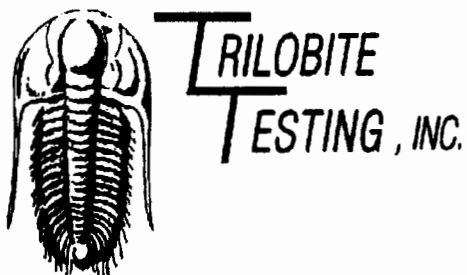


33-055-22W
W2 NE SE



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.16 @ 15:05:41

End Date: 2006.11.16 @ 21:58:20

Job Ticket #: 26047 DST #: 1

15-137-20460
2040 FSL 850 FEL

KCC
MAR 07 2007
CONFIDENTIAL

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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26047

DST#: 1

Test Start: 2006.11.16 @ 15:05:41

GENERAL INFORMATION:

Formation: **Topeka**

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

Time Tool Opened: 17:31:01

Time Test Ended: 21:58:20

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **22**

Interval: **3339.00 ft (KB) To 3366.00 ft (KB) (TVD)**

Total Depth: **3366.00 ft (KB) (TVD)**

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

Reference Elevations: **2365.00 ft (KB)**

2360.00 ft (CF)

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

Serial #: 6799

Inside

Press@RunDepth: **28.64 psig @ 3340.00 ft (KB)**

Start Date: **2006.11.16**

End Date: **2006.11.16**

Start Time: **15:05:43**

End Time: **21:58:21**

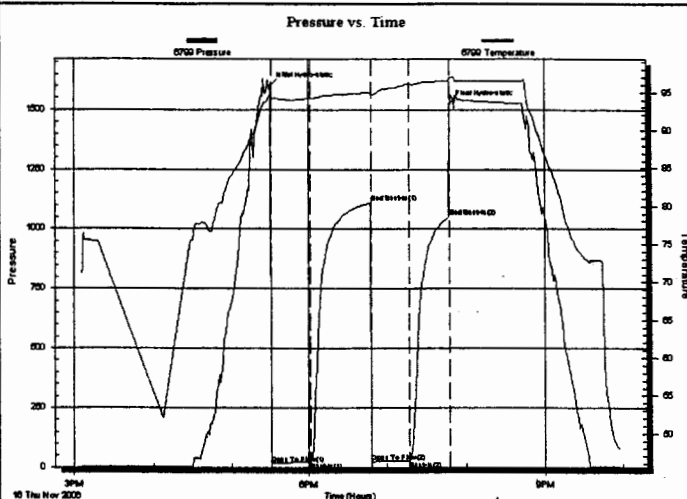
Capacity: **7000.00 psig**

Last Calib.: **2006.11.16**

Time On Btm: **2006.11.16 @ 17:30:51**

Time Off Btm: **2006.11.16 @ 19:48:00**

TEST COMMENT: IF Weak blow building to 3/4 " in bucket
ISI Bled off no blow back.
FF No blow
FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1601.67	94.55	Initial Hydro-static
1	15.47	93.50	Open To Flow (1)
31	23.05	94.17	Shut-In(1)
78	1109.58	95.00	End Shut-In(1)
78	24.88	94.59	Open To Flow (2)
107	28.64	96.09	Shut-In(2)
137	1050.50	96.49	End Shut-In(2)
138	1522.58	96.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	SOCM 4%O 96%M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26047

DST#: 1

ATTN: Jeff Christian

Test Start: 2006.11.16 @ 15:05:41

Tool Information

Drill Pipe:	Length: 2842.00 ft	Diameter: 3.80 inches	Volume: 39.87 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: 30000.00 lb
Drill Collar:	Length: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 42.25 bbl		Tool Chased 5.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3339.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	47.00 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			3324.00	
Hydraulic tool	5.00			3329.00	
Packer	5.00			3334.00	20.00 Bottom Of Top Packer
Packer	5.00			3339.00	
Stubb	1.00			3340.00	
Recorder	0.00	6799	Inside	3340.00	
Perforations	23.00			3363.00	
Recorder	0.00	3354	Outside	3363.00	
Bullnose	3.00			3366.00	27.00 Bottom Packers & Anchor
Total Tool Length:	47.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26047

DST#: 1

ATTN: Jeff Christian

Test Start: 2006.11.16 @ 15:05:41

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: 7.15 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	SOCM 4%O 96%M	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

