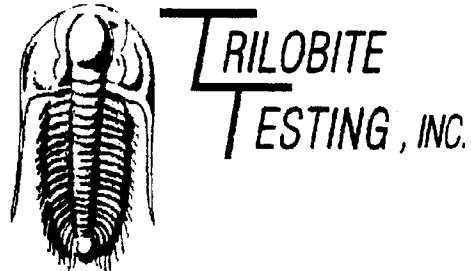


15-151-22307

24-29s-14w

MD



DRILL STEM TEST REPORT

Prepared For: **RAMA Operating Co., Inc.**

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

24-29s-14w Pratt KS

Andrews # 7-24

Start Date: 2008.07.24 @ 02:24:24

End Date: 2008.07.24 @ 09:07:54

Job Ticket #: 29332 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

RAMA Operating Co., Inc.

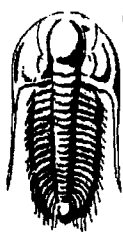
Andrews # 7-24

24-29s-14w Pratt KS

DST # 1

Lansing 'B'

2008.07.24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

RAMA Operating Co., Inc.

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

Andrews # 7-24

24-29s-14w Pratt KS

Job Ticket: 29332

DST#: 1

Test Start: 2008.07.24 @ 02:24:24

GENERAL INFORMATION:

Formation: **Lansing 'B'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:50:54

Time Test Ended: 09:07:54

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **3944.00 ft (KB) To 3962.00 ft (KB) (TVD)**

Total Depth: 3962.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1965.00 ft (KB)

1952.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 6798

Inside

Press@RunDepth: 52.73 psig @ 3945.00 ft (KB)

Start Date: 2008.07.24

End Date:

2008.07.24

Capacity: 7000.00 psig

Last Calib.: 2008.07.24

Start Time:

02:24:25

End Time:

09:07:54

Time On Btm: 2008.07.24 @ 04:48:24

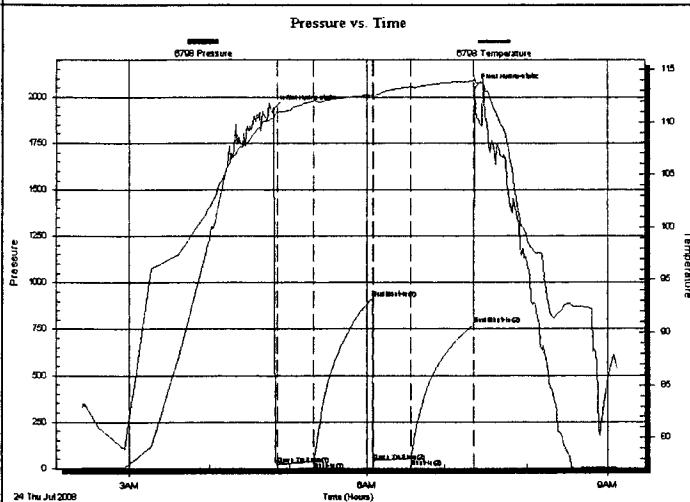
Time Off Btm: 2008.07.24 @ 07:21:54

TEST COMMENT: IF: Strong blow BOB in 30 secs

IS: No blow

FF: Strong blow BOB immediately.

FS: No blow



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1935.99	110.31	Initial Hydro-static
3	22.24	110.90	Open To Flow (1)
31	35.56	112.01	Shut-In (1)
76	914.02	112.55	End Shut-In (1)
77	35.36	112.24	Open To Flow (2)
106	52.73	113.32	Shut-In (2)
153	771.53	113.87	End Shut-In (2)
154	2049.72	114.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	VSG&WCM 2 1/2%g 2 1/2%w 95%sm	0.34
0.00	2410' GIP	0.00
0.00		0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29332

