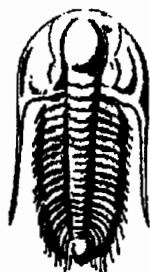


15-193-20691



TRILOBITE
TESTING, INC.

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KCC WICHITA

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

CONFIDENTIAL
C. Box 783188
Wichita KS 67278-3188

KCC

ATTN: Gary Gensch

MAR 25 2004

21-10S-31W Thomas
CONFIDENTIAL

Amelia Ottley 21B #1

Start Date: 2004.01.12 @ 08:10:00

End Date: 2004.01.12 @ 15:02:15

Job Ticket #: 18050

DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18050

DST#: 1

Test Start: 2004.01.12 @ 08:10:00

GENERAL INFORMATION:

Formation: **L/KC "E"**

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

Time Tool Opened: 10:02:30

Time Test Ended: 15:02:15

Interval: **4060.00 ft (KB) To 4075.00 ft (KB) (TVD)**

Total Depth: **4075.00 ft (KB) (TVD)**

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

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Reference Elevations: **2963.00 ft (KB)**

2958.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: **37.94 psig @ 4061.00 ft (KB)**

Start Date: **2004.01.12**

End Date:

2004.01.12

Start Time: **08:10:10**

End Time:

15:02:15

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2004.01.12 @ 10:01:15**

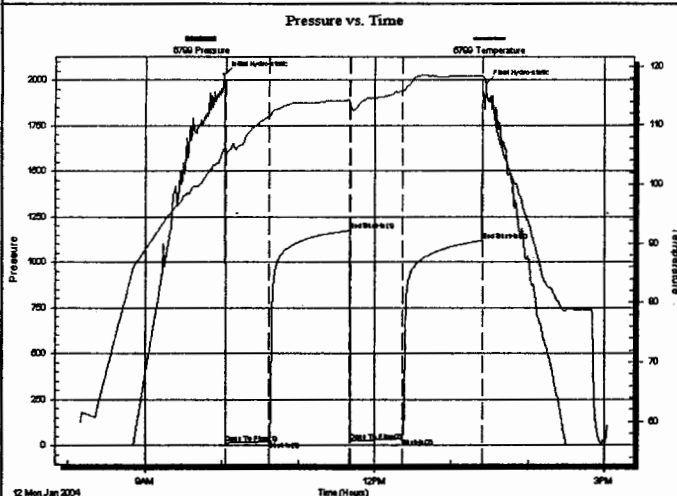
Time Off Btm: **2004.01.12 @ 13:27:30**

TEST COMMENT: IF; Weak surface blow built to 2"

IS; No return

FF; Weak surface return steady thru

FS; No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2027.27	105.99	Initial Hydro-static
2	12.63	104.23	Open To Flow (1)
36	23.19	111.45	Shut-In(1)
100	1173.81	114.30	End Shut-In(1)
101	25.70	113.53	Open To Flow (2)
141	37.94	115.77	Shut-In(2)
203	1118.95	118.37	End Shut-In(2)
207	1979.62	116.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	MCSW 85%w tr 15% mud	0.77

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18050

DST#: 1

Test Start: 2004.01.12 @ 08:10:00

Tool Information

Drill Pipe:	Length: 4062.00 ft	Diameter: 3.80 inches	Volume: 56.98 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 56.98 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4060.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4043.00	
Hydraulic tool	5.00			4048.00	
Safety Joint	2.00			4050.00	
Packer	5.00			4055.00	22.00 Bottom Of Top Packer
Packer	5.00			4060.00	
Stubb	1.00			4061.00	
Recorder	0.00	6799	Inside	4061.00	
Recorder	0.00	6773	Inside	4061.00	
Perforations	9.00			4070.00	
Recorder	0.00	13309	Outside	4070.00	
Bullnose	5.00			4075.00	15.00 Bottom Packers & Anchor

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

Amelia Ottley 21B #1

P. O. Box 783188
Wichita KS 67278-3188

21-10S-31W Thomas

Job Ticket: 18050

DST#: 1

ATTN: Gary Gensch

Test Start: 2004.01.12 @ 08:10:00

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	MCSW 85%w tr 15%mud	0.772

Total Length: 55.00 ft Total Volume: 0.772 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .24 @ 70 deg = 30,000 Chlorides