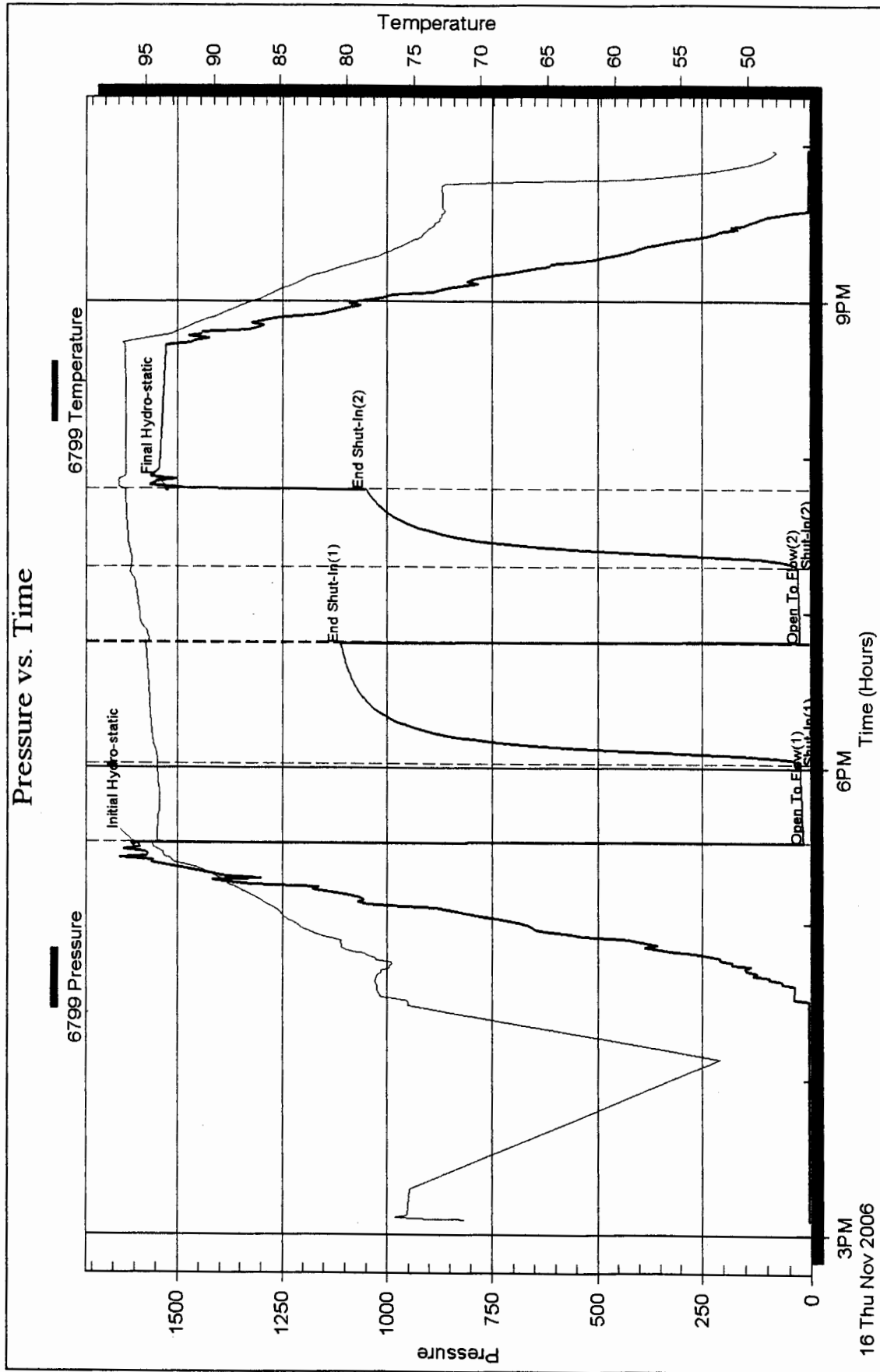
Serial #:

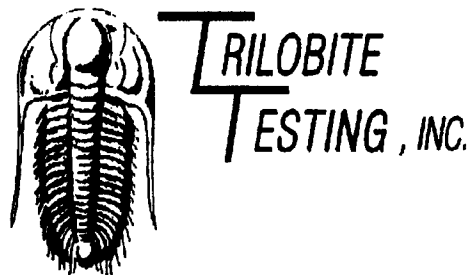
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.17 @ 08:43:06

End Date: 2006.11.17 @ 15:17:15

Job Ticket #: 26048 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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26048

DST#: 2

Test Start: 2006.11.17 @ 08:43:06

GENERAL INFORMATION:

Formation: **Oread**

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

Time Tool Opened: 10:23:36

Time Test Ended: 15:17:15

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **22**

Interval: **3455.00 ft (KB) To 3508.00 ft (KB) (TVD)**

Total Depth: **3508.00 ft (KB) (TVD)**

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

Reference Elevations: **2365.00 ft (KB)**

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: **471.96 psig @ 3456.00 ft (KB)**

Start Date: **2006.11.17**

End Date:

2006.11.17

Capacity: **7000.00 psig**

Last Calib.: **2006.11.17**

Start Time: **08:43:08**

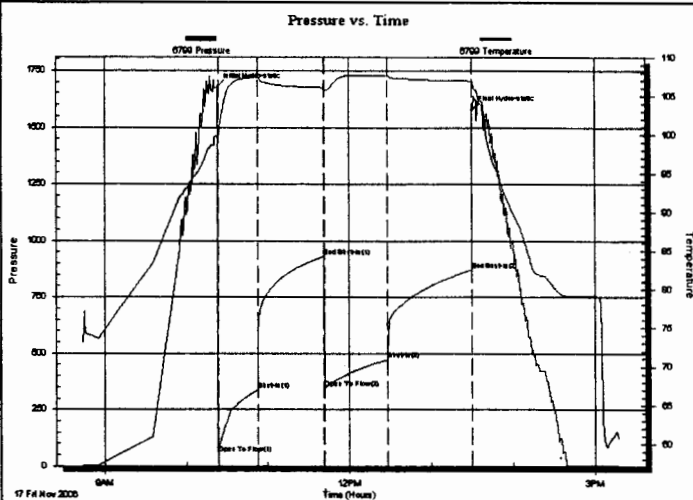
End Time:

15:17:16

Time On Btm: **2006.11.17 @ 10:23:16**

Time Off Btm: **2006.11.17 @ 13:29:46**

TEST COMMENT: IF Strong blow building to BOB in 3 1/2 minutes
ISI Bled off no blow back
FF Strong blow building to BOB in 6 3/4 minutes
FSI Bled off



PRESSURE SUMMARY

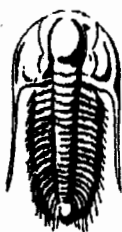
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1676.59	99.77	Initial Hydro-static
1	55.65	99.19	Open To Flow (1)
30	338.16	107.33	Shut-In(1)
79	931.33	106.02	End Shut-In(1)
79	346.50	105.73	Open To Flow (2)
125	471.96	107.58	Shut-In(2)
187	872.06	106.91	End Shut-In(2)
187	1577.06	107.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
680.00	Salt Water 100%	5.14
240.00	SOSMCW 1%o30%w69%w	3.37
50.00	SOCWCM 8%o30%w 62%w	0.70
0.00	60' +/- GIP	0.00
0.00	RW=.13ohm@61degF=69000ppmChl	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

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26048

DST#:2

ATTN: Jeff Christian

Test Start: 2006.11.17 @ 08:43:06

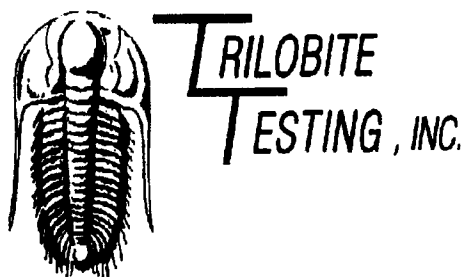
Tool Information

Drill Pipe:	Length: 2964.00 ft	Diameter: 3.80 inches	Volume: 41.58 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:	25000.00 lb
Drill Collar:	Length: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	lb
		Total Volume:	43.96 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3455.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	53.00 ft				
Tool Length:	73.00 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			3440.00	
Hydraulic tool	5.00			3445.00	
Packer	5.00			3450.00	20.00 Bottom Of Top Packer
Packer	5.00			3455.00	
Stubb	1.00			3456.00	
Recorder	0.00	6799	Inside	3456.00	
Perforations	16.00			3472.00	
Blank Spacing	33.00			3505.00	
Recorder	0.00	3354	Outside	3505.00	
Bullnose	3.00			3508.00	53.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.17 @ 22:22:38

End Date: 2006.11.18 @ 05:57:58

Job Ticket #: 26049 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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26049

DST#: 3

Test Start: 2006.11.17 @ 22:22:38

GENERAL INFORMATION:

Formation: **Toronto**

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

Time Tool Opened: 23:39:38

Time Test Ended: 05:57:58

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **22**

Interval: **3520.00 ft (KB) To 3559.00 ft (KB) (TVD)**

Total Depth: **3559.00 ft (KB) (TVD)**

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

Reference Elevations: **2365.00 ft (KB)**

2360.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: 6799

Inside

Press@RunDepth: **711.46 psig @ 3521.00 ft (KB)**

Start Date: **2006.11.17**

End Date:

2006.11.18

Start Time: **22:22:40**

End Time:

05:57:57

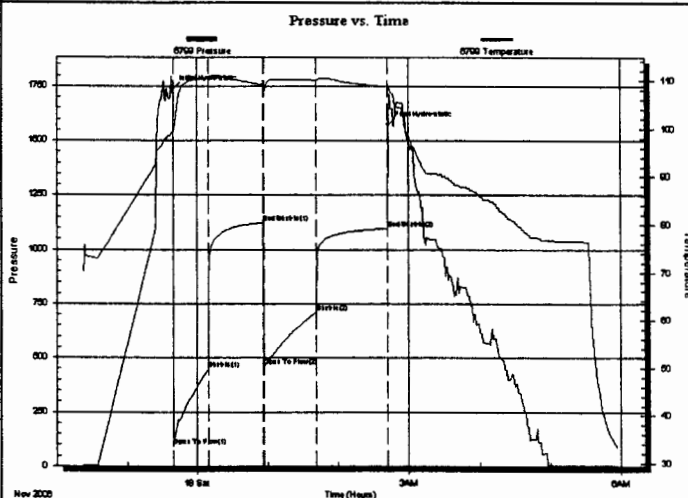
Capacity: **7000.00 psig**

Last Calib.: **2006.11.18**

Time On Btm: **2006.11.17 @ 23:39:28**

Time Off Btm: **2006.11.18 @ 02:42:57**

TEST COMMENT: IF Strong blow building to BOB in 1 1/2 minutes
ISI Bled off blow back building to BOB in 8 minutes
FF Strong blow building to BOB in 1 1/2 minutes
FSI Bled off blow back building to BOB in 7 minutes



PRESSURE SUMMARY

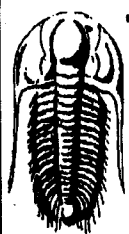
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1734.56	99.33	Initial Hydro-static
1	94.27	98.78	Open To Flow (1)
30	445.86	110.40	Shut-In (1)
77	1123.31	109.15	End Shut-In (1)
78	460.93	108.51	Open To Flow (2)
122	711.46	110.10	Shut-In (2)
184	1097.91	108.78	End Shut-In (2)
184	1572.47	108.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	GCMdyO 20%G 30%M 50%O	1.77
1790.00	Gassy Oil 5%G 95%O	23.99
0.00	gravity=35 corrected	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