DST#: 1

ATTN: Josh Austin

Test Start: 2008.07.24 @ 02:24:24

Tool Information

Drill Pipe:	Length: 3704.00 ft	Diameter: 3.80 inches	Volume: 51.96 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 249.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	90000.00 lb
		Total Volume:	53.18 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	79000.00 lb
Depth to Top Packer:	3944.00 ft			Final	79000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	18.00 ft				
Tool Length:	38.00 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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Shut In Tool	5.00			3929.00	
Hydraulic tool	5.00			3934.00	
Packer	5.00			3939.00	20.00 Bottom Of Top Packer
Packer	5.00			3944.00	
Stubb	1.00			3945.00	
Recorder	0.00	6798	Inside	3945.00	
Recorder	0.00	8358	Inside	3945.00	
Perforations	14.00			3959.00	
Bullnose	3.00			3962.00	18.00 Bottom Packers & Anchor
Total Tool Length:	38.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

ATTN: Josh Austin

Job Ticket: 29332

DST#: 1

Test Start: 2008.07.24 @ 02:24:24

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	VSG&WCM 2 1/2%g 2 1/2%w 95%m	0.344
0.00	2410' GIP	0.000
0.00		0.000

Total Length: 70.00 ft

Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

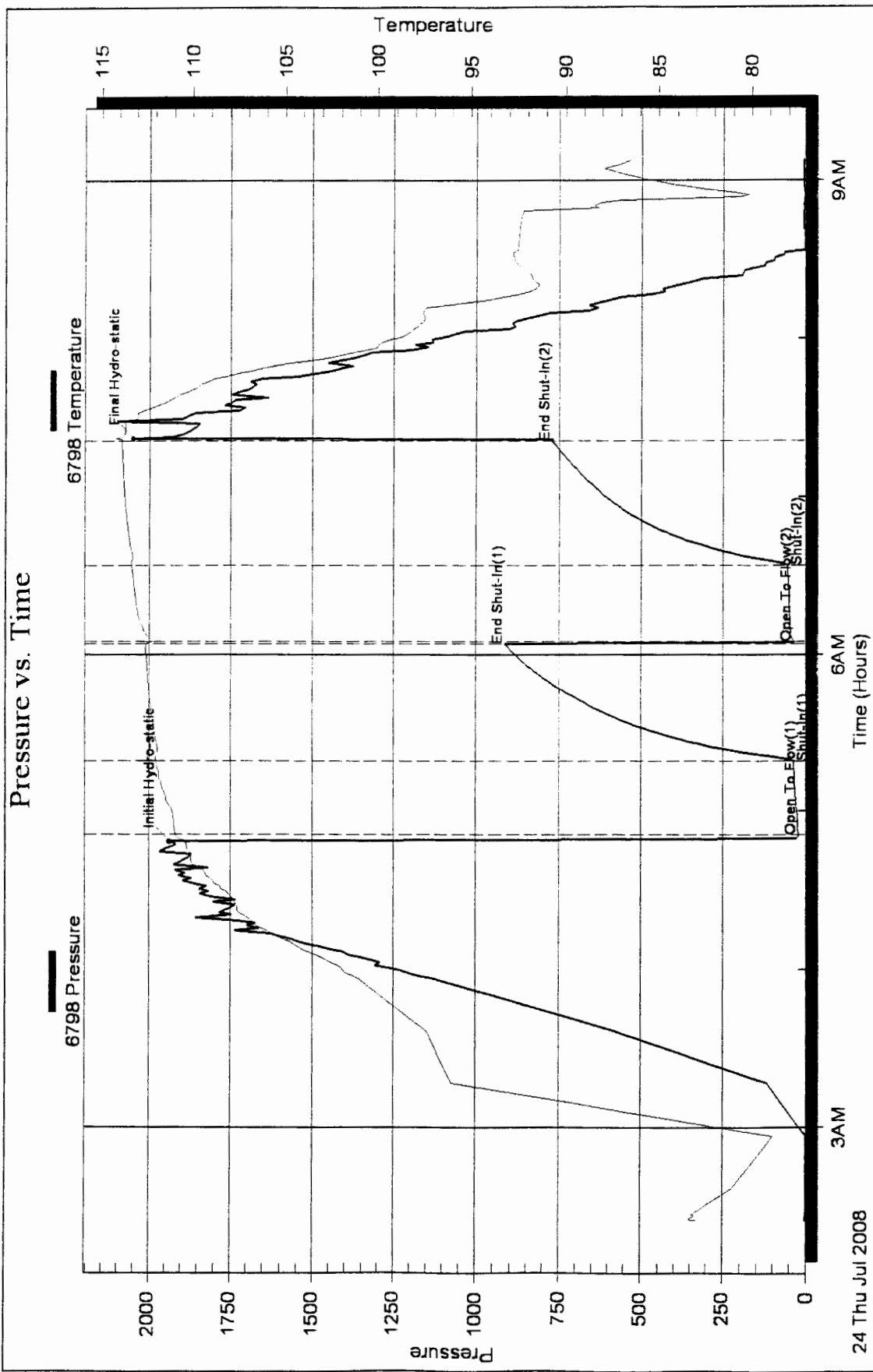
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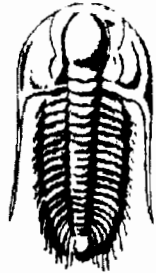
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **RAMA Operating Co., Inc.**