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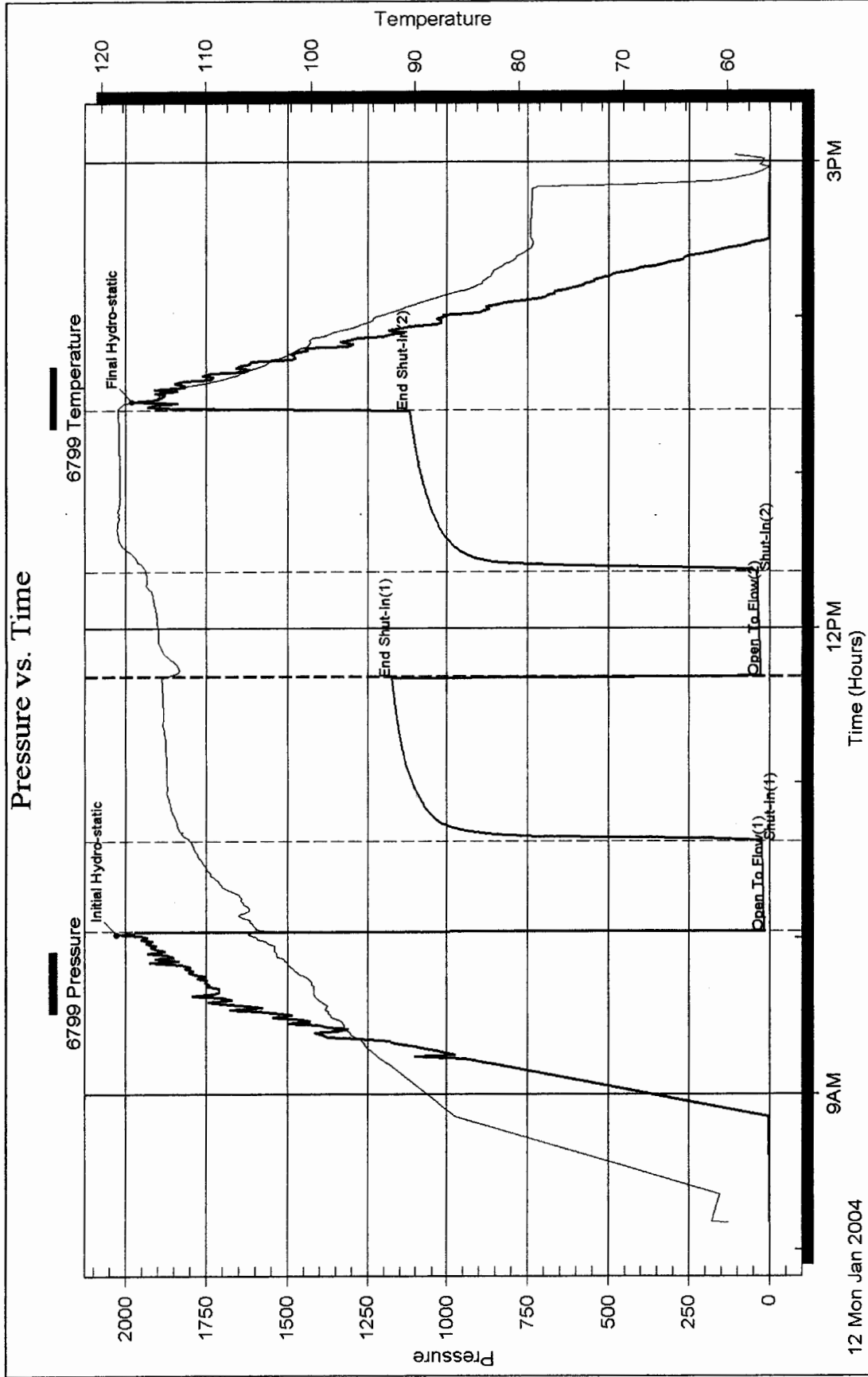
Amelia Otley 21B #1
21-10S-31W Thomas

DST Test Number: 1

Serial #: 6799 Ritchie Exploration Inc.

