



DRILL STEM TEST REPORT

Prepared For: **Blake Exploration LLC**

PO Box 150
Bogue KS 67625

ATTN: Mike Davignon

34-8s-17w Rook,KS

McMullen #1

Start Date: 2011.07.04 @ 03:33:46

End Date: 2011.07.04 @ 09:43:46

Job Ticket #: 44180 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook, KS

Job Ticket: 44180

DST#: 1

ATTN: Mike Davignon

Test Start: 2011.07.04 @ 03:33:46

GENERAL INFORMATION:

Formation: **Lansing-C-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:23:16

Time Test Ended: 09:43:46

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: 3185.00 ft (KB) To 3250.00 ft (KB) (TVD)

Reference Elevations: 2029.00 ft (KB)

Total Depth: 3250.00 ft (KB) (TVD)

2021.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8321

Inside

Press@RunDepth: 48.76 psig @ 3228.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.04

End Date:

2011.07.04

Last Calib.: 2011.07.04

Start Time: 03:33:47

End Time:

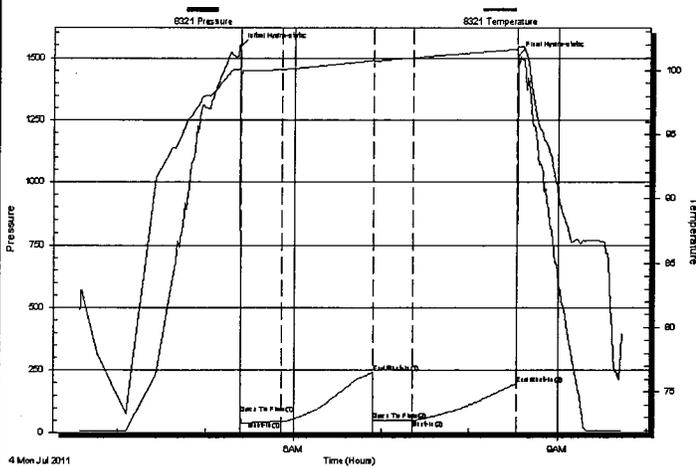
09:43:46

Time On Btmr 2011.07.04 @ 05:22:46

Time Off Btmr 2011.07.04 @ 08:32:46

TEST COMMENT: IFF-Weak blow built to 1 1/8 in
ISI-Dead no blow back
FFP-Weak blow built to 1 1/2 in
FSI-Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1544.92	100.22	Initial Hydro-static
1	77.55	99.44	Open To Flow (1)
29	43.72	100.05	Shut-In(1)
91	239.27	100.75	End Shut-In(1)
92	48.45	100.72	Open To Flow (2)
118	48.76	100.98	Shut-In(2)
189	194.93	101.61	End Shut-In(2)
190	1507.69	101.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM 20% O 80% M	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

Job Ticket: 44180

DST#: 1

ATTN: Mike Davignon

Test Start: 2011.07.04 @ 03:33:46

Tool Information

Drill Pipe:	Length: 3169.00 ft	Diameter: 3.80 inches	Volume: 44.45 bbl	Tool Weight: 2000.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 58000.00 lb
		<u>Total Volume:</u>	<u>44.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3185.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	85.00 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			3166.00	
Shut In Tool	5.00			3171.00	
Hydraulic tool	5.00			3176.00	
Packer	4.00			3180.00	20.00 Bottom Of Top Packer
Packer	5.00			3185.00	
Stubb	1.00			3186.00	
Perforations	9.00			3195.00	
Change Over Sub	1.00			3196.00	
Drill Pipe	31.00			3227.00	
Change Over Sub	1.00			3228.00	
Recorder	0.00	8321	Inside	3228.00	
Recorder	0.00	8679	Outside	3228.00	
Perforations	19.00			3247.00	
Bullnose	3.00			3250.00	65.00 Bottom Packers & Anchor
Total Tool Length:	85.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook, KS

Job Ticket: 44180

DST#: 1

ATTN: Mke Davignon

Test Start: 2011.07.04 @ 03:33:46

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: 69.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OCM 20%O80%M	0.098

