: 44192                      DST #: 1

Trilobite Testing, Inc  
 PO Box 1733 Hays, KS 67601  
 ph: 785-625-4778 fax: 785-625-5620

RECEIVED  
 OCT 26 2011  
 KCC WICHITA

Tomlinson Operating  
 Mary B Unit #2  
 32-10s-20w Rooks,KS  
 DST # 1  
 LKC E-F  
 2011.07.23



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Tomlinson Operating

**Mary B Unit #2**

7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44192      **DST#: 1**  
Test Start: 2011.07.23 @ 00:21:21

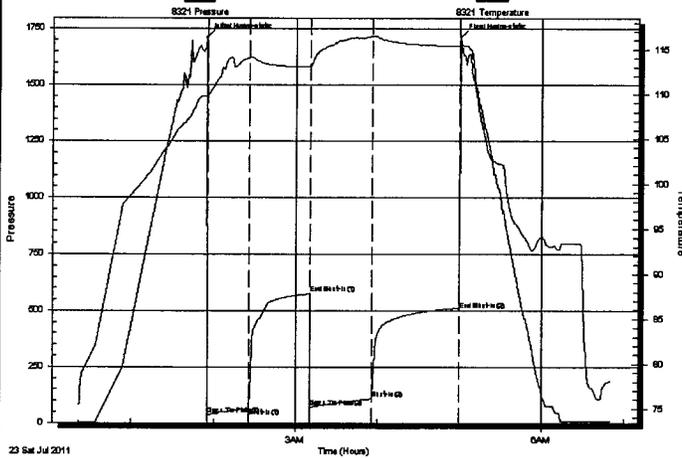
## GENERAL INFORMATION:

Formation: **LKC E-F**  
 Deviated: **No Whipstock**      ft (KB)  
 Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: 01:55:21      Tester: **Jeff Brown**  
 Time Test Ended: 06:51:21      Unit No: **44**  
 Interval: **3489.00 ft (KB) To 3514.00 ft (KB) (TVD)**  
 Total Depth: **3514.00 ft (KB) (TVD)**  
 Reference Elevations: **2145.00 ft (KB)**  
**2136.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 KB to GRVCF: **9.00 ft**

**Serial #: 8321**      **Inside**  
 Press@RunDepth: **108.89 psig @ 3490.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2011.07.23**      End Date: **2011.07.23**      Last Calib.: **2011.07.23**  
 Start Time: **00:21:22**      End Time: **06:51:21**      Time On Btmr: **2011.07.23 @ 01:54:51**  
 Time Off Btmr: **2011.07.23 @ 05:00:51**

**TEST COMMENT:** IFP-Fair blow built to 9 1/2 in  
 IS-Dead no blow back  
 FFP-Fair blow built to 8 1/2 in  
 FS-Dead no blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1712.85	109.87	Initial Hydro-static
1	36.53	109.87	Open To Flow (1)
31	67.17	114.07	Shut-In(1)
76	574.77	113.09	End Shut-In(1)
76	71.32	113.07	Open To Flow (2)
121	108.89	116.45	Shut-In(2)
185	502.66	115.36	End Shut-In(2)
186	1714.38	115.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	MM with oil spots	1.74
57.00	WM with oil spots	0.80
5.00	VSOCM 3 %O97%M	0.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St

**32-10s-20w Rooks,KS**

FMB 302

Boise ID 83714

Job Ticket: 44192

**DST#: 1**

ATTN: Sid Tomlinson

Test Start: 2011.07.23 @ 00:21:21

**Tool Information**

Drill Pipe:	Length: 3484.00 ft	Diameter: 3.80 inches	Volume: 48.87 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 48.87 bbl</u>	Tool Chased 7.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3489.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 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			3462.00	
Shut In Tool	5.00			3467.00	
Hydraulic tool	5.00			3472.00	
Jars	5.00			3477.00	
Safety Joint	3.00			3480.00	
Packer	4.00			3484.00	28.00 Bottom Of Top Packer
Packer	5.00			3489.00	
Stubb	1.00			3490.00	
Recorder	0.00	8321	Inside	3490.00	
Recorder	0.00	8679	Inside	3490.00	
Perforations	21.00			3511.00	
Bullnose	3.00			3514.00	25.00 Bottom Packers & Anchor

**Total Tool Length: 53.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St

**32-10s-20w Rooks,KS**

FMB 302

Job Ticket: 44192

**DST#: 1**

Boise ID 83714

Test Start: 2011.07.23 @ 00:21:21

ATTN: Sid Tomlinson

**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:

85000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
124.00	MV with oil spots	1.739
57.00	VM with oil spots	0.800
5.00	VSOQM 3 %O97%M	0.070