Inside

Pressure vs. Time

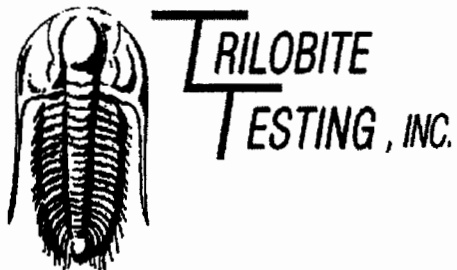


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KCC WICHITA

Trilobite Testing, Inc

Ref. No: 18050

Printed: 2004.01.16 @ 10:07:32 Page 5



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KCC WICHITA

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

21-10S-31W Thomas

Amelia Ottley 21B #1

Start Date: 2004.01.13 @ 06:28:10

End Date: 2004.01.13 @ 11:17:55

Job Ticket #: 18051 . 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

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18051

DST#: 2

Test Start: 2004.01.13 @ 06:28:10

GENERAL INFORMATION:

Formation: **L/KC "H thru J"**

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

Time Tool Opened: 07:47:40

Time Test Ended: 11:17:55

Interval: **4120.00 ft (KB) To 4209.00 ft (KB) (TVD)**

Total Depth: **4209.00 ft (KB) (TVD)**

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

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MAR 29 2004
KCC WICHITA**

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Reference Elevations: **2963.00 ft (KB)**

2958.00 ft (CF)

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

Serial #: 6799

Inside

Press@RunDepth: **19.79 psig @ 4121.00 ft (KB)**

Start Date: **2004.01.13**

End Date:

2004.01.13

Start Time: **06:28:20**

End Time:

11:17:55

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2004.01.13 @ 07:45:10**

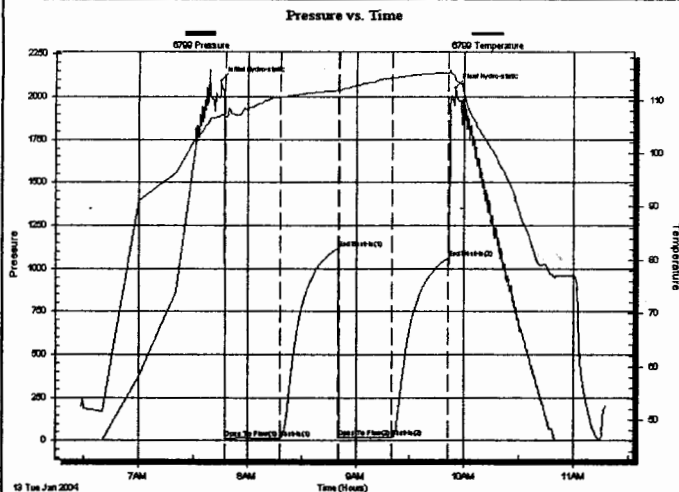
Time Off Btm: **2004.01.13 @ 09:55:40**

TEST COMMENT: **IF; Weak blow built to 1"**

IS; No return blow

FF; Weak intermitten surface blow in 15 mins

FSI; No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2092.33	107.16	Initial Hydro-static
3	14.58	106.94	Open To Flow (1)
33	16.22	110.59	Shut-In(1)
65	1117.38	111.89	End Shut-In(1)
66	19.26	111.82	Open To Flow (2)
95	19.79	114.26	Shut-In(2)
127	1060.96	115.28	End Shut-In(2)
131	2053.64	113.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drig. Mud	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18051

DST#: 2

Test Start: 2004.01.13 @ 06:28:10

Tool Information

Drill Pipe:	Length: 4124.00 ft	Diameter: 3.80 inches	Volume: 57.85 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 57.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4120.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.00 ft			
Tool Length:	111.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4103.00	
Hydraulic tool	5.00			4108.00	
Safety Joint	2.00			4110.00	
Packer	5.00			4115.00	22.00 Bottom Of Top Packer
Packer	5.00			4120.00	
Stubb	1.00			4121.00	
Recorder	0.00	6799	Inside	4121.00	
Recorder	0.00	6773	Inside	4121.00	
Perforations	19.00			4140.00	
Change Over Sub	1.00			4141.00	
Anchor	62.00			4203.00	
Change Over Sub	1.00			4204.00	
Recorder	0.00	13309	Outside	4204.00	
Bullnose	5.00			4209.00	89.00 Bottom Packers & Anchor

