

DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

PO Box 9395
Bend OR 97708

ATTN: Bob O'Dell

32 10 20 Rooks KS

Mary B 1

Start Date: 2007.05.21 @ 03:15:42

End Date: 2007.05.21 @ 09:53:21

Job Ticket #: 28461 DST #: 1

15-163-23610-00-00

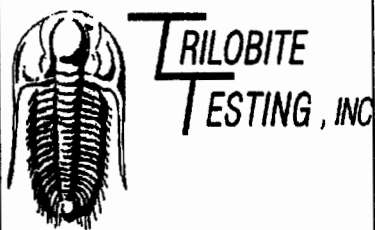
E2 E2 NW

1320 FWL 2310 FWL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



DRILL STEM TEST REPORT

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28461

DST#: 1

ATTN: Bob O'Dell

Test Start: 2007.05.21 @ 03:15:42

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:05:12

Time Test Ended: 09:53:21

Test Type: Conventional Bottom Hole

Tester: Michael Armbrister

Unit No: 21

Interval: **3188.00 ft (KB) To 3220.00 ft (KB) (TVD)**

Reference Elevations: 2155.00 ft (KB)

Total Depth: 3220.00 ft (KB) (TVD)

2150.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **8320**

Inside

Press@RunDepth: 55.20 psig @ 3189.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.05.21

End Date:

2007.05.21

Last Calib.: 2007.05.21

Start Time: 03:15:44

End Time:

09:53:22

Time On Btm: 2007.05.21 @ 05:05:02

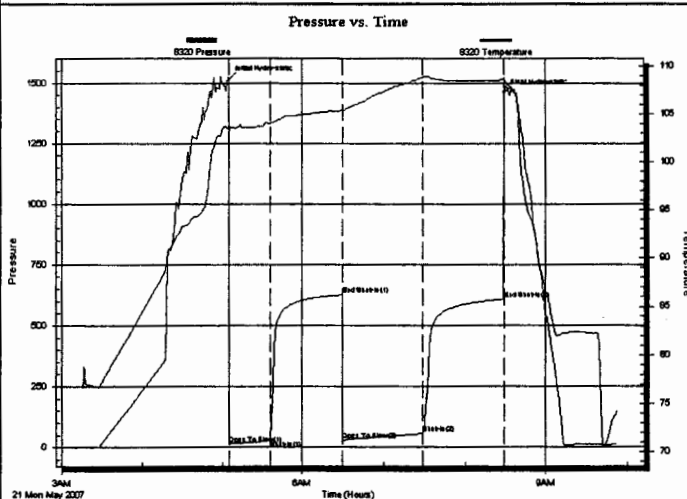
Time Off Btm: 2007.05.21 @ 08:29:02

TEST COMMENT: IF Slowly built to 4 1/2 "

ISI Dead

FF Slowly built to 2 "

FSI Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1514.52	103.54	Initial Hydro-static
1	12.77	102.91	Open To Flow (1)
31	27.51	104.00	Shut-In(1)
85	625.34	105.35	End Shut-In(1)
86	29.15	105.33	Open To Flow (2)
144	55.20	108.81	Shut-In(2)
204	608.01	108.51	End Shut-In(2)
204	1459.66	108.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Clean Oil	0.07
90.00	M cut SW 10% M 90% SW	1.26

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28461

DST#: 1

ATTN: Bob O'Dell

Test Start: 2007.05.21 @ 03:15:42

Tool Information

Drill Pipe:	Length: 3183.00 ft	Diameter: 3.80 inches	Volume: 44.65 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 40000.00 lb
		Total Volume: 44.65 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3188.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 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
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Change Over Sub	1.00			3168.00	
Shut In Tool	5.00			3173.00	
Hydraulic tool	5.00			3178.00	
Packer	5.00			3183.00	21.00 Bottom Of Top Packer
Packer	5.00			3188.00	
Stubb	1.00			3189.00	
Recorder	0.00	8320	Inside	3189.00	
Perforations	28.00			3217.00	
Recorder	0.00	13401	Inside	3217.00	
Bullnose	3.00			3220.00	32.00 Bottom Packers & Anchor
Total Tool Length:	53.00				



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28461

DST#: 1

ATTN: Bob O'Dell

Test Start: 2007.05.21 @ 03:15:42

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Clean Oil	0.070
90.00	M cut SW 10%M 90%SW	1.262