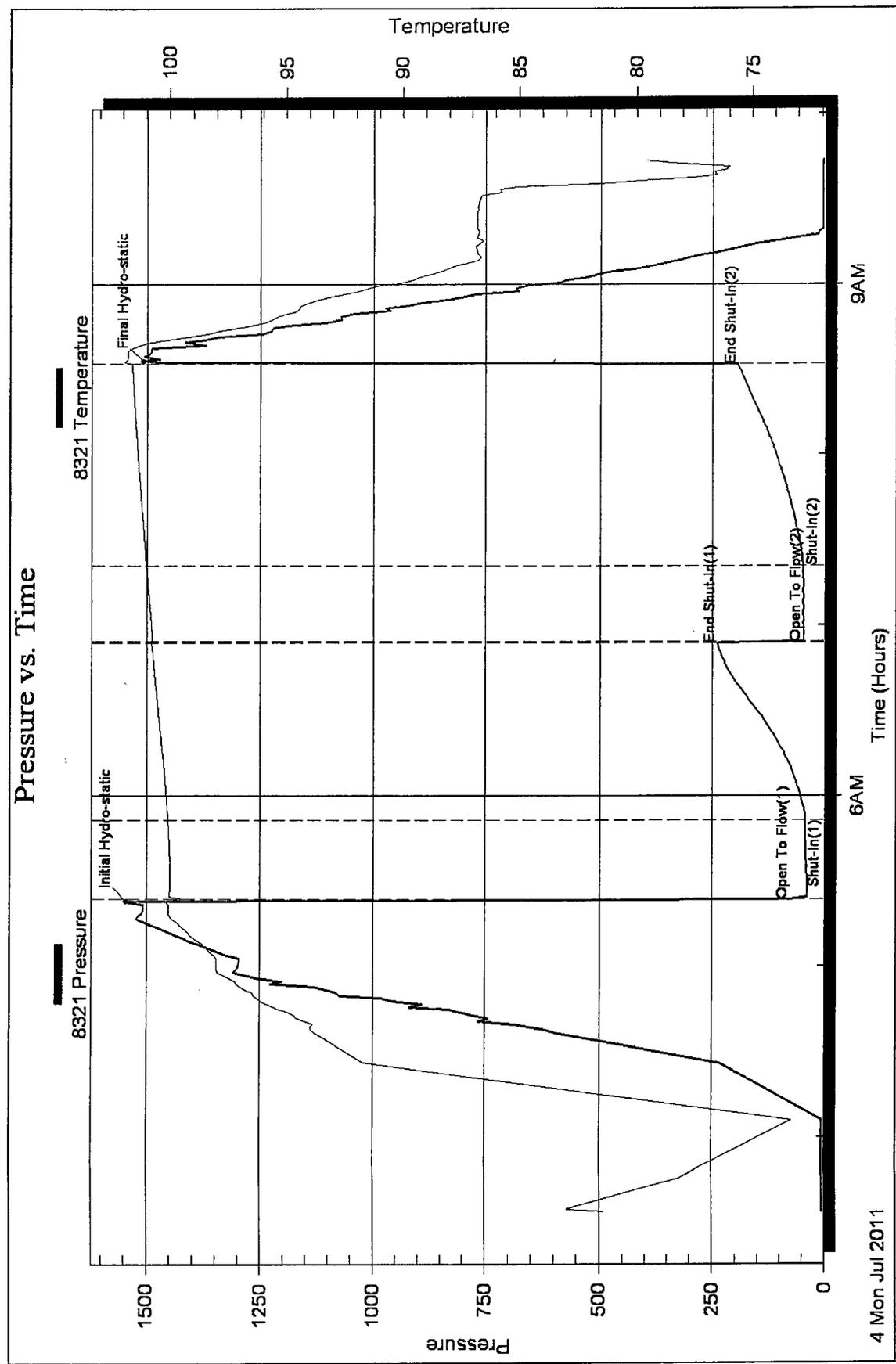
Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



4 Mon Jul 2011



DRILL STEM TEST REPORT

Prepared For: **Blake Exploration LLC**

PO Box 150
Bogue KS 67625

ATTN: Mike Davignon

34-8s-17w Rook,KS

McMullen #1

Start Date: 2011.07.04 @ 14:46:20

End Date: 2011.07.04 @ 21:15:20

Job Ticket #: 44181 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Blake Exploration LLC