Total Tool Length: 111.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

Amelia Ottley 21B #1

P. O. Box 783188
Wichita KS 67278-3188

21-10S-31W Thomas

Job Ticket: 18051

DST#: 2

ATTN: Gary Gensch

Test Start: 2004.01.13 @ 06:28:10

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Drig. Mud	0.140

Total Length: 10.00 ft

Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

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KCC WICHITA

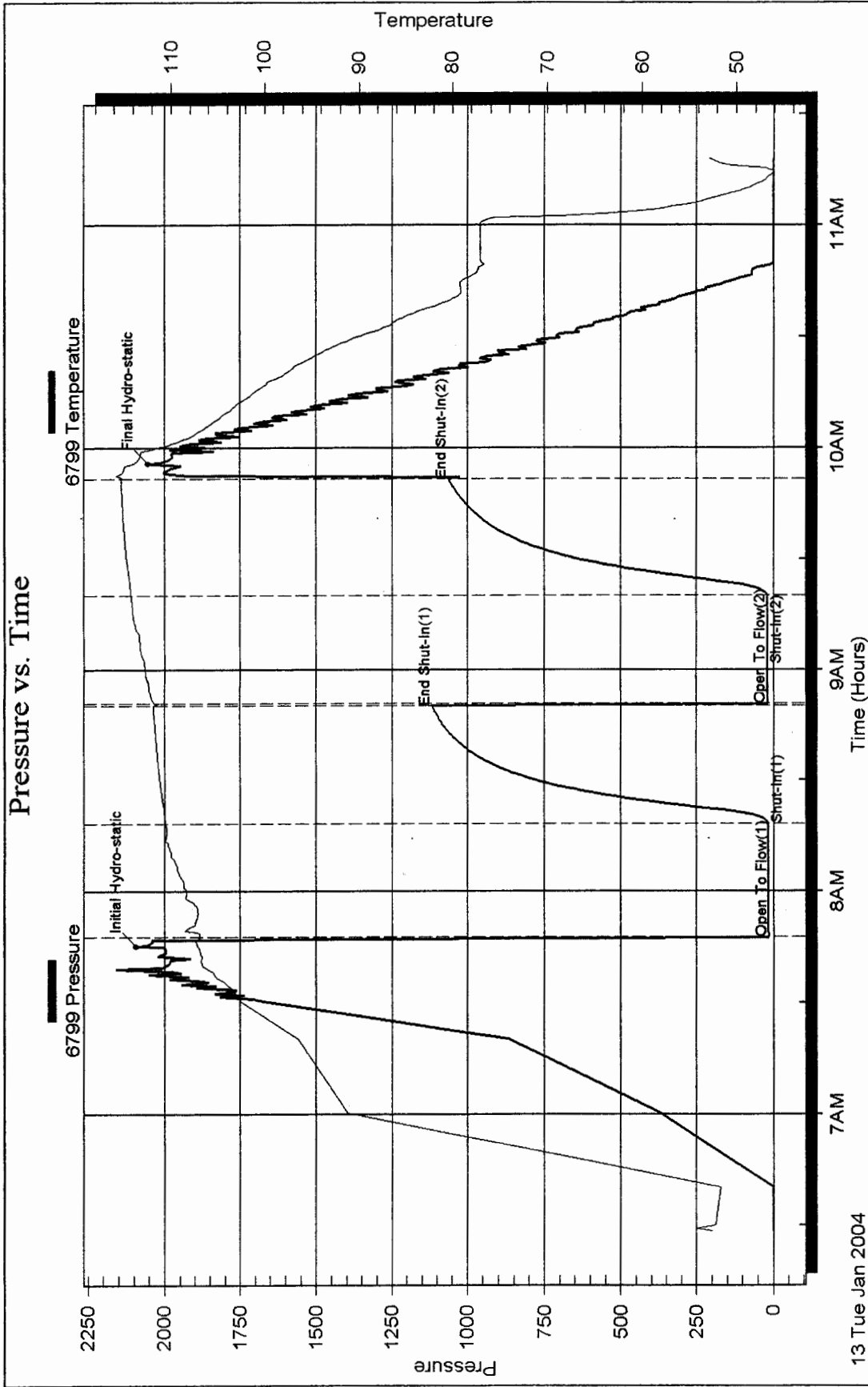
Anelia Otley 213 #1
21-10S-31W Thomas

DST Test Number: 2

Serial #: 6799 Ritchie Exploration Inc.