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

24-29s-14w Pratt KS

Andrews # 7-24

Start Date: 2008.07.25 @ 14:39:49

End Date: 2008.07.25 @ 21:47:19

Job Ticket #: 29333 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

RAMA Operating Co., Inc.

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

Andrews # 7-24

24-29s-14w Pratt KS

Job Ticket: 29333

DST#: 2

Test Start: 2008.07.25 @ 14:39:49

GENERAL INFORMATION:

Formation: **Simpson Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:02:19

Time Test Ended: 21:47:19

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **4330.00 ft (KB) To 4362.00 ft (KB) (TVD)**

Total Depth: 4362.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1965.00 ft (KB)

1952.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 6798

Inside

Press@RunDepth: 45.26 psig @ 4331.00 ft (KB)

Start Date: 2008.07.25

End Date:

2008.07.25

Start Time: 14:39:50

End Time:

21:47:19

Capacity: 7000.00 psig

Last Calib.: 2008.07.25

Time On Btm: 2008.07.25 @ 16:59:49

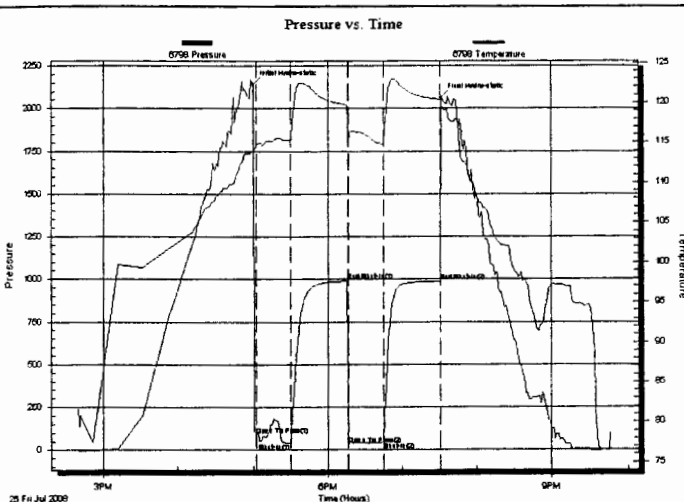
Time Off Btm: 2008.07.25 @ 19:31:19

TEST COMMENT: IF: Strong blow BOB in 5 mins.

IS: No blow

FF: Very strong blow BOB imm GTS in 5 mins (see gas flow report.)