Total Length: 186.00 ft      Total Volume: 2.609 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

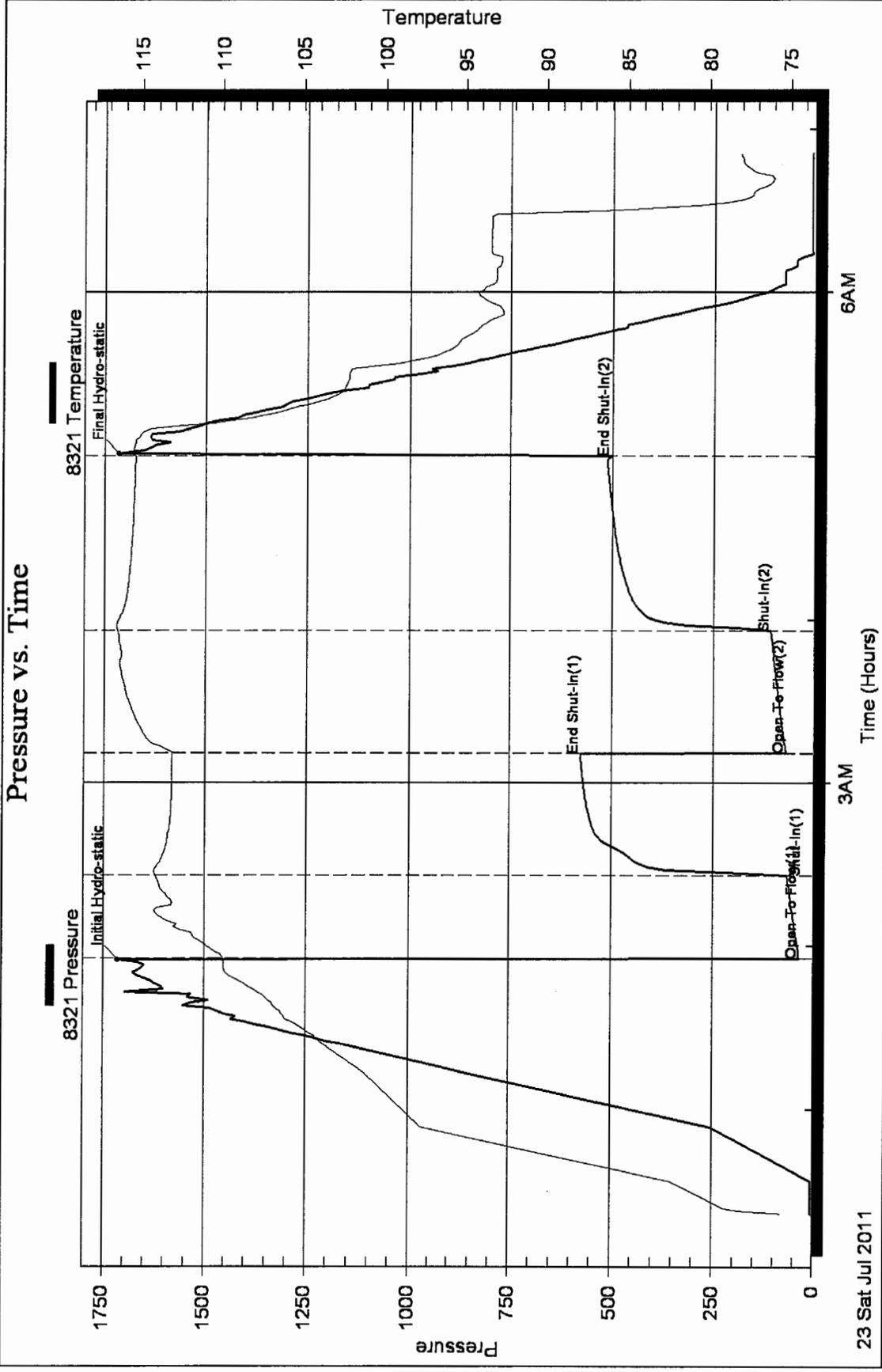
Serial #:

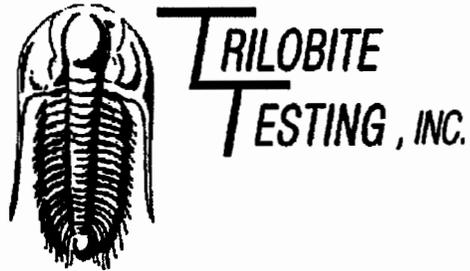
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

7154 W State St  
PMB 302  
Boise ID 83714

ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**

**Mary B Unit #2**

Start Date: 2011.07.23 @ 19:35:04

End Date: 2011.07.24 @ 02:20:04

Job Ticket #: 44193                      DST #: 2

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44193      **DST#: 2**  
Test Start: 2011.07.23 @ 19:35:04