Inside

Pressure vs. Time



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MAR 29 2004
KCC WICHITA

Trilobite Testing, Inc

Ref. No: 18051

Printed: 2004.01.16 @ 10:09:14 Page 5



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

P. O. Box 783188
Wichita KS 67278-3188

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KCC WICHITA

ATTN: Gary Gensch

21-10S-31W Thomas

Amelia Ottley 21B #1

Start Date: 2004.01.13 @ 19:28:40

End Date: 2004.01.14 @ 01:28:40

Job Ticket #: 18052 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18052

DST#: 3

Test Start: 2004.01.13 @ 19:28:40

GENERAL INFORMATION:

Formation: **L/KC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:43:25

Time Test Ended: 01:28:40

Interval: **4204.00 ft (KB) To 4244.00 ft (KB) (TVD)**

Total Depth: **4204.00 ft (KB) (TVD)**

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

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Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Reference Elevations: 2963.00 ft (KB)

2958.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 114.52 psig @ 4205.00 ft (KB)

Start Date: 2004.01.13

End Date:

2004.01.14

Start Time: 19:28:50

End Time:

01:28:40

Capacity: 7000.00 psig

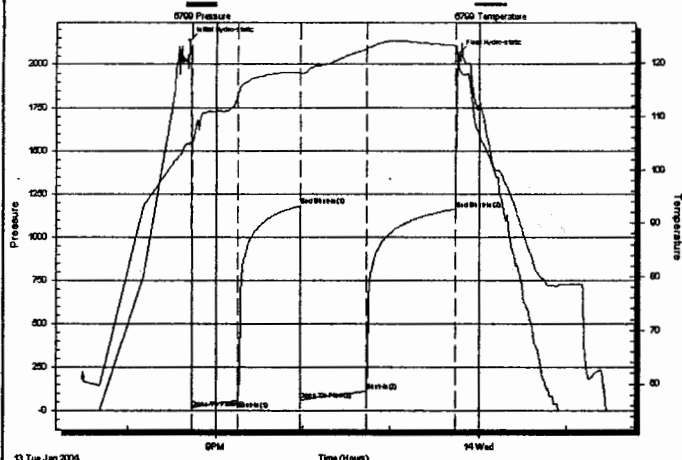
Last Calib.: 1899.12.30

Time On Btm: 2004.01.13 @ 20:41:40

Time Off Btm: 2004.01.13 @ 23:45:55

TEST COMMENT: If; Weak to fair built to 8"
IS; Very weak intermitten blow thru
FF; Weak to fair built to 9"
FS; No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2136.76	104.88	Initial Hydro-static
2	15.98	104.77	Open To Flow (1)
34	60.23	114.05	Shut-In(1)
77	1180.41	118.32	End Shut-In(1)
77	62.17	118.05	Open To Flow (2)
123	114.52	122.60	Shut-In(2)
183	1162.08	123.32	End Shut-In(2)
185	2063.45	119.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	MCW 80%w tr 20%mud	2.52
30.00	Oil Stained Mud >1% oil	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

Amelia Ottley 21B #1

P. O. Box 783188
Wichita KS 67278-3188

21-10S-31W Thomas

Job Ticket: 18052

DST#: 3

ATTN: Gary Gensch

Test Start: 2004.01.13 @ 19:28:40

Tool Information

Drill Pipe:	Length: 4187.00 ft	Diameter: 3.80 inches	Volume: 58.73 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 58.73 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4204.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4187.00	
Hydraulic tool	5.00			4192.00	
Safety Joint	2.00			4194.00	
Packer	5.00			4199.00	22.00 Bottom Of Top Packer
Packer	5.00			4204.00	
Stubb	1.00			4205.00	
Recorder	0.00	6799	Inside	4205.00	
Perforations	34.00			4239.00	
Recorder	0.00	13309	Outside	4239.00	
Bullnose	5.00			4244.00	40.00 Bottom Packers & Anchor
Total Tool Length:		62.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

Amelia Ottley 21B #1

P. O. Box 783188
Wichita KS 67278-3188

21-10S-31W Thomas

Job Ticket: 18052

DST#: 3

ATTN: Gary Gensch

Test Start: 2004.01.13 @ 19:28:40

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: 60.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	MCW 80%w tr 20% mud	2.525
30.00	Oil Stained Mud >1% oil	0.421