Total Length: 95.00 ft

Total Volume: 1.332 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

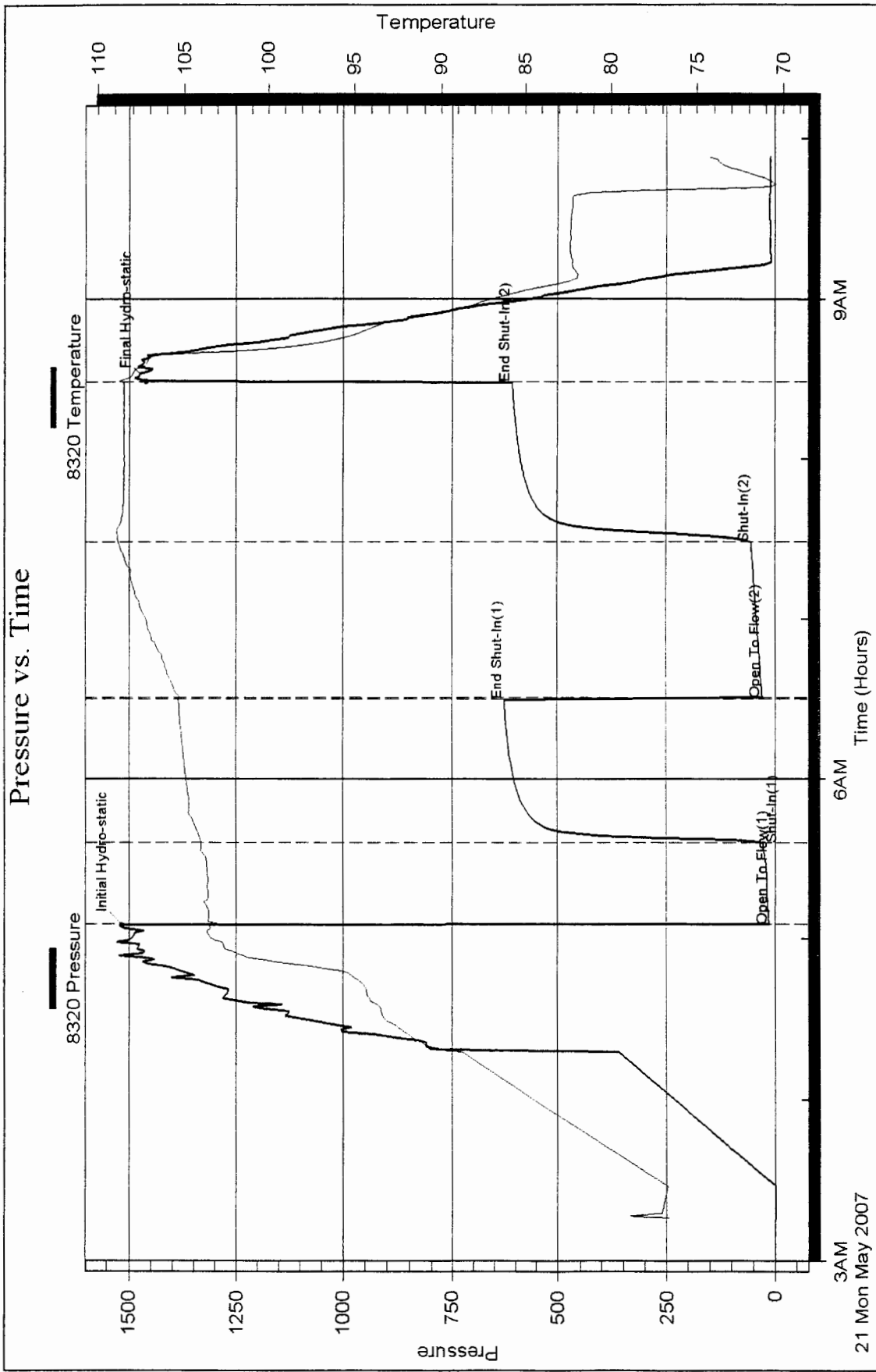
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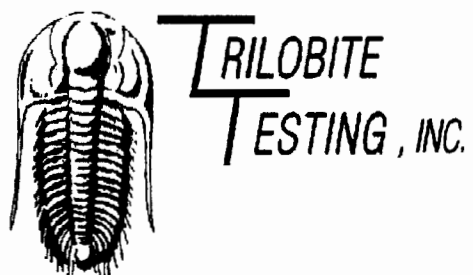
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