McMullen #1

34-8s-17w Rook,KS

DST # 2

LKC-G

2011.07.04



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

ATTN: Mike Davignon

Job Ticket: 44181 DST#: 2

Test Start: 2011.07.04 @ 14:46:20

GENERAL INFORMATION:

Formation: **LKC-G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:02:20

Time Test Ended: 21:15:20

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: **3250.00 ft (KB) To 3270.00 ft (KB) (TVD)**

Total Depth: 3270.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2029.00 ft (KB)

2021.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8321

Inside

Press@RunDepth: 72.03 psig @ 3252.00 ft (KB)

Start Date: 2011.07.04

End Date: 2011.07.04

Start Time: 14:46:21

End Time: 21:23:20

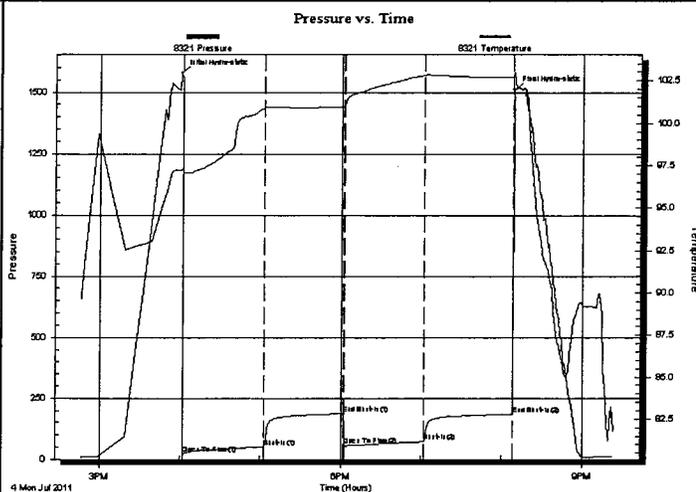
Capacity: 8000.00 psig

Last Calib.: 2011.07.04

Time On Btrt 2011.07.04 @ 16:00:50

Time Off Btrt 2011.07.04 @ 20:08:50

TEST COMMENT: IFF-Fair blow built to 6 in
ISL-Dead no blow back
FFP-Fair blow built to 4 in
FSL-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1578.02	97.23	Initial Hydro-static
2	20.93	96.91	Open To Flow (1)
62	51.87	100.90	Shut-In(1)
121	185.63	100.97	End Shut-In(1)
122	55.88	101.02	Open To Flow (2)
182	72.03	102.81	Shut-In(2)
248	183.14	102.70	End Shut-In(2)
248	1511.90	102.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	MV 40% M60% W	0.04
61.00	MV with a scum of oil 20% M80% W	0.66

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

Job Ticket: 44181

DST#: 2

ATTN: Mike Davignon

Test Start: 2011.07.04 @ 14:46:20

Tool Information

Drill Pipe:	Length: 3233.00 ft	Diameter: 3.80 inches	Volume: 45.35 bbl	Tool Weight: 2000.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 58000.00 lb
			Total Volume: 45.50 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3250.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	40.00 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			3231.00	
Shut In Tool	5.00			3236.00	
Hydraulic tool	5.00			3241.00	
Packer	4.00			3245.00	20.00 Bottom Of Top Packer
Packer	5.00			3250.00	
Stubb	1.00			3251.00	
Perforations	1.00			3252.00	
Recorder	0.00	8321	Inside	3252.00	
Recorder	0.00	8679	Outside	3252.00	
Perforations	15.00			3267.00	
Bullnose	3.00			3270.00	20.00 Bottom Packers & Anchor

Total Tool Length: 40.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

Job Ticket: 44181

DST#: 2

ATTN: Mike Davignon

Test Start: 2011.07.04 @ 14:46:20

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:

55000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
8.00	MW 40% M60% W	0.039
61.00	MW with a scum of oil 20% M80% W	0.655

Total Length: 69.00 ft Total Volume: 0.694 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8321