Total Length: 210.00 ft

Total Volume: 2.946 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .35 @ 70 deg = 20,000 Chlorides

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KCC WICHITA

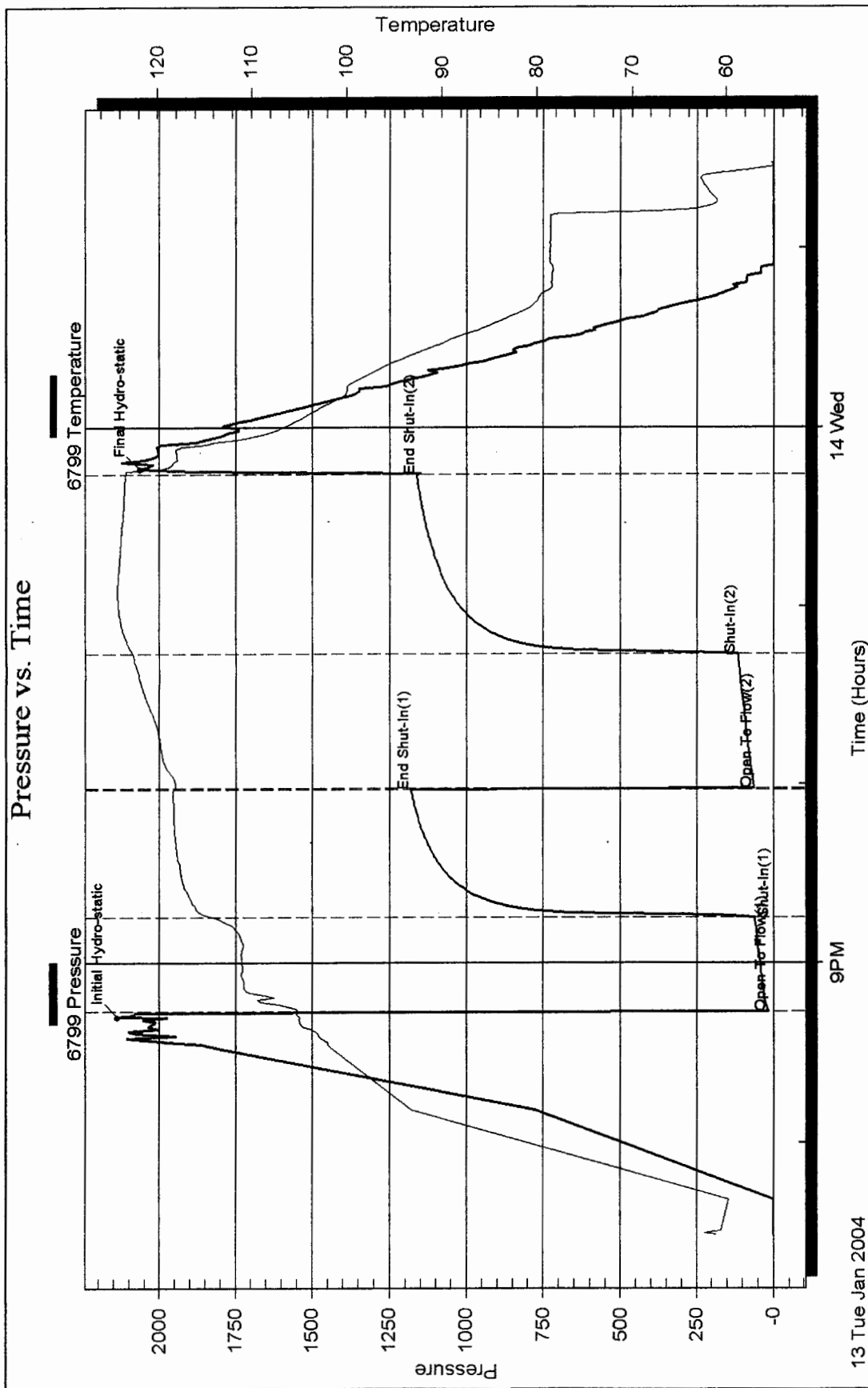
Amelia Ottley 21B #1
21-10S-31W Thomas

DST Test Number: 3

Serial #: 6799 Ritchie Exploration Inc.