Ritchie Exploration Inc

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26049

DST#: 3

Test Start: 2006.11.17 @ 22:22:38

Tool Information

Drill Pipe:	Length: 3026.00 ft	Diameter: 3.80 inches	Volume: 42.45 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	78000.00 lb
		Total Volume:	44.83 bbl	Tool Chased	5.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3520.00 ft			Final	66000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	39.00 ft				
Tool Length:	59.00 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			3505.00	
Hydraulic tool	5.00			3510.00	
Packer	5.00			3515.00	20.00 Bottom Of Top Packer
Packer	5.00			3520.00	
Stubb	1.00			3521.00	
Recorder	0.00	6799	Inside	3521.00	
Perforations	35.00			3556.00	
Recorder	0.00	3354	Outside	3556.00	
Bullnose	3.00			3559.00	39.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

ATTN: Jeff Christian

Job Ticket: 26049

DST#: 3

Test Start: 2006.11.17 @ 22:22:38

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: 8.15 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	GCMdyO 20%G 30%M 50%O	1.770
1790.00	Gassy Oil 5%G 95%O	23.989
0.00	gravity=35 corrected	0.000

Total Length: 2150.00 ft

Total Volume: 25.759 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

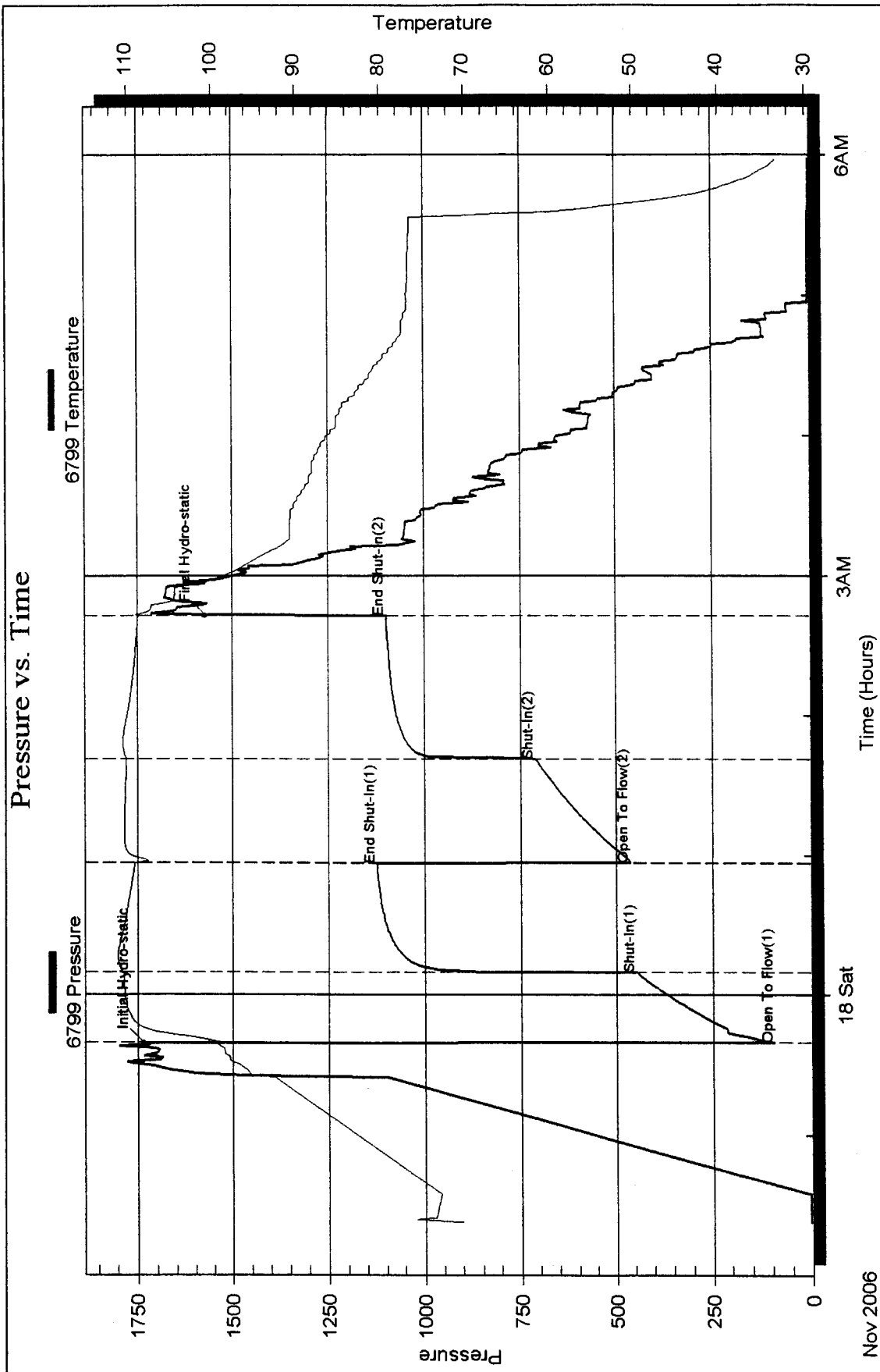
Serial #:

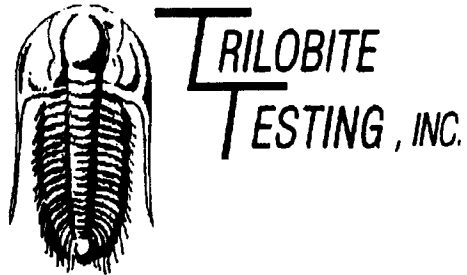
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.18 @ 11:18:15

End Date: 2006.11.18 @ 18:03:54

Job Ticket #: 26050 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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26050

DST#: 4

Test Start: 2006.11.18 @ 11:18:15

GENERAL INFORMATION:

Formation: **L-KC "A"**

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

Time Tool Opened: 12:43:25

Time Test Ended: 18:03:54

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **22**

Interval: **3556.00 ft (KB) To 3578.00 ft (KB) (TVD)**

Total Depth: **3578.00 ft (KB) (TVD)**

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

Reference Elevations: **2365.00 ft (KB)**

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: **609.39 psig @ 3557.00 ft (KB)**

Start Date: **2006.11.18**

End Date:

2006.11.18

Start Time: **11:18:17**

End Time:

18:03:55

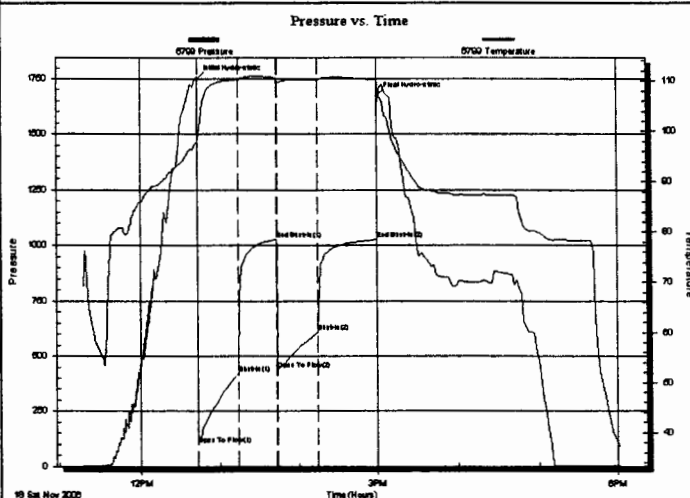
Capacity: **7000.00 psig**

Last Calib.: **2006.11.18**

Time On Btm: **2006.11.18 @ 12:42:55**

Time Off Btm: **2006.11.18 @ 15:00:25**

TEST COMMENT: IF Strong blow building to BOB in 1 1/2 minutes
ISI Bled off blow back building to 11" in bucket
FF Strong blow building to BOB in 2 1/4 minutes
FSI Bled off blow back building to BOB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1748.79	97.88	Initial Hydro-static
1	101.40	97.49	Open To Flow (1)
31	421.88	110.15	Shut-In (1)
61	1028.40	110.61	End Shut-In (1)
61	436.80	109.92	Open To Flow (2)
92	609.39	110.20	Shut-In (2)
138	1025.86	110.12	End Shut-In (2)
138	1671.00	110.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1500.00	Oil 100%O	16.64
0.00	850' GIP	0.00
0.00	35 Corrected Gravity	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26050

DST#: 4

ATTN: Jeff Christian

Test Start: 2006.11.18 @ 11:18:15

Tool Information

Drill Pipe:	Length: 3057.00 ft	Diameter: 3.80 inches	Volume: 42.88 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	45.26 bbl	Tool Chased	2.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3556.00 ft			Final	68000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	22.00 ft				
Tool Length:	42.00 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			3541.00	
Hydraulic tool	5.00			3546.00	
Packer	5.00			3551.00	20.00 Bottom Of Top Packer
Packer	5.00			3556.00	
Stubb	1.00			3557.00	
Recorder	0.00	6799	Inside	3557.00	
Perforations	18.00			3575.00	
Recorder	0.00	3354	Outside	3575.00	
Bullnose	3.00			3578.00	22.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26050

DST#: 4

ATTN: Jeff Christian

Test Start: 2006.11.18 @ 11:18:15

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:

bbl

Water Loss: 9.15 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1500.00	Oil 100%O	16.641
0.00	850 ' GIP	0.000
0.00	35 Corrected Gravity	0.000