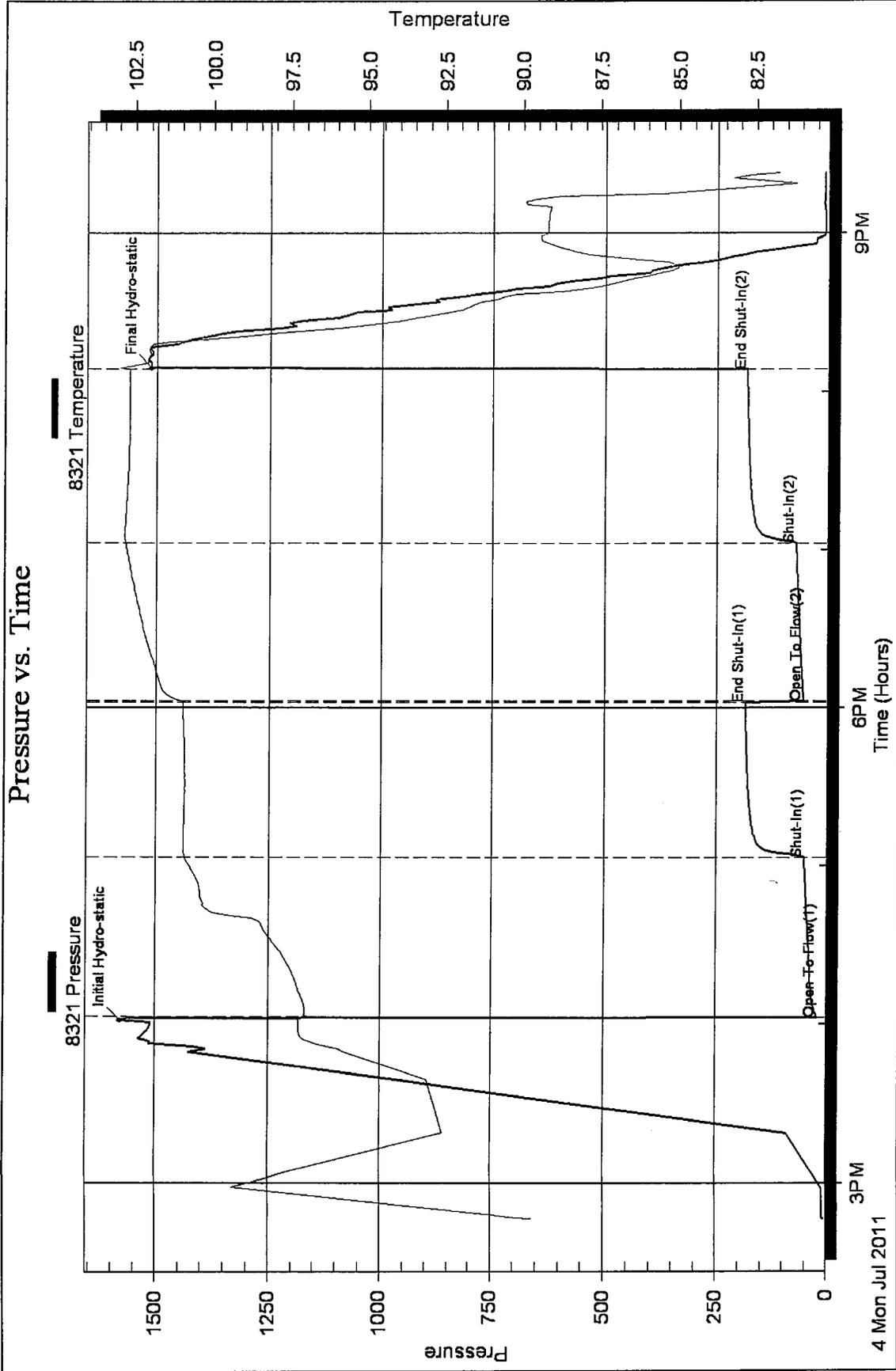
Inside

Blake Exploration LLC

34-8s-17w Rook,KS

DST Test Number: 2

Pressure vs. Time

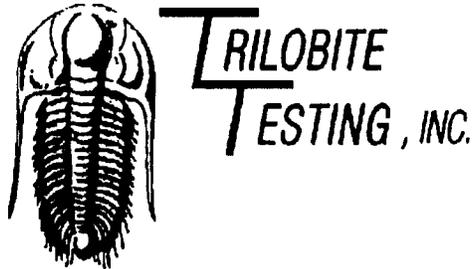


4 Mon Jul 2011

3PM

6PM

9PM



DRILL STEM TEST REPORT

Prepared For: **Blake Exploration LLC**

PO Box 150
Bogue KS 67625

ATTN: Mike Davignon

34-8s-17w Rook,KS

McMullen #1

Start Date: 2011.07.05 @ 10:46:32

End Date: 2011.07.05 @ 16:33:02

Job Ticket #: 44182 DST #: 3

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

ATTN: Mike Davignon

Job Ticket: 44182

DST#: 3

Test Start: 2011.07.05 @ 10:46:32

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:57:32

Time Test Ended: 16:33:02

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: **3395.00 ft (KB) To 3462.00 ft (KB) (TVD)**

Total Depth: **3462.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: Good

Reference Elevations: **2029.00 ft (KB)**

2021.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 8321 Inside

Press@RunDepth: **66.76 psig @ 3434.00 ft (KB)**

Start Date: **2011.07.05** End Date: **2011.07.05**

Start Time: **10:46:33** End Time: **16:33:02**

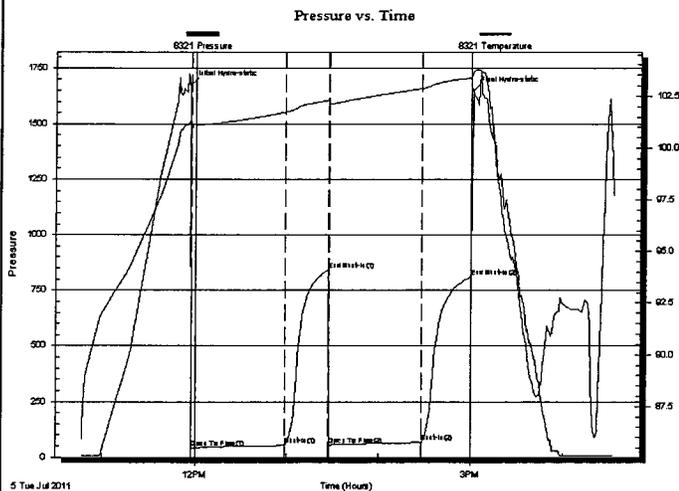
Capacity: **8000.00 psig**

Last Calib.: **2011.07.05**

Time On Btm: **2011.07.05 @ 11:57:02**

Time Off Btm: **2011.07.05 @ 15:01:02**

TEST COMMENT: IFF-Fair blow built to 8 1/2 in
ISI-Dead no blow back
FFP-Good blow BOB in 58 min
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1676.49	101.35	Initial Hydro-static
1	43.11	100.72	Open To Flow (1)