Inside

Pressure vs. Time



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KCC WICHITA

Trilobite Testing, Inc

Ref. No: 18052

Printed: 2004.01.16 @ 10:10:56 Page 5



**TRILOBITE
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KCC WICHITA

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

21-10S-31W Thomas

Amelia Ottley 21B #1

Start Date: 2004.01.15 @ 13:12:28

End Date: 2004.01.15 @ 19:31:58

Job Ticket #: 18053

DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18053

DST#: 4

Test Start: 2004.01.15 @ 13:12:28

GENERAL INFORMATION:

Formation: **Ft Scott-Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:41:58

Time Test Ended: 19:31:58

Interval: **4380.00 ft (KB) To 4496.00 ft (KB) (TVD)**

Total Depth: 4496.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Reference Elevations: 2963.00 ft (KB)

2958.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 34.11 psig @ 4381.00 ft (KB)

Start Date: 2004.01.15

End Date:

2004.01.15

Start Time: 01:12:38

End Time:

07:31:58

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.01.15 @ 02:40:13

Time Off Btm: 2004.01.15 @ 05:48:58

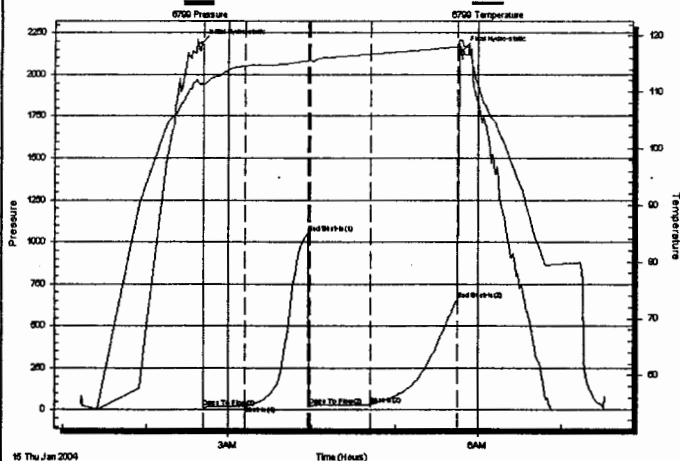
TEST COMMENT: IF; Weak building blow to 4"

IS; No return

FF; Weak surface return built to 2"

FS; No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2188.06	111.50	Initial Hydro-static
2	14.94	111.03	Open To Flow (1)
32	24.04	114.64	Shut-In(1)
78	1052.73	115.48	End Shut-In(1)
79	24.90	115.80	Open To Flow (2)
123	34.11	116.75	Shut-In(2)
185	659.81	118.09	End Shut-In(2)
189	2146.76	118.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Very Slightly OCM >1% oil	0.70

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

P. O. Box 783188
Wichita KS 67278-3188

ATTN: Gary Gensch

Amelia Ottley 21B #1

21-10S-31W Thomas

Job Ticket: 18053

DST#: 4

Test Start: 2004.01.15 @ 13:12:28

Tool Information

Drill Pipe:	Length: 4376.00 ft	Diameter: 3.80 inches	Volume: 61.38 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 61.38 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4380.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	113.00 ft			
Tool Length:	135.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4363.00	
Hydraulic tool	5.00			4368.00	
Safety Joint	2.00			4370.00	
Packer	5.00			4375.00	22.00 Bottom Of Top Packer
Packer	5.00			4380.00	
Stubb	1.00			4381.00	
Recorder	0.00	6799	Inside	4381.00	
Recorder	0.00	6773	Inside	4381.00	
Perforations	12.00			4393.00	
Change Over Sub	1.00			4394.00	
Anchor	93.00			4487.00	
Change Over Sub	1.00			4488.00	
Recorder	0.00	13309	Outside	4488.00	
Bullnose	5.00			4493.00	113.00 Bottom Packers & Anchor

Total Tool Length: 135.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

Amelia Ottley 21B #1

P. O. Box 783188
Wichita KS 67278-3188

21-10S-31W Thomas

Job Ticket: 18053

DST#: 4

ATTN: Gary Gensch

Test Start: 2004.01.15 @ 13:12:28

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	Very Slightly OCM >1% oil	0.701