**Tool Information**

Drill Pipe:	Length: 3516.00 ft	Diameter: 3.80 inches	Volume: 49.32 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 49.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3539.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	114.00 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			3512.00	
Shut In Tool	5.00			3517.00	
Hydraulic tool	5.00			3522.00	
Jars	5.00			3527.00	
Safety Joint	3.00			3530.00	
Packer	4.00			3534.00	28.00      Bottom Of Top Packer
Packer	5.00			3539.00	
Stubb	1.00			3540.00	
Perforations	3.00			3543.00	
Change Over Sub	1.00			3544.00	
Drill Pipe	62.00			3606.00	
Change Over Sub	1.00			3607.00	
Recorder	0.00	8321	Inside	3607.00	
Recorder	0.00	8679	Inside	3607.00	
Perforations	15.00			3622.00	
Bullnose	3.00			3625.00	86.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>114.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Tortinson Operating

**Mary B Unit #2**

7154 W State St  
PMB 302  
Boise ID 83714  
ATTN: Sid Tortinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44193      DST#: 2  
Test Start: 2011.07.23 @ 19:35:04

**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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: inches			

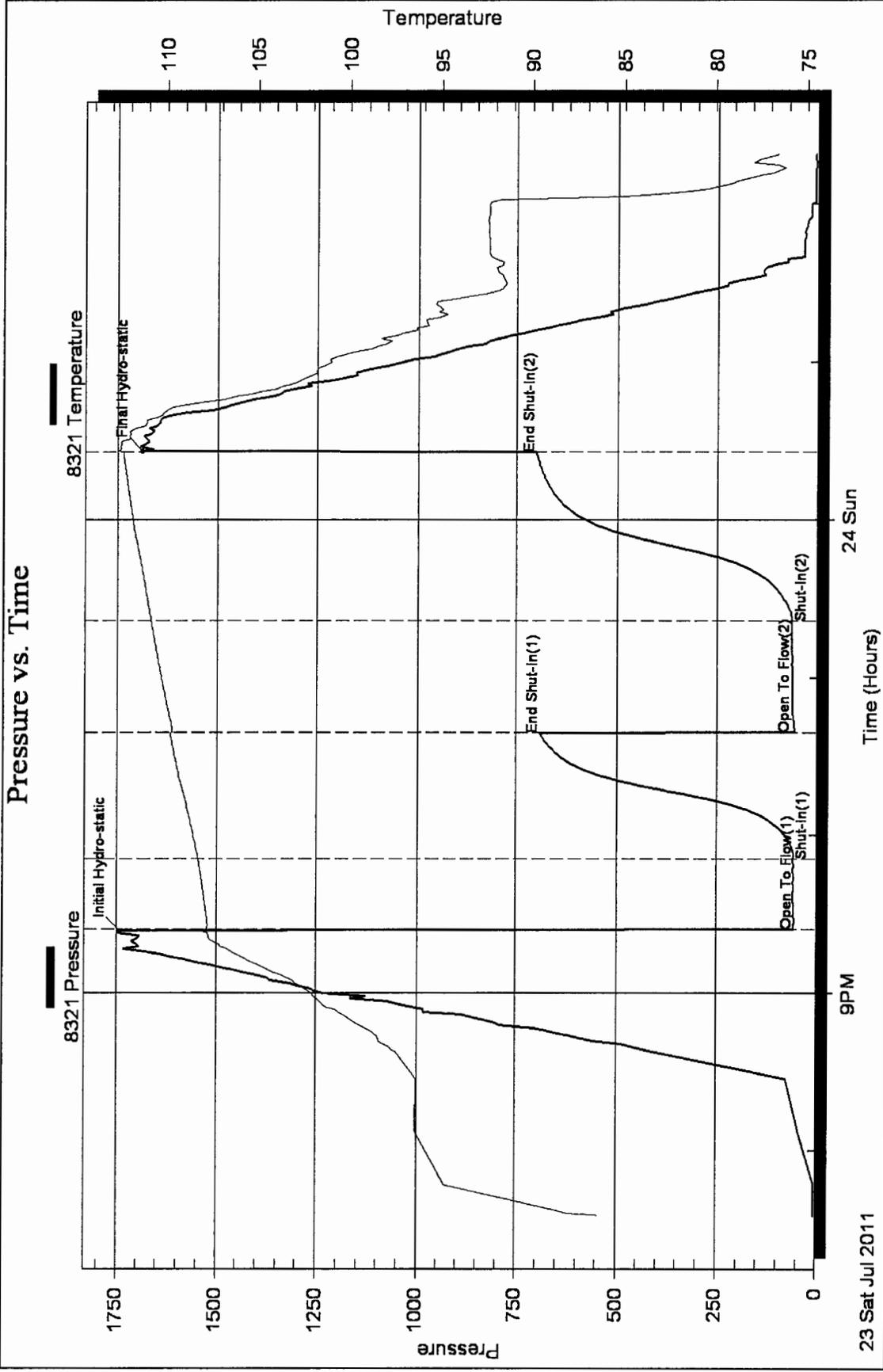
**Recovery Information**

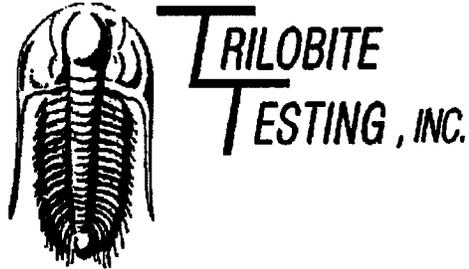
Recovery Table

Length ft	Description	Volume bbl
31.00	COGM 20%O5%G75%M	0.435
0.00	62 GIP	0.000

Total Length: 31.00 ft      Total Volume: 0.435 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

7154 W State St  
PMB 302  
Boise ID 83714

ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**

**Mary B Unit #2**

Start Date: 2011.07.24 @ 14:29:07

End Date: 2011.07.24 @ 17:49:37

Job Ticket #: 44194                      DST #: 3

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Tomlinson Operating

Mary B Unit #2

32-10s-20w Rooks,KS

DST # 3

Arbuckle

2011.07.24



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Tomlinson Operating

**Mary B Unit #2**

7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44194      DST#: 3  
Test Start: 2011.07.24 @ 14:29:07

### GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 15:59:07  
Time Test Ended: 17:49:37