PO Box 9395
Bend OR 97708

ATTN: Bob O'Dell

32 10 20 Rooks KS

Mary B 1

Start Date: 2007.05.21 @ 03:56:09

End Date: 2007.05.21 @ 08:56:29

Job Ticket #: 28462 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Tomlinson Operating

PO Box 9395
Bend OR 97708

ATTN: Bob O'Dell

Mary B 1

32 10 20 Rooks KS

Job Ticket: 28462

DST#: 2

Test Start: 2007.05.21 @ 03:56:09

GENERAL INFORMATION:

Formation: **LKC A&B**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 05:26:09

Time Test Ended: 08:56:29

Test Type: **Conventional Bottom Hole**

Tester: **Michael Armbrister**

Unit No: **21**

Interval: **3416.00 ft (KB) To 3475.00 ft (KB) (TVD)**

Total Depth: **3475.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2155.00 ft (KB)**

2150.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8320

Inside

Press@RunDepth: **44.03 psig @ 3419.00 ft (KB)**

Start Date: **2007.05.21**

End Date:

2007.05.21

Capacity: **7000.00 psig**

Last Calib.: **2007.05.22**

Start Time: **03:56:11**

End Time:

08:56:28

Time On Btm: **2007.05.21 @ 05:25:59**

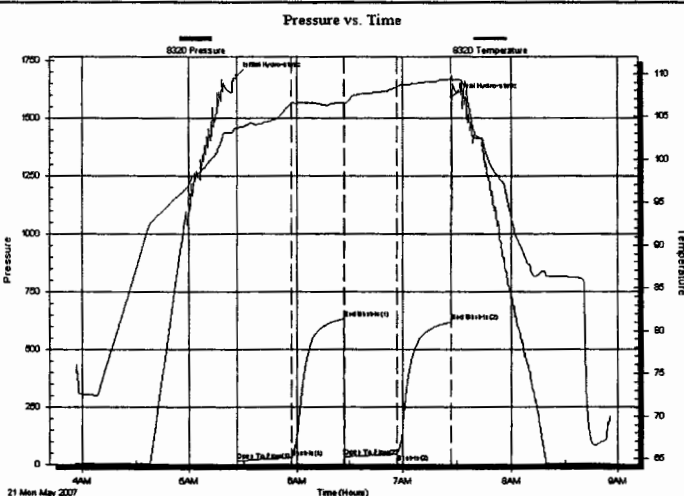
Time Off Btm: **2007.05.21 @ 07:27:29**

TEST COMMENT: IF Surface blow died 25 m

ISI Dead

FF Dead

FSI Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1683.30	103.71	Initial Hydro-static
1	16.01	103.38	Open To Flow (1)
31	30.25	106.56	Shut-In(1)
61	631.93	106.62	End Shut-In(1)
62	31.81	106.60	Open To Flow (2)
91	44.03	108.49	Shut-In(2)
122	617.90	109.38	End Shut-In(2)
122	1589.19	109.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Clean Oil	0.01
30.00	OCM 45%O 55%M	0.42
34.00	O spotted M 5%O 95%M	0.48

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28462

DST#: 2

ATTN: Bob O'Dell

Test Start: 2007.05.21 @ 03:56:09

Tool Information

Drill Pipe:	Length: 3400.00 ft	Diameter: 3.80 inches	Volume: 47.69 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 43000.00 lb
		Total Volume: 47.69 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3416.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	80.00 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			3396.00	
Shut In Tool	5.00			3401.00	
Hydraulic tool	5.00			3406.00	
Packer	5.00			3411.00	21.00 Bottom Of Top Packer
Packer	5.00			3416.00	
Stubb	1.00			3417.00	
Perforations	1.00			3418.00	
Change Over Sub	1.00			3419.00	
Recorder	0.00	8320	Inside	3419.00	
Blank Spacing	31.00			3450.00	
Change Over Sub	1.00			3451.00	
Perforations	21.00			3472.00	
Recorder	0.00	13401	Inside	3472.00	
Bullnose	3.00			3475.00	59.00 Bottom Packers & Anchor

Total Tool Length: 80.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28462

DST#: 2

ATTN: Bob O'Dell

Test Start: 2007.05.21 @ 03:56:09

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Clean Oil	0.014
30.00	OCM 45%O 55%M	0.421
34.00	O spotted M 5%O 95%M	0.477