Total Length:

50.00 ft

Total Volume:

0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

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KCC WICHITA

Amelia Offley 21B #1

21-10S-31W Thomas

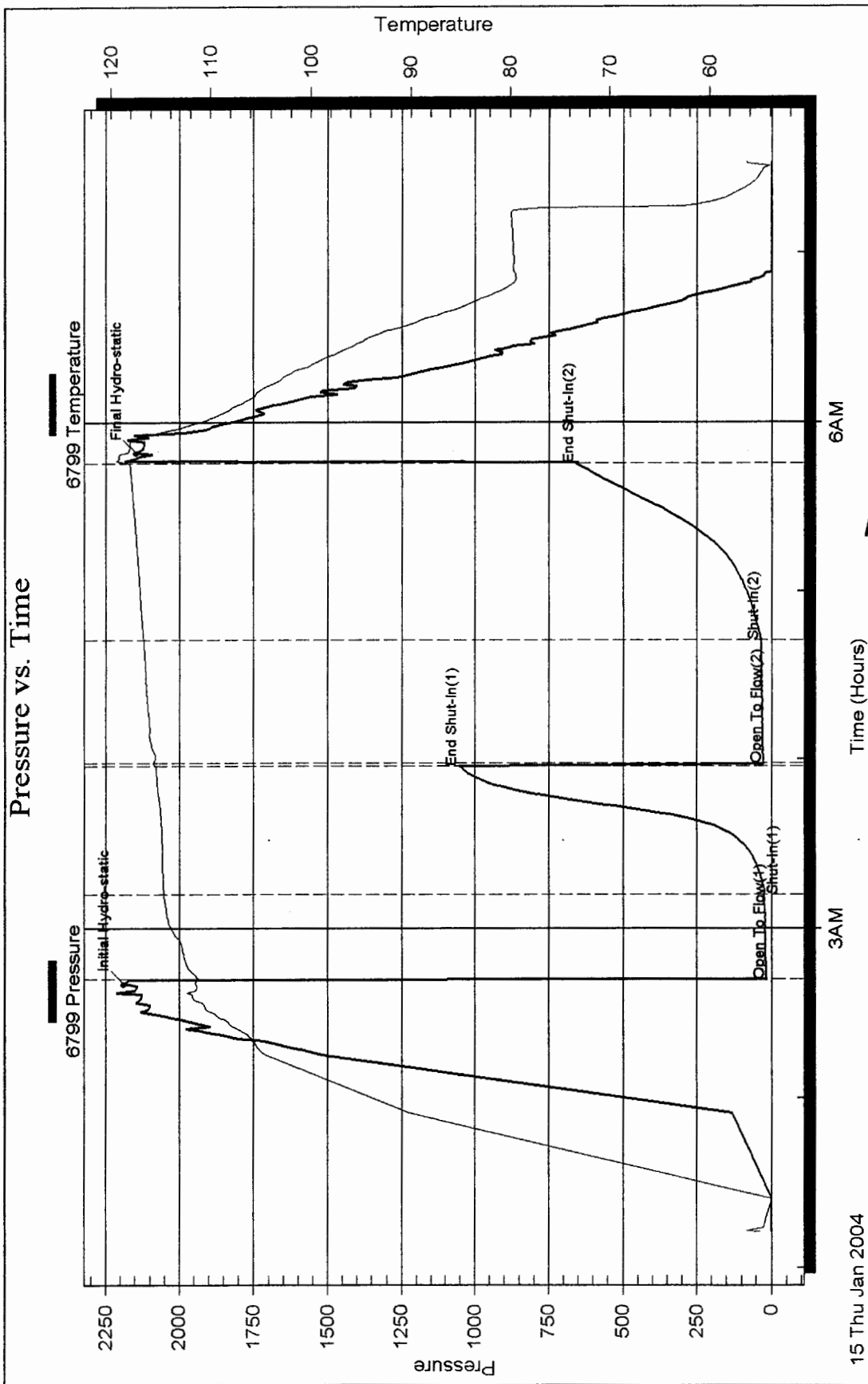
Serial #: 6799

Inside

Ritchie Exploration Inc.

DST Test Number: 4

Pressure vs. Time



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Trilobite Testing, Inc

Ref. No: 18053

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