Test Type: Conventional Bottom Hole  
Tester: Jeff Brown  
Unit No: 44

Interval: **3658.00 ft (KB) To 3728.00 ft (KB) (TVD)**  
Total Depth: 3728.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good

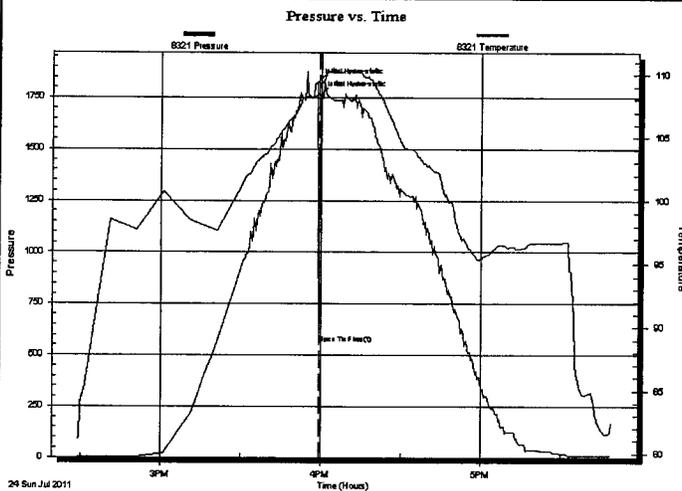
Reference Elevations: 2145.00 ft (KB)  
2136.00 ft (CF)  
KB to GR/CF: 9.00 ft

### Serial #: 8321      Inside

Press@RunDepth:                      psig @      3696.00 ft (KB)  
Start Date: 2011.07.24      End Date: 2011.07.24  
Start Time: 14:29:08      End Time: 17:48:37

Capacity: 8000.00 psig  
Last Calib.: 2011.07.24  
Time On Btm: 2011.07.24 @ 15:58:37  
Time Off Btm:

TEST COMMENT: MS-RUN



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1823.01	108.41	Initial Hydro-static
1	557.32	108.56	Open To Flow (1)
1	1763.96	109.35	Initial Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
75.00	MUD	1.05

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44194      **DST#: 3**  
Test Start: 2011.07.24 @ 14:29:07

**Tool Information**

Drill Pipe:	Length: 3637.00 ft	Diameter: 3.80 inches	Volume: 51.02 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 51.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 37000.00 lb
Depth to Top Packer:	3658.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	98.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:  
MS-RUN

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3631.00	
Shut In Tool	5.00			3636.00	
Hydraulic tool	5.00			3641.00	
Jars	5.00			3646.00	
Safety Joint	3.00			3649.00	
Packer	4.00			3653.00	28.00      Bottom Of Top Packer
Packer	5.00			3658.00	
Stubb	1.00			3659.00	
Perforations	4.00			3663.00	
Change Over Sub	1.00			3664.00	
Drill Pipe	31.00			3695.00	
Change Over Sub	1.00			3696.00	
Recorder	0.00	8321	Inside	3696.00	
Recorder	0.00	8679	Inside	3696.00	
Perforations	29.00			3725.00	
Bullnose	3.00			3728.00	70.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>98.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Tomlinson Operating  
7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**Mary B Unit #2**  
**32-10s-20w Rooks,KS**  
Job Ticket: 44194      **DST#: 3**  
Test Start: 2011.07.24 @ 14:29:07