FS: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2142.31	113.87	Initial Hydro-static
3	85.35	114.65	Open To Flow (1)
31	41.99	115.22	Shut-In(1)
76	988.83	119.66	End Shut-In(1)
77	32.58	115.13	Open To Flow (2)
105	45.26	114.75	Shut-In(2)
151	986.58	120.36	End Shut-In(2)
152	2060.88	120.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	SG&OCM 3%g 2%o 95%rn	0.37
0.00	4261' GIP	0.00
0.00		0.00

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	6.00	32.36
Last Gas Rate	0.25	7.00	33.95
Max. Gas Rate	0.25	7.00	33.95



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29333

DST#: 2

ATTN: Josh Austin

Test Start: 2008.07.25 @ 14:39:49

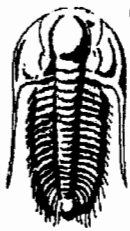
Tool Information

Drill Pipe:	Length: 4087.00 ft	Diameter: 3.80 inches	Volume: 57.33 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 249.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	90000.00 lb
		Total Volume:	58.55 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	84000.00 lb
Depth to Top Packer:	4330.00 ft			Final	84000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	32.00 ft				
Tool Length:	52.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4315.00	
Hydraulic tool	5.00			4320.00	
Packer	5.00			4325.00	20.00 Bottom Of Top Packer
Packer	5.00			4330.00	
Stubb	1.00			4331.00	
Recorder	0.00	6798	Inside	4331.00	
Recorder	0.00	8358	Inside	4331.00	
Perforations	28.00			4359.00	
Bullnose	3.00			4362.00	32.00 Bottom Packers & Anchor
Total Tool Length:	52.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29333

DST#: 2

ATTN: Josh Austin

Test Start: 2008.07.25 @ 14:39:49

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	SG&OCM 3%g 2%o 95%w	0.369
0.00	4261' GIP	0.000
0.00		0.000

Total Length: 75.00 ft

Total Volume: 0.369 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: GA-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29333

DST#: 2

ATTN: Josh Austin

Test Start: 2008.07.25 @ 14:39:49

Gas Rates Information

Temperature: 59 deg C

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	10	0.25	6.00	32.36
2	10	0.25	6.00	32.36
2	20	0.25	6.50	33.16
2	30	0.25	7.00	33.95