Total Length: 65.00 ft

Total Volume: 0.912 bbl

Num Fluid Samples: 0

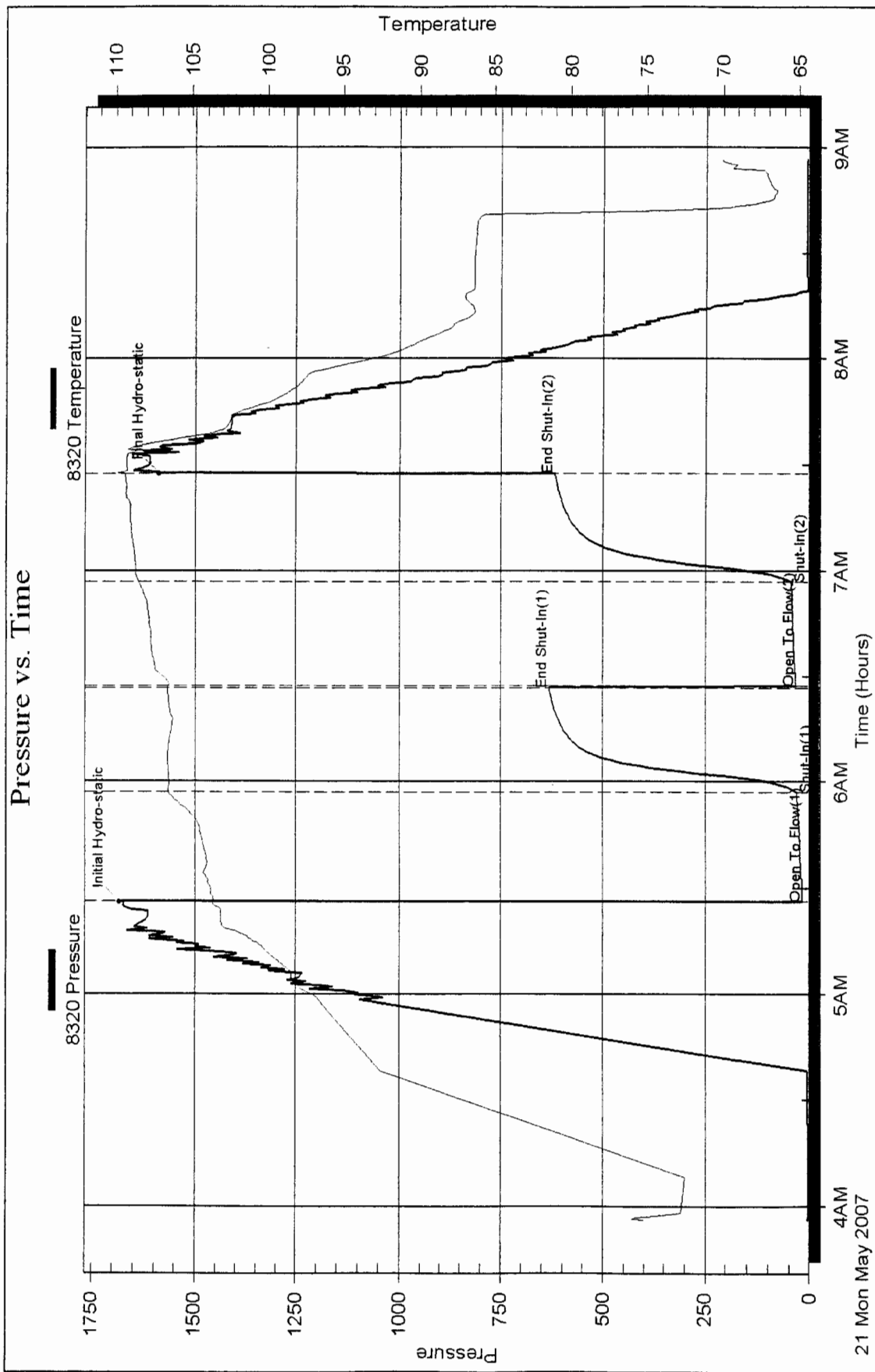
Num Gas Bombs: 0

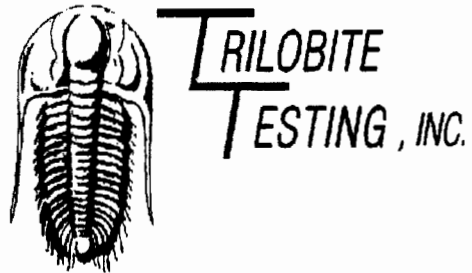
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