## 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: 9.16 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

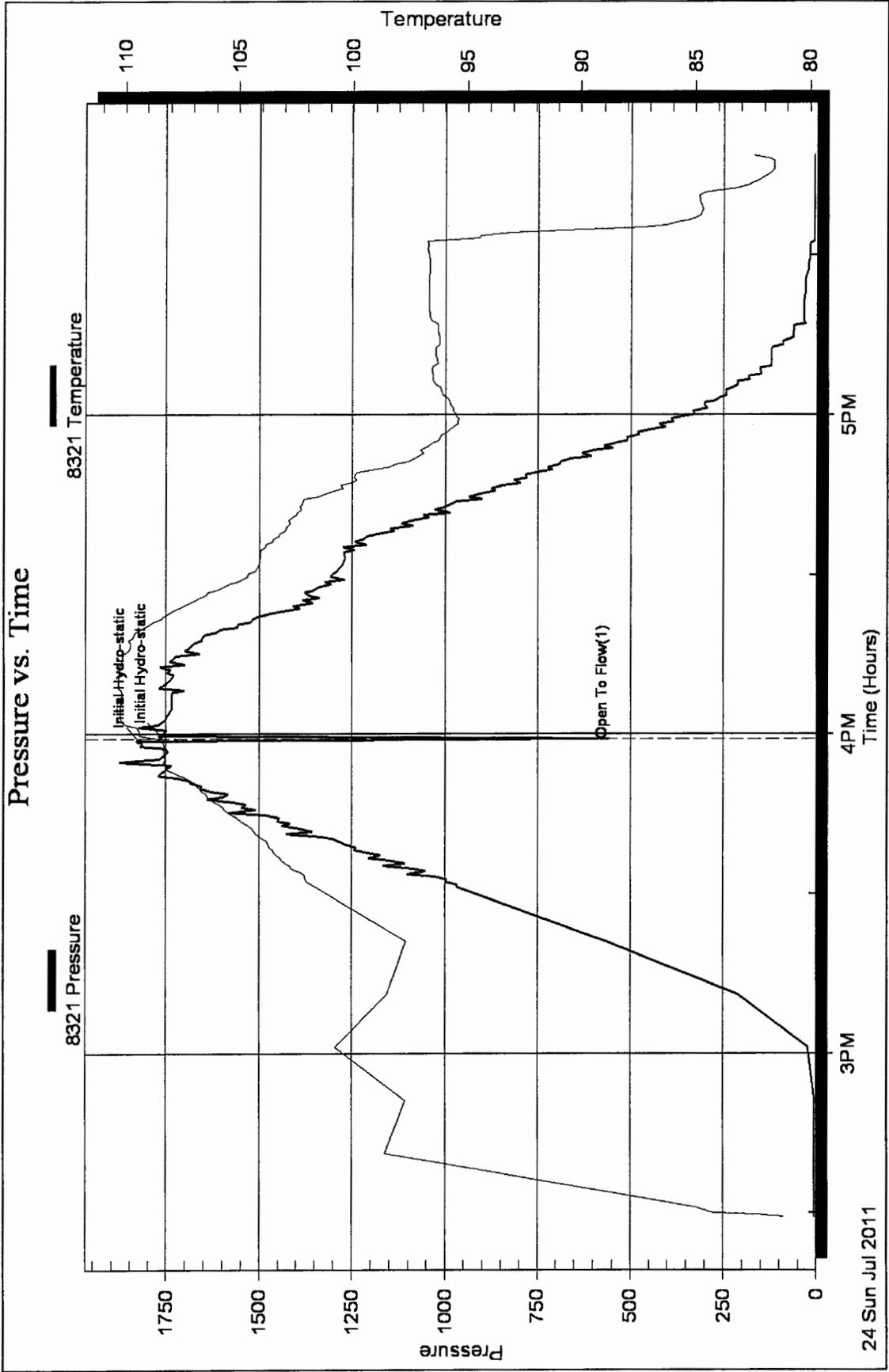
## Recovery Information

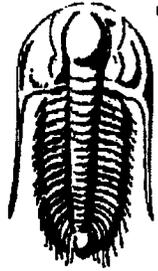
Recovery Table

Length ft	Description	Volume bbl
75.00	MUD	1.052

Total Length: 75.00ft      Total Volume: 1.052 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: MS-RUN

# Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

7154 W State St  
PMB 302  
Boise ID 83714

ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**

**Mary B Unit #2**

Start Date: 2011.07.24 @ 22:19:25

End Date: 2011.07.25 @ 05:10:25

Job Ticket #: 44195                      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Tomlinson Operating

Mary B Unit #2

32-10s-20w Rooks,KS

DST # 4

Arbuckle

2011.07.24



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Tomlinson Operating

**Mary B Unit #2**

7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**  
Job Ticket: 44195      DST#: 4  
Test Start: 2011.07.24 @ 22:19:25

### GENERAL INFORMATION:

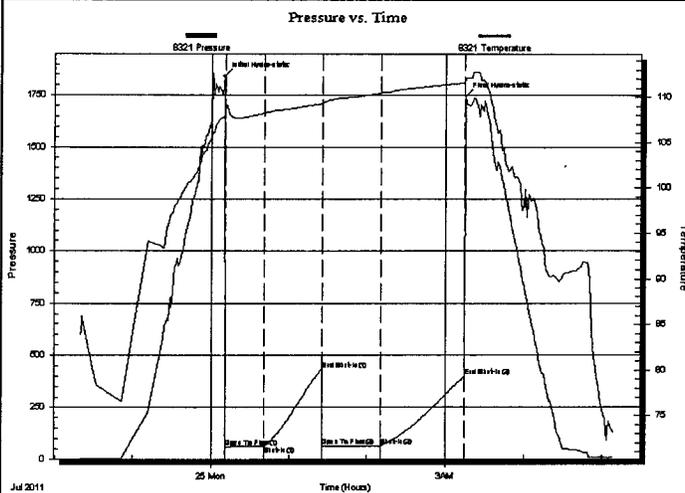
Formation: **Arbuckle**  
Deviated: **No Whipstock**      ft (KB)  
Time Tool Opened: 00:10:25  
Time Test Ended: 05:10:25  
Test Type: **Conventional Bottom Hole**  
Tester: **Jeff Brown**  
Unit No: **44**  
Interval: **3637.00 ft (KB) To 3728.00 ft (KB) (TVD)**  
Reference Elevations: **2145.00 ft (KB)**  
**2136.00 ft (CF)**  
Total Depth: **3728.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**  
KB to GR/CF: **9.00 ft**

### Serial #: 8321

Inside

Press@RunDepth: **62.56 psig @ 3705.00 ft (KB)**      Capacity: **8000.00 psig**  
Start Date: **2011.07.24**      End Date: **2011.07.25**      Last Calib.: **2011.07.25**  
Start Time: **22:19:26**      End Time: **05:09:25**      Time On Btm: **2011.07.25 @ 00:09:55**  
Time Off Btm: **2011.07.25 @ 03:14:55**

TEST COMMENT: IFF-Weak blow built to 1 1/2 In  
ISI-Dead no blow back  
FFP-Weak surface blow died out in 15 min  
FSI-dead no blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.82	107.82	Initial Hydro-static
1	60.12	107.77	Open To Flow (1)
31	62.88	108.28	Shut-In(1)
75	433.25	109.28	End Shut-In(1)
76	63.81	109.23	Open To Flow (2)
121	62.56	110.47	Shut-In(2)
185	397.13	111.63	End Shut-In(2)
185	1748.03	112.07	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
17.00	MUD	0.24

### Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcfd)



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Tonlinson Operating

**Mary B Unit #2**

7154 W State St

**32-10s-20w Rooks, KS**

FMB 302

Job Ticket: 44195

DST#: 4

Boise ID 83714

Test Start: 2011.07.24 @ 22:19:25

ATTN: Sid Tomlinson

### Tool Information

Drill Pipe:	Length: 3637.00 ft	Diameter: 3.80 inches	Volume: 51.02 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 51.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3637.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	91.00 ft			
Tool Length:	119.00 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			3610.00	
Shut In Tool	5.00			3615.00	
Hydraulic tool	5.00			3620.00	
Jars	5.00			3625.00	
Safety Joint	3.00			3628.00	
Packer	4.00			3632.00	28.00 Bottom Of Top Packer
Packer	5.00			3637.00	
Stubb	1.00			3638.00	
Perforations	3.00			3641.00	
Change Over Sub	1.00			3642.00	
Drill Pipe	62.00			3704.00	
Change Over Sub	1.00			3705.00	
Recorder	0.00	8321	Inside	3705.00	
Recorder	0.00	8737	Outside	3705.00	
Perforations	20.00			3725.00	
Bullnose	3.00			3728.00	91.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>119.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Tomlinson Operating  
7154 W State St  
FMB 302  
Boise ID 83714  
ATTN: Sid Tomlinson