62	53.96	101.73	Shut-In(1)
90	842.50	102.30	End Shut-In(1)
91	54.49	102.15	Open To Flow (2)
151	66.76	102.86	Shut-In(2)
183	811.98	103.38	End Shut-In(2)
184	1651.77	103.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	MOGO 10%G35%M55%O	0.15
60.00	MO 15%M85%O	0.84
0.00	126 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

ATTN: Mike Davignon

Job Ticket: 44182

DST#: 3

Test Start: 2011.07.05 @ 10:46:32

Tool Information

Drill Pipe:	Length: 3359.00 ft	Diameter: 3.80 inches	Volume: 47.12 bbl	Tool Weight: 2000.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3395.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	67.00 ft			
Tool Length:	87.00 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			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	5.00			3401.00	
Change Over Sub	1.00			3402.00	
Drill Pipe	31.00			3433.00	
Change Over Sub	1.00			3434.00	
Recorder	0.00	8321	Inside	3434.00	
Recorder	0.00	8679	Outside	3434.00	
Perforations	25.00			3459.00	
Bullnose	3.00			3462.00	67.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Blake Exploration LLC

McMullen #1

PO Box 150
Bogue KS 67625

34-8s-17w Rook,KS

Job Ticket: 44182

DST#: 3

ATTN: Mike Davignon

Test Start: 2011.07.05 @ 10:46:32

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 57.00 sec/qt
Water Loss: 7.18 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 31 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	MCGO 10%G35%M55%O	0.148
60.00	MO 15%M85%O	0.842
0.00	126 GIP	0.000