PO Box 9395
Bend OR 97708

ATTN: Bob O'Dell

32 10 20 Rooks KS

Mary B 1

Start Date: 2007.05.23 @ 03:55:01

End Date: 2007.05.23 @ 11:40:01

Job Ticket #: 28463 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Tomlinson Operating

Mary B 1

32 10 20 Rooks KS

DST # 3

LKC- H-K

2007.05.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28463

DST#: 3

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 03:55:01

GENERAL INFORMATION:

Formation: LKC- H-K

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:33:51

Time Test Ended: 11:40:01

Test Type: Conventional Bottom Hole

Tester: Michael Armbrister

Unit No: 21

Interval: 3538.00 ft (KB) To 3630.00 ft (KB) (TVD)

Total Depth: 3630.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2155.00 ft (KB)

2150.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320

Inside

Press@RunDepth: 103.39 psig @ 3608.00 ft (KB)

Start Date: 2007.05.23

End Date:

2007.05.23

Capacity: 7000.00 psig

Last Calib.: 2007.05.23

Start Time: 03:55:03

End Time:

11:40:01

Time On Btm: 2007.05.23 @ 06:33:41

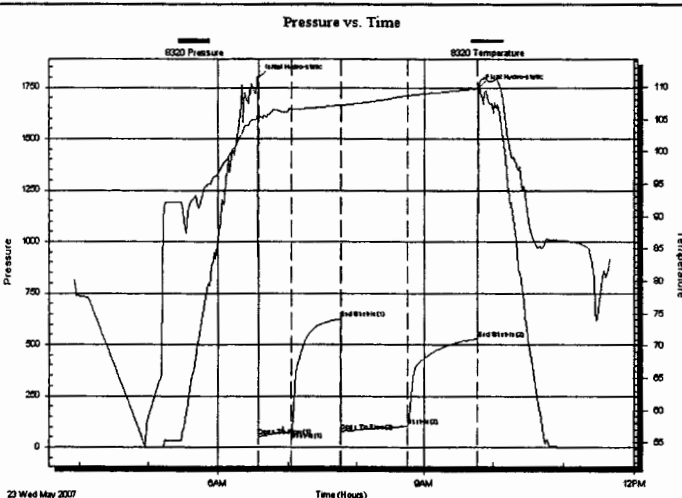
Time Off Btm: 2007.05.23 @ 09:47:41

TEST COMMENT: FF Slow building 7" Blow

ISI Dead

FF B of B 50 m

FSI Dead



PRESSURE SUMMARY

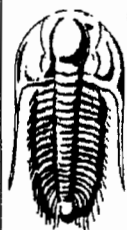
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1795.16	105.53	Initial Hydro-static
1	49.96	104.96	Open To Flow (1)
30	74.73	106.54	Shut-In (1)
72	625.63	107.22	End Shut-In (1)
73	73.93	107.20	Open To Flow (2)
132	103.39	108.67	Shut-In (2)
194	528.56	109.80	End Shut-In (2)
194	1745.33	110.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Clean Oil	0.21
120.00	OCM 15%O 85%M	1.68
0.00	110 GIP	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

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28463

DST#: 3

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 03:55:01

Tool Information

Drill Pipe:	Length: 3530.00 ft	Diameter: 3.80 inches	Volume: 49.52 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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:	43000.00 lb
			<u>Total Volume: 49.52 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	43000.00 lb
Depth to Top Packer:	3538.00 ft			Final	43000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	92.00 ft				
Tool Length:	113.00 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			3518.00	
Shut In Tool	5.00			3523.00	
Hydraulic tool	5.00			3528.00	
Packer	5.00			3533.00	21.00 Bottom Of Top Packer
Packer	5.00			3538.00	
Stubb	1.00			3539.00	
Perforations	5.00			3544.00	
Change Over Sub	1.00			3545.00	
Drill Pipe	62.00			3607.00	
Change Over Sub	1.00			3608.00	
Recorder	0.00	8320	Inside	3608.00	
Perforations	19.00			3627.00	
Recorder	0.00	13401	Inside	3627.00	
Bullnose	3.00			3630.00	92.00 Bottom Packers & Anchor

Total Tool Length: 113.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28463