**Mary B Unit #2**  
**32-10s-20w Rooks,KS**  
Job Ticket: 44195      **DST#: 4**  
Test Start: 2011.07.24 @ 22:19:25

**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: 9.18 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
17.00	MUD	0.238

Total Length: 17.00ft      Total Volume: 0.238 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 8321

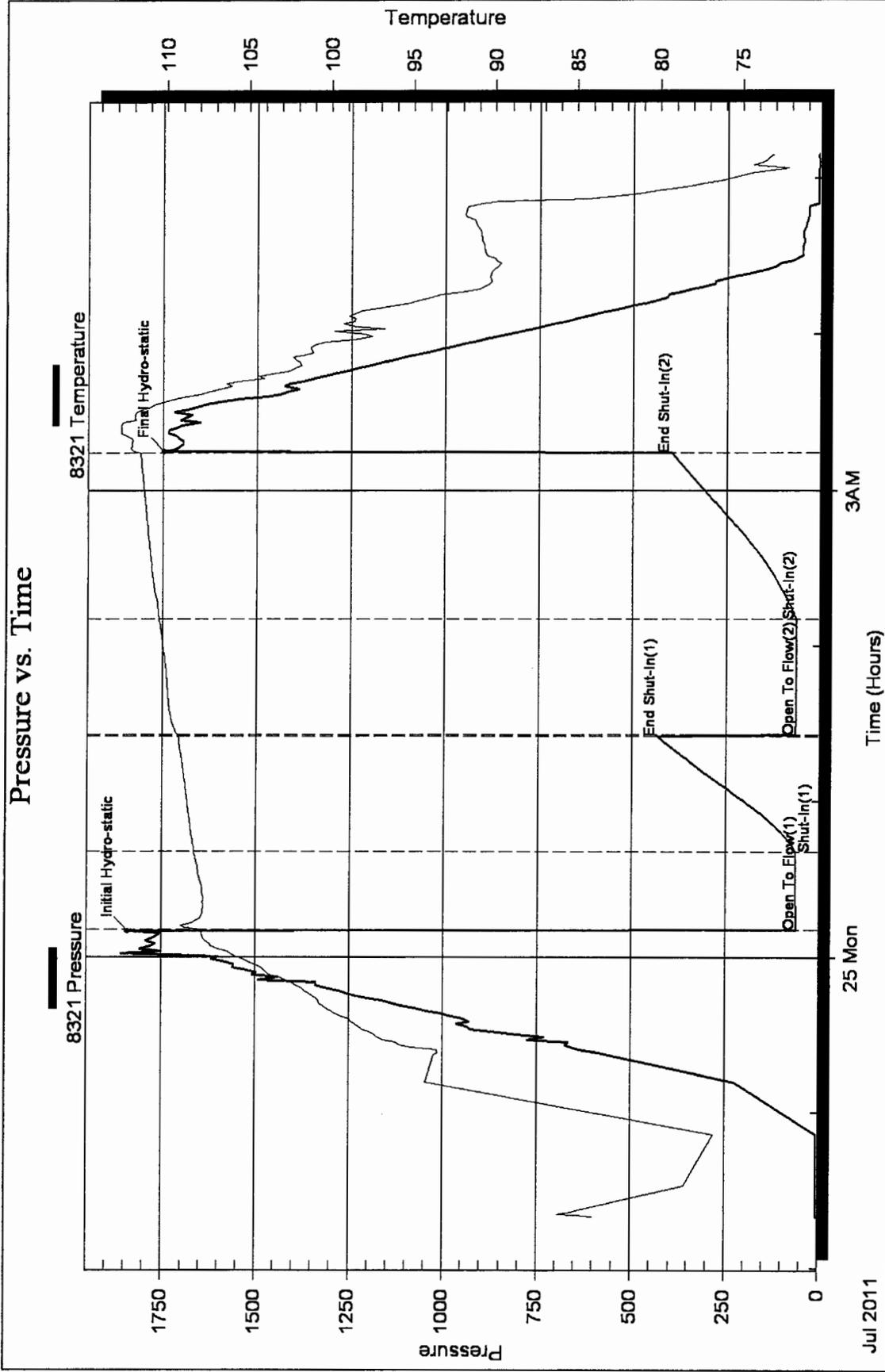
Inside

Tortinson Operating

32-10s-20w Rooks, KS

DST Test Number: 4

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

7154 W State St  
PMB 302  
Boise ID 83714

ATTN: Sid Tomlinson

**32-10s-20w Rooks,KS**

**Mary B Unit #2**

Start Date: 2011.07.25 @ 13:40:43

End Date: 2011.07.25 @ 19:19:43

Job Ticket #: 44196                      DST #: 5

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Tomlinson Operating

Mary B Unit #2

32-10s-20w Rooks,KS

DST # 5

Arbuckle

2011.07.25



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Tomlinson Operating  
 7154 W State St  
 FMB 302  
 Boise ID 83714  
 ATTN: Sid Tomlinson