Total Length: 90.00 ft Total Volume: 0.990 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8321

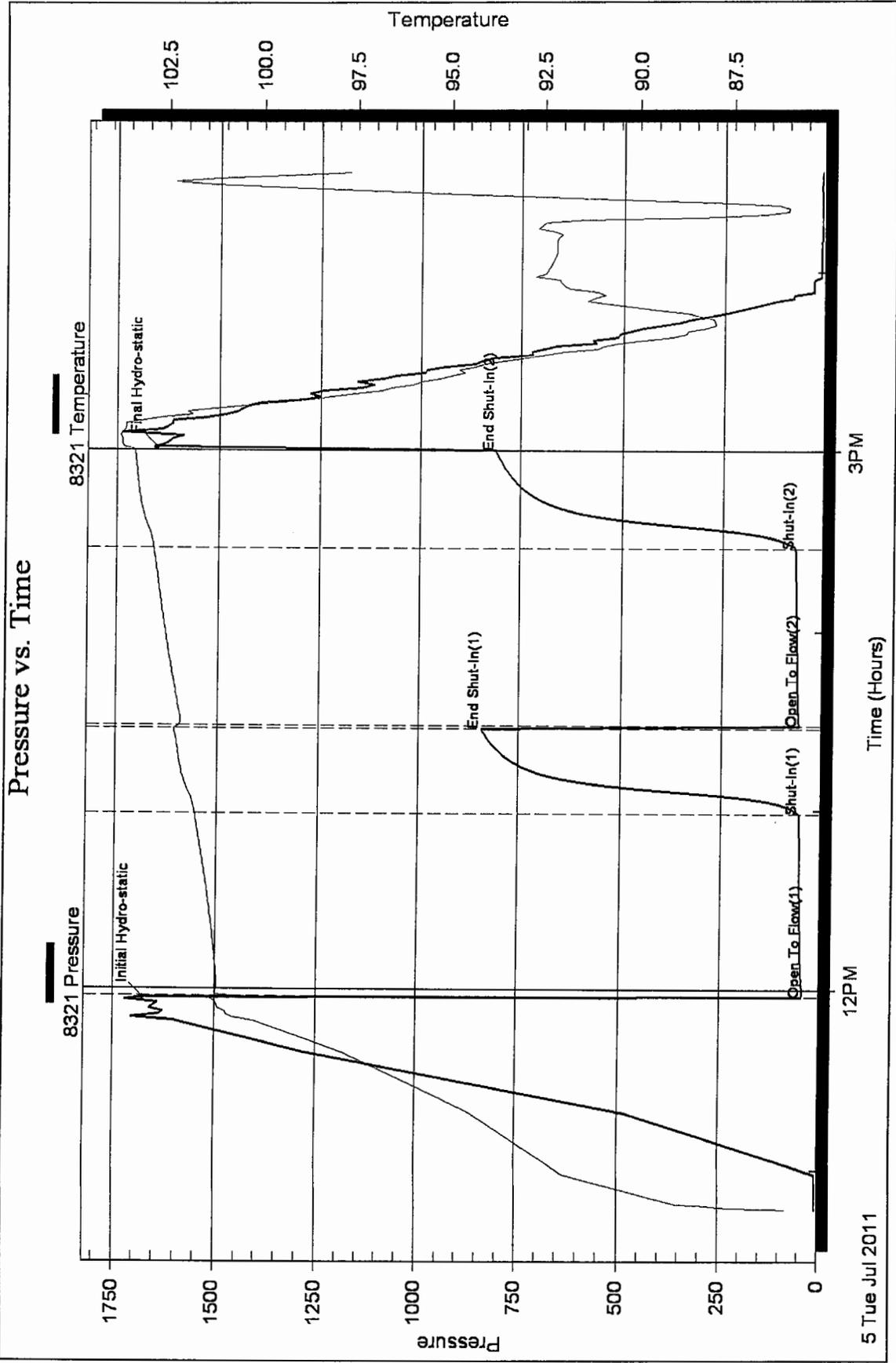
Inside

Blake Exploration LLC

34-8s-17w Rook, KS

DST Test Number: 3

Pressure vs. Time



5 Tue Jul 2011

12PM

3PM

Time (Hours)