DST#: 3

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 03:55:01

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Clean Oil	0.210
120.00	OCM 15%O 85%M	1.683
0.00	110 GIP	0.000

Total Length: 135.00 ft

Total Volume: 1.893 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

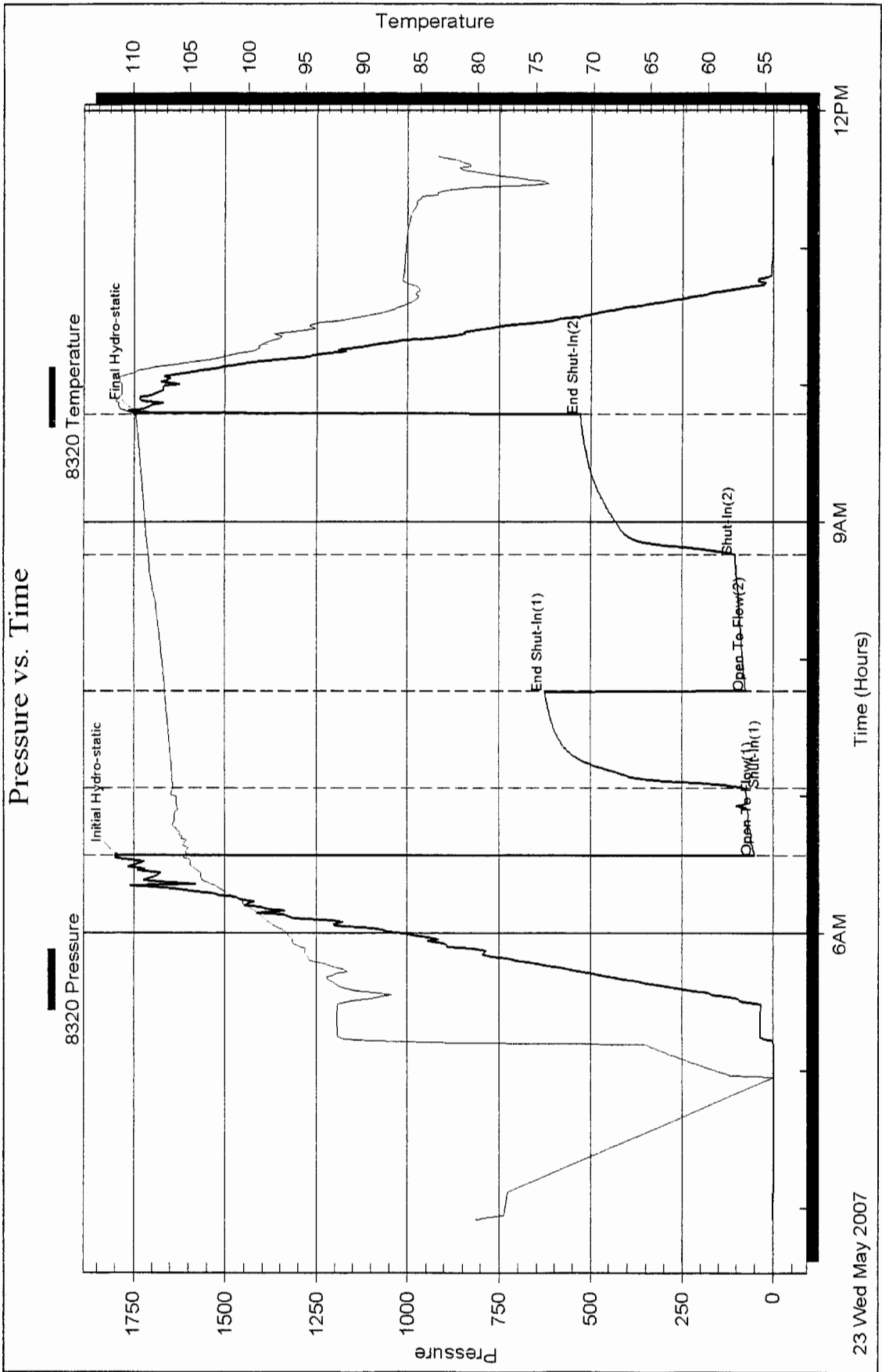
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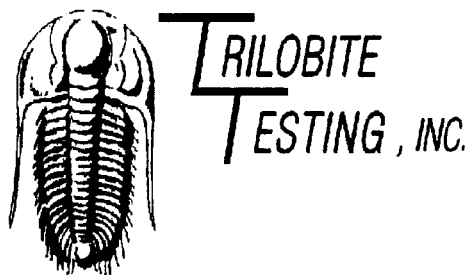
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating**