**Mary B Unit #2**  
**32-10s-20w Rooks,KS**  
 Job Ticket: 44196      DST#: 5  
 Test Start: 2011.07.25 @ 13:40:43

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: **No Whipstock**      ft (KB)  
 Time Tool Opened: 15:30:43  
 Time Test Ended: 19:19:43

Test Type: **Conventional Bottom Hole**  
 Tester: **Jeff Brown**  
 Unit No: **44**

Interval: **3728.00 ft (KB) To 3744.00 ft (KB) (TVD)**  
 Total Depth: **3744.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2145.00 ft (KB)**  
**2136.00 ft (CF)**  
 KB to GR/CF: **9.00 ft**

## Serial #: 8321

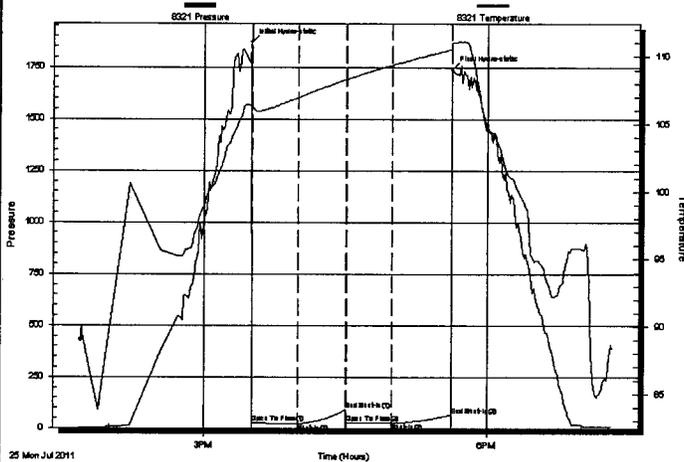
Inside

Press@RunDepth: **24.79 psig @ 3731.00 ft (KB)**  
 Start Date: **2011.07.25**      End Date: **2011.07.25**  
 Start Time: **13:40:44**      End Time: **19:19:43**

Capacity: **8000.00 psig**  
 Last Calib.: **2011.07.25**  
 Time On Btm: **2011.07.25 @ 15:30:13**  
 Time Off Btm: **2011.07.25 @ 17:37:43**

TEST COMMENT: IFP-Weak surface blow died out in 25 min  
 ISF-Dead no blow back  
 FFP-Dead no blow  
 FSF-Dead no blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1870.10	106.30	Initial Hydro-static
1	26.30	106.25	Open To Flow (1)
30	23.38	106.95	Shut-In(1)
61	93.30	108.30	End Shut-In(1)
61	26.06	108.30	Open To Flow (2)
90	24.79	109.35	Shut-In(2)
127	65.59	110.53	End Shut-In(2)
128	1737.89	110.91	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	VSOOM 3%O97%M	0.03

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St

**32-10s-20w Rooks,KS**

FMB 302

Job Ticket: 44196

**DST#: 5**

Boise ID 83714

Test Start: 2011.07.25 @ 13:40:43

ATTN: Sid Tomlinson

### Tool Information

Drill Pipe:	Length: 3731.00 ft	Diameter: 3.80 inches	Volume: 52.34 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<b>Total Volume: 52.34 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 37000.00 lb
Depth to Top Packer:	3728.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	44.00 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			3701.00	
Shut In Tool	5.00			3706.00	
Hydraulic tool	5.00			3711.00	
Jars	5.00			3716.00	
Safety Joint	3.00			3719.00	
Packer	4.00			3723.00	28.00 Bottom Of Top Packer
Packer	5.00			3728.00	
Stubb	1.00			3729.00	
Perforations	2.00			3731.00	
Recorder	0.00	8321	Inside	3731.00	
Recorder	0.00	8737	Inside	3731.00	
Perforations	10.00			3741.00	
Bullnose	3.00			3744.00	16.00 Bottom Packers & Anchor

**Total Tool Length: 44.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Tomlinson Operating

**Mary B Unit #2**

7154 W State St

**32-10s-20w Rooks,KS**

FMB 302

Job Ticket: 44196

DST#: 5

Boise ID 83714

ATTN: Sid Tomlinson

Test Start: 2011.07.25 @ 13:40:43

### 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4900.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	VSOCM3%O97%M	0.028

Total Length: 2.00ft

Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8321

Inside

Tomlinson Operating

32-10s-20w Rooks, KS

DST Test Number: 5

### Pressure vs. Time