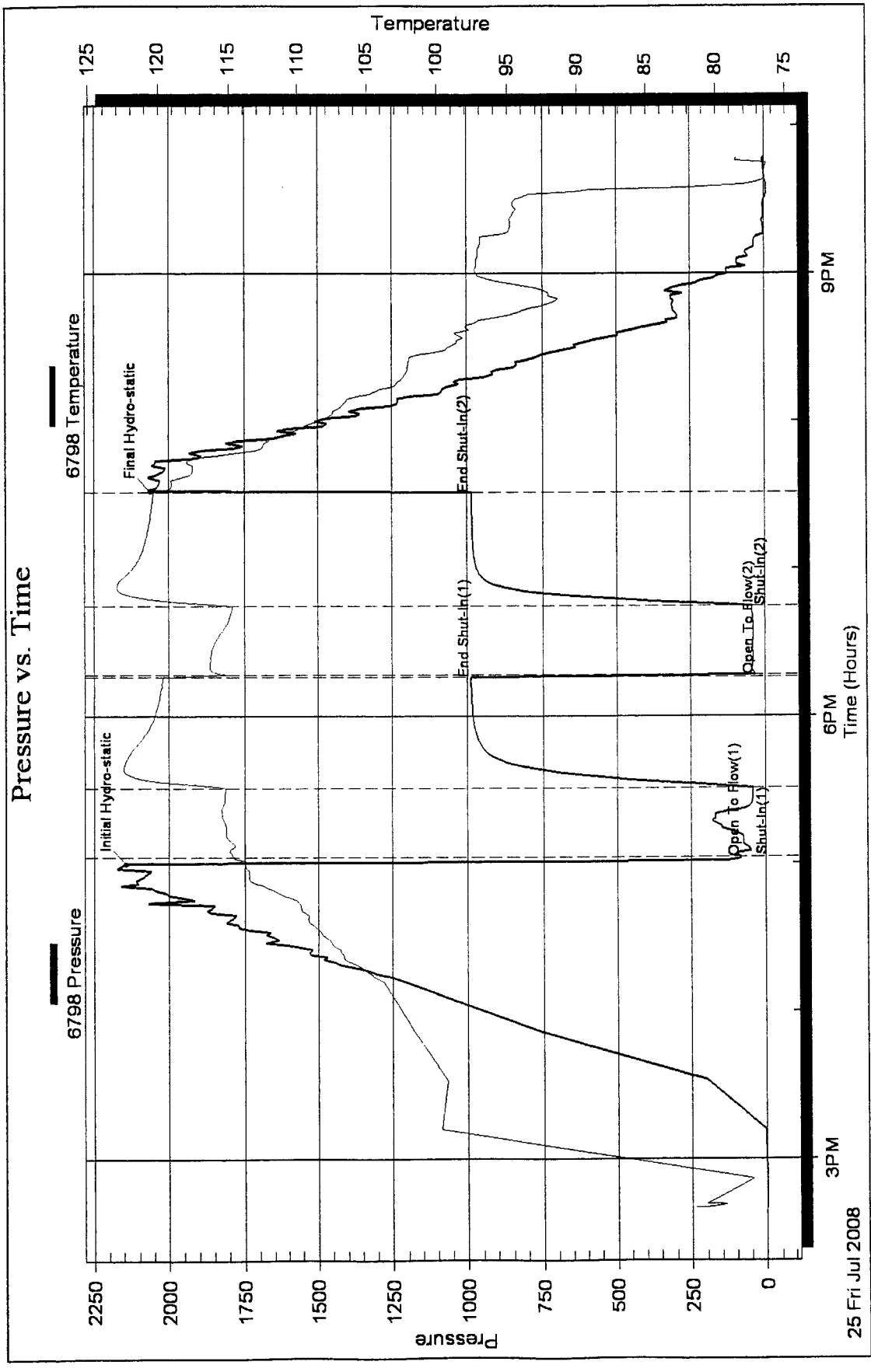
DST Test Number: 2

24-29s-14w Pratt KS

RAMA Operating Co., Inc.

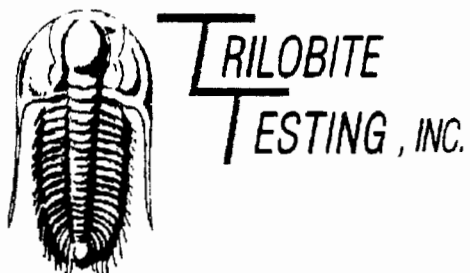
Inside

Serial #: 6798



Ref. No: 29333

Trilobite Testing, Inc



DRILL STEM TEST REPORT

Prepared For: **RAMA Operating Co., Inc.**

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

24-29s-14w Pratt KS

Andrews # 7-24

Start Date: 2008.07.26 @ 08:46:01

End Date: 2008.07.26 @ 15:22:01

Job Ticket #: 29334 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

RAMA Operating Co., Inc.

P.O.Box 159
Stafford, Kansas 67578

ATTN: Josh Austin

Andrews # 7-24

24-29s-14w Pratt KS

Job Ticket: 29334

DST#: 3

Test Start: 2008.07.26 @ 08:46:01

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:46:01

Time Test Ended: 15:22:01

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: 4402.00 ft (KB) To 4410.00 ft (KB) (TVD)

Total Depth: 4410.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1965.00 ft (KB)

1952.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 6798

Inside

Press@RunDepth: 459.41 psig @ 4403.00 ft (KB)

Start Date: 2008.07.26

End Date:

2008.07.26

Start Time: 08:46:02

End Time:

15:22:01

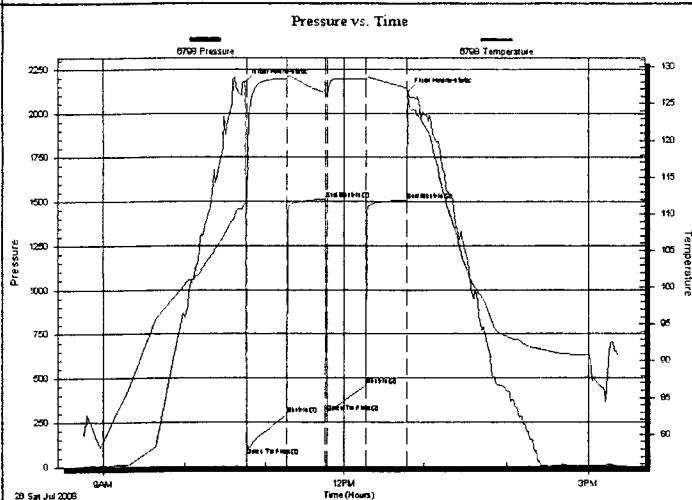
Capacity: 7000.00 psig

Last Calib.: 2008.07.26

Time On Btm: 2008.07.26 @ 10:44:31

Time Off Btm: 2008.07.26 @ 12:48:01

TEST COMMENT: IF:Fair blow BOBin 8 mins
IS:Weak blow Built to 4 1/2"
FF:Fair blow BOB in 9 mins
FSI:Weak blow Built to 6"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2172.46	111.34	Initial Hydro-static
2	61.32	110.94	Open To Flow (1)
32	294.55	128.35	Shut-In(1)
62	1512.64	126.37	End Shut-In(1)
63	303.16	126.04	Open To Flow (2)
92	459.41	128.24	Shut-In(2)
123	1507.63	127.12	End Shut-In(2)
124	2121.10	125.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
680.00	SMCW 90%w 10%m	7.27
30.00	SO&WCM 5%o 10%w 85%m	0.42
2.00	Clean Oil	0.03
0.00	220' GIP	0.00
0.00	RW= .084 @ 105 deg.	0.00
0.00		0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29334

DST#: 3

ATTN: Josh Austin

Test Start: 2008.07.26 @ 08:46:01

Tool Information

Drill Pipe:	Length: 4151.00 ft	Diameter: 3.80 inches	Volume: 58.23 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 249.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	90000.00 lb
		Total Volume:	59.45 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	80000.00 lb
Depth to Top Packer:	4402.00 ft			Final	83000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	8.00 ft				
Tool Length:	28.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4387.00	
Hydraulic tool	5.00			4392.00	
Packer	5.00			4397.00	20.00 Bottom Of Top Packer
Packer	5.00			4402.00	
Stubb	1.00			4403.00	
Recorder	0.00	6798	Inside	4403.00	
Recorder	0.00	8358	Inside	4403.00	
Perforations	4.00			4407.00	
Bullnose	3.00			4410.00	8.00 Bottom Packers & Anchor
Total Tool Length:	28.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

RAMA Operating Co., Inc.

Andrews # 7-24

P.O.Box 159
Stafford, Kansas 67578

24-29s-14w Pratt KS

Job Ticket: 29334

DST#: 3

ATTN: Josh Austin

Test Start: 2008.07.26 @ 08:46:01

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:

62000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
680.00	SMCW 90%w 10%m	7.270
30.00	SO&WCM 5%o 10%w 85%m	0.421
2.00	Clean Oil	0.028
0.00	220' GIP	0.000
0.00	RW= .084 @ 105 deg.	0.000
0.00		0.000

Total Length: 712.00 ft

Total Volume: 7.719 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6798

Inside

RAMA Operating Co., Inc.

24-29s-14w Pratt KS

DST Test Number: 3

Pressure vs. Time