PO Box 9395
Bend OR 97708

ATTN: Bob O'Dell

32 10 20 Rooks KS

Mary B 1

Start Date: 2007.05.23 @ 22:55:08

End Date: 2007.05.24 @ 07:37:48

Job Ticket #: 28464 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Tomlinson Operating

Mary B 1

32 10 20 Rooks KS

DST # 4

ARB

2007.05.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28464

DST#: 4

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 22:55:08

GENERAL INFORMATION:

Formation: **ARB**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:57:18

Time Test Ended: 07:37:48

Test Type: Conventional Bottom Hole

Tester: Michael Armbrister/P

Unit No: 21

Interval: 3715.00 ft (KB) To 3740.00 ft (KB) (TVD)

Total Depth: 3740.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2155.00 ft (KB)

2150.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320

Inside

Press@RunDepth: 599.23 psig @ 3716.00 ft (KB)

Start Date: 2007.05.23

End Date:

2007.05.24

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Start Time: 22:55:10

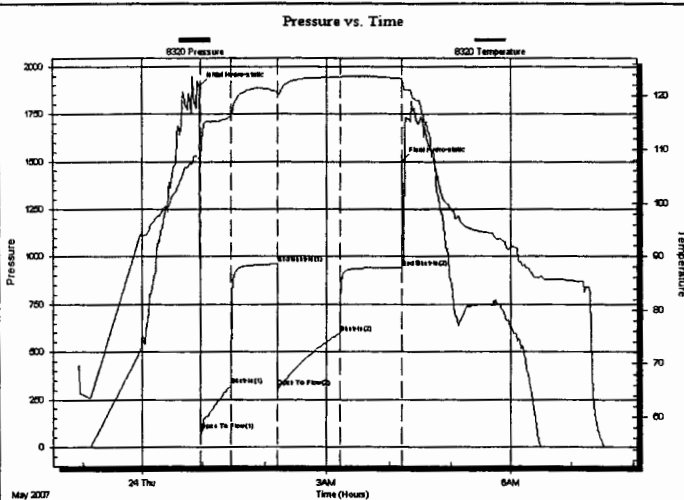
End Time:

07:37:48

Time On Btm: 2007.05.24 @ 00:56:58

Time Off Btm: 2007.05.24 @ 04:12:38

TEST COMMENT: IF Strong blow bottom of bucket in 2 minutes
ISI Weak blow
FF Strong blow bottom of bucket in 3 minutes
FSI 1" Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1895.51	108.00	Initial Hydro-static
1	84.00	107.92	Open To Flow (1)
31	325.99	116.31	Shut-In (1)
76	959.72	120.73	End Shut-In (1)
76	315.30	120.55	Open To Flow (2)
137	599.23	123.39	Shut-In (2)
196	942.60	123.15	End Shut-In (2)
196	1503.00	123.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1740.00	Gassy Oil	24.41

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28464

DST#: 4

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 22:55:08

Tool Information

Drill Pipe:	Length: 3716.00 ft	Diameter: 3.80 inches	Volume: 52.13 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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:	90000.00 lb
			Total Volume: 52.13 bbl	Tool Chased	ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	3715.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.00 ft				
Tool Length:	54.00 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			3687.00	
Shut In Tool	5.00			3692.00	
Hydraulic tool	5.00			3697.00	
Jars	5.00			3702.00	
Safety Joint	3.00			3705.00	
Packer	5.00			3710.00	29.00 Bottom Of Top Packer
Packer	5.00			3715.00	
Stubb	1.00			3716.00	
Recorder	0.00	8320	Inside	3716.00	
Perforations	21.00			3737.00	
Recorder	0.00	13401	Inside	3737.00	
Bullnose	3.00			3740.00	25.00 Bottom Packers & Anchor

Total Tool Length: 54.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating

Mary B 1

PO Box 9395
Bend OR 97708

32 10 20 Rooks KS

Job Ticket: 28464

DST#: 4

ATTN: Bob O'Dell

Test Start: 2007.05.23 @ 22:55:08

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33.5 deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1740.00	Gassy Oil	24.408

Total Length: 1740.00 ft

Total Volume: 24.408 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