Total Length: 1500.00 ft

Total Volume: 16.641 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

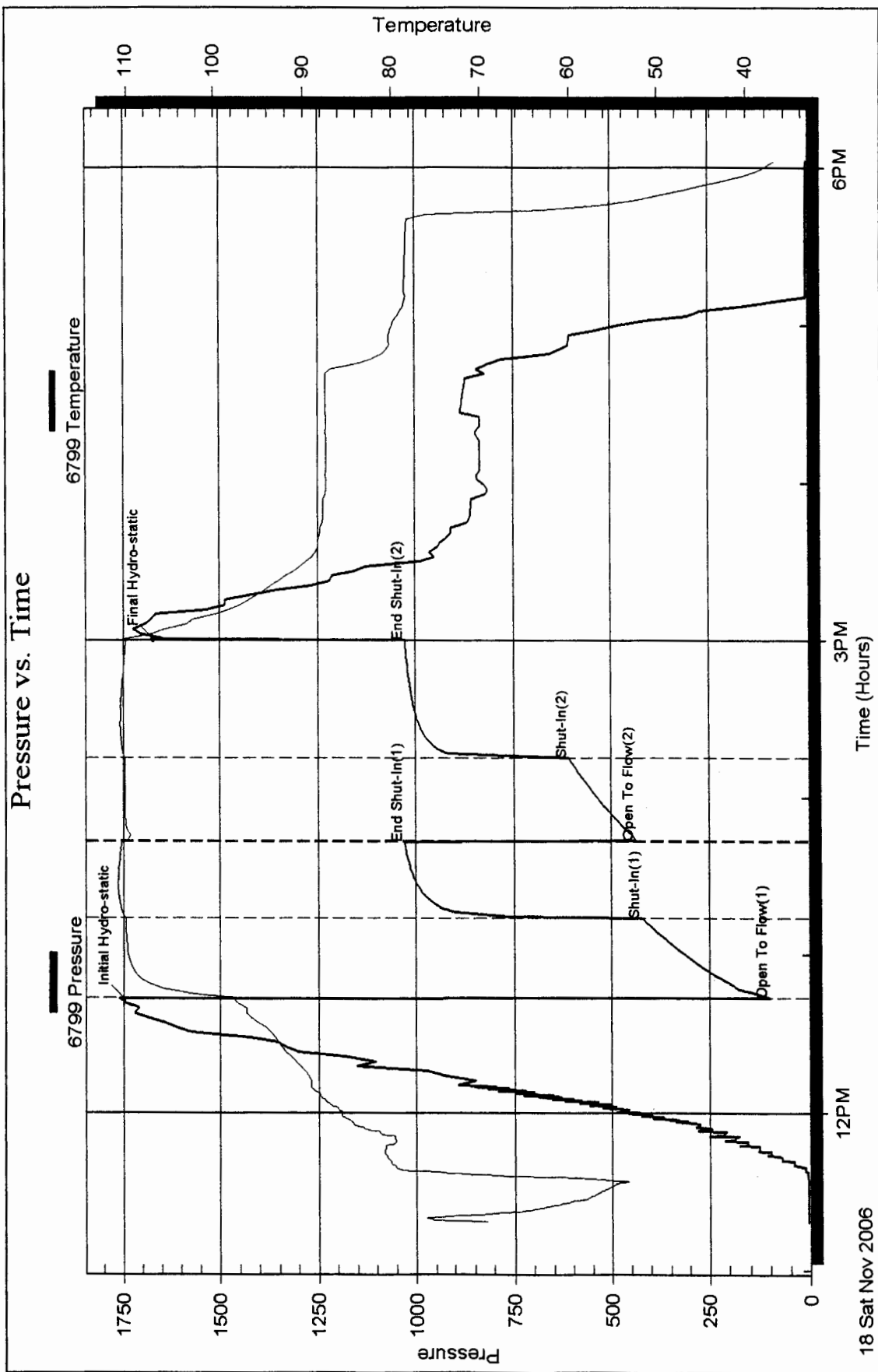
Serial #:

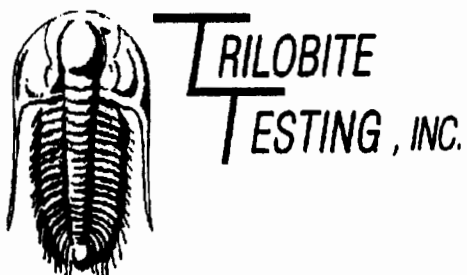
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.19 @ 00:02:47

End Date: 2006.11.19 @ 05:23:37

Job Ticket #: 26051

DST #: 5

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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26051

DST#: 5

Test Start: 2006.11.19 @ 00:02:47

GENERAL INFORMATION:

Formation: L-KC "C"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:46:47

Time Test Ended: 05:23:37

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 22

Interval: 3580.00 ft (KB) To 3603.00 ft (KB) (TVD)

Total Depth: 3603.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2365.00 ft (KB)

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 18.13 psig @ 3581.00 ft (KB)

Start Date: 2006.11.19

End Date:

2006.11.19

Start Time: 00:02:49

End Time:

05:23:36

Capacity: 7000.00 psig

Last Calib.: 2006.11.19

Time On Btm: 2006.11.19 @ 01:46:37

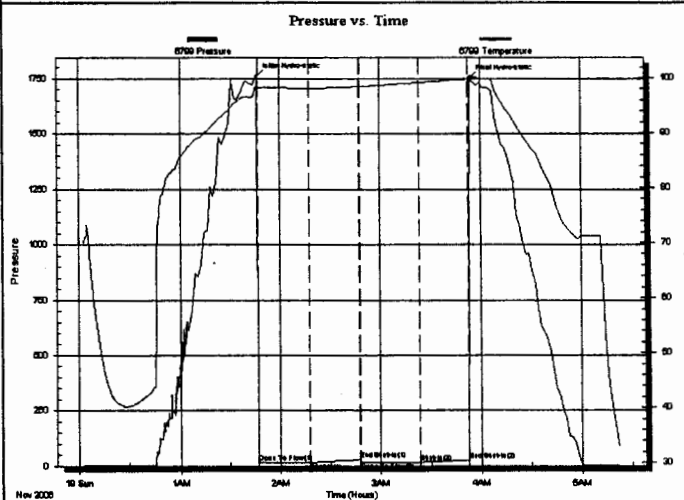
Time Off Btm: 2006.11.19 @ 03:53:57

TEST COMMENT: IF Weak blow built to 1/2 " slowly died

ISI No blow

FF No blow

FSI No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.89	98.53	Initial Hydro-static
1	16.30	97.68	Open To Flow (1)
31	18.08	98.10	Shut-In (1)
61	29.50	98.38	End Shut-In (1)
62	17.15	98.39	Open To Flow (2)
97	18.13	99.09	Shut-In (2)
127	25.68	99.76	End Shut-In (2)
128	1748.19	100.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Drig Mud	0.02

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc
PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1
33 5S 22W Norton KS
Job Ticket: 26051 **DST#: 5**
Test Start: 2006.11.19 @ 00:02:47

Tool Information

Drill Pipe:	Length: 3090.00 ft	Diameter: 3.80 inches	Volume: 43.34 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose: 72000.00 lb
		Total Volume:	45.72 bbl	Tool Chased 5.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3580.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	42.00 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			3565.00	
Hydraulic tool	5.00			3570.00	
Packer	5.00			3575.00	20.00 Bottom Of Top Packer
Packer	5.00			3580.00	
Stubb	1.00			3581.00	
Recorder	0.00	6799	Inside	3581.00	
Perforations	18.00			3599.00	
Recorder	0.00	3354	Outside	3599.00	
Bullnose	3.00			3602.00	22.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc
PO Box 783188
Wichita KS 67278-3188
ATTN: Jeff Christian

Minks 33AD #1
33 5S 22W Norton KS
Job Ticket: 26051 **DST#: 5**
Test Start: 2006.11.19 @ 00:02:47

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:	bbl		
Water Loss:	9.16 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1300.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Drig Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

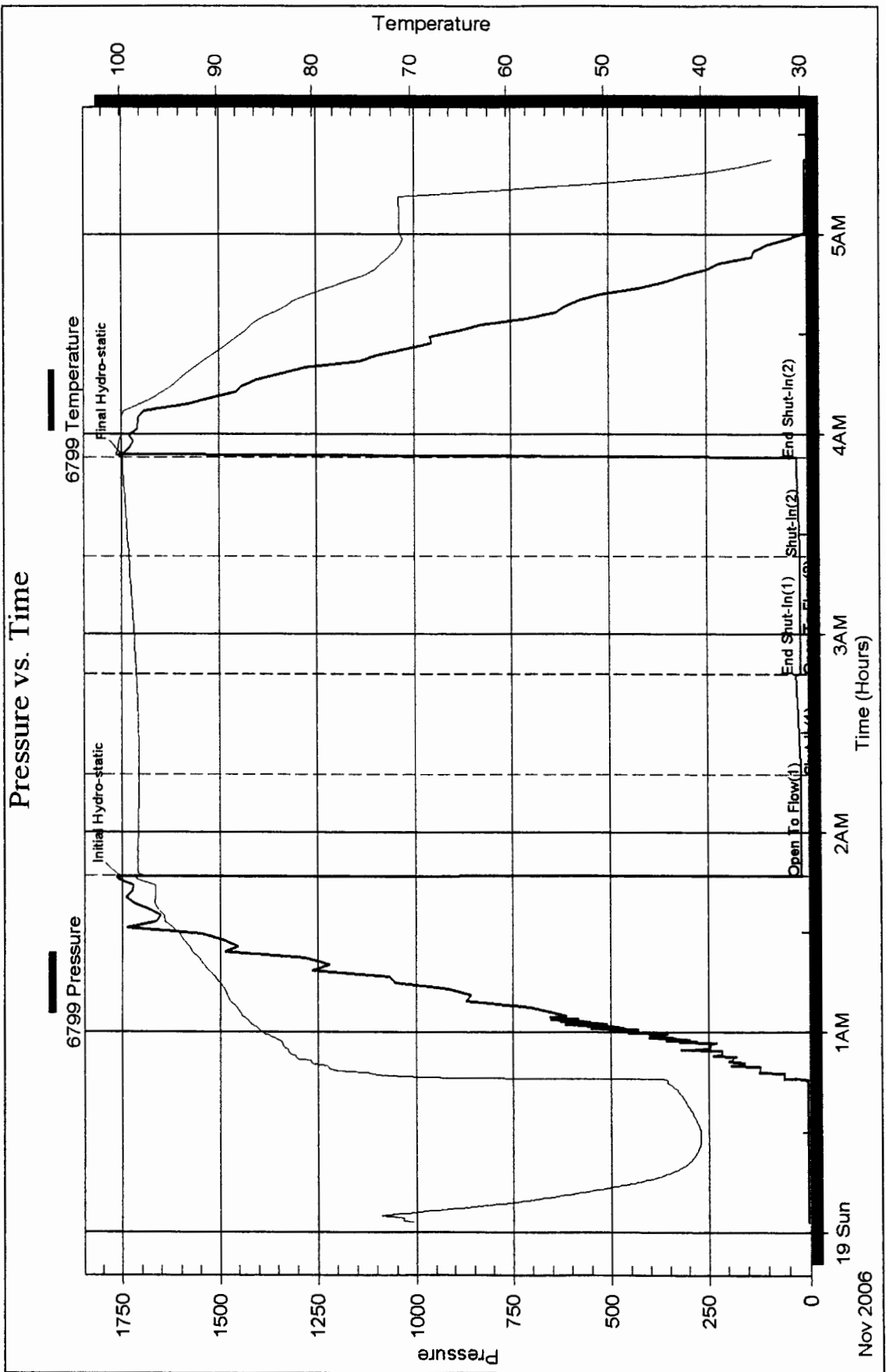
Serial #:

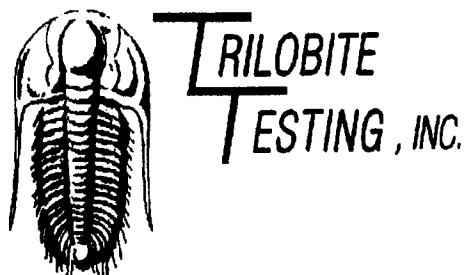
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.19 @ 11:34:03

End Date: 2006.11.19 @ 18:00:53

Job Ticket #: 26052 DST #: 6

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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26052

DST#: 6

Test Start: 2006.11.19 @ 11:34:03

GENERAL INFORMATION:

Formation: L-KC "D"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:02:03

Time Test Ended: 18:00:53

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 22

Interval: 3601.00 ft (KB) To 3621.00 ft (KB) (TVD)

Total Depth: 3621.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2365.00 ft (KB)

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 498.48 psig @ 3602.00 ft (KB)

Start Date: 2006.11.19

End Date:

2006.11.19

Start Time: 11:34:05

End Time:

18:00:52

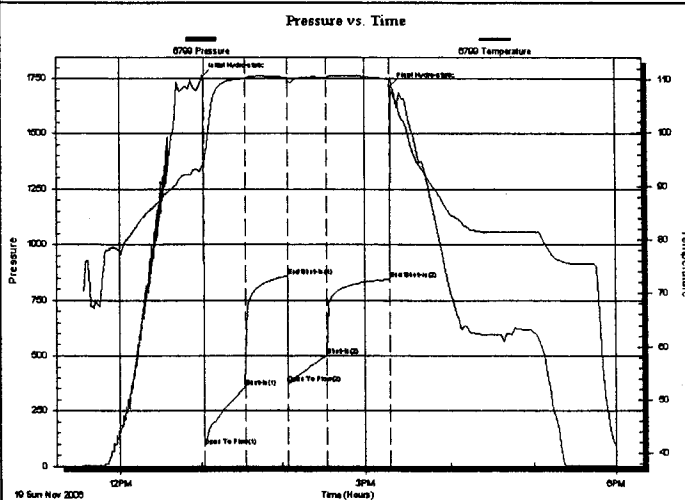
Capacity: 7000.00 psig

Last Calib.: 2006.11.19

Time On Btm: 2006.11.19 @ 13:01:13

Time Off Btm: 2006.11.19 @ 15:18:03

TEST COMMENT: IF Strong blow BOB 1 1/4 minutes
ISI Bled off blow back building to BOB
FF Strong blow BOB 13/4 minutes
FSI Bled off blow back building to BOB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1759.79	93.94	Initial Hydro-static
1	90.40	93.62	Open To Flow (1)
32	358.00	110.16	Shut-In (1)
63	857.19	110.38	End Shut-In (1)
64	371.55	109.92	Open To Flow (2)
92	498.48	110.47	Shut-In (2)
137	844.37	110.11	End Shut-In (2)
137	1712.98	110.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCO 35%M 65%O	0.59
1210.00	Gassy Oil 5%G 95%O	13.67
0.00	2300' GIP	0.00
0.00	Gravity= 36 corrected	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

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26052

DST#: 6

ATTN: Jeff Christian

Test Start: 2006.11.19 @ 11:34:03

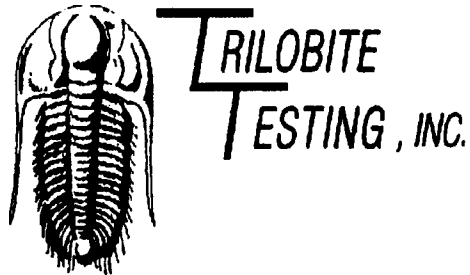
Tool Information

Drill Pipe:	Length: 3118.00 ft	Diameter: 3.80 inches	Volume: 43.74 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:	30000.00 lb
Drill Collar:	Length: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	46.12 bbl	Tool Chased	2.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	3601.00 ft			Final	68000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3586.00	
Hydraulic tool	5.00			3591.00	
Packer	5.00			3596.00	20.00 Bottom Of Top Packer
Packer	5.00			3601.00	
Stubb	1.00			3602.00	
Recorder	0.00	6799	Inside	3602.00	
Perforations	16.00			3618.00	
Recorder	0.00	3354	Outside	3618.00	
Bullnose	3.00			3621.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.20 @ 00:08:13

End Date: 2006.11.20 @ 05:51:43

Job Ticket #: 26053 DST #: 7

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26053

DST#: 7

ATTN: Jeff Christian

Test Start: 2006.11.20 @ 00:08:13

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: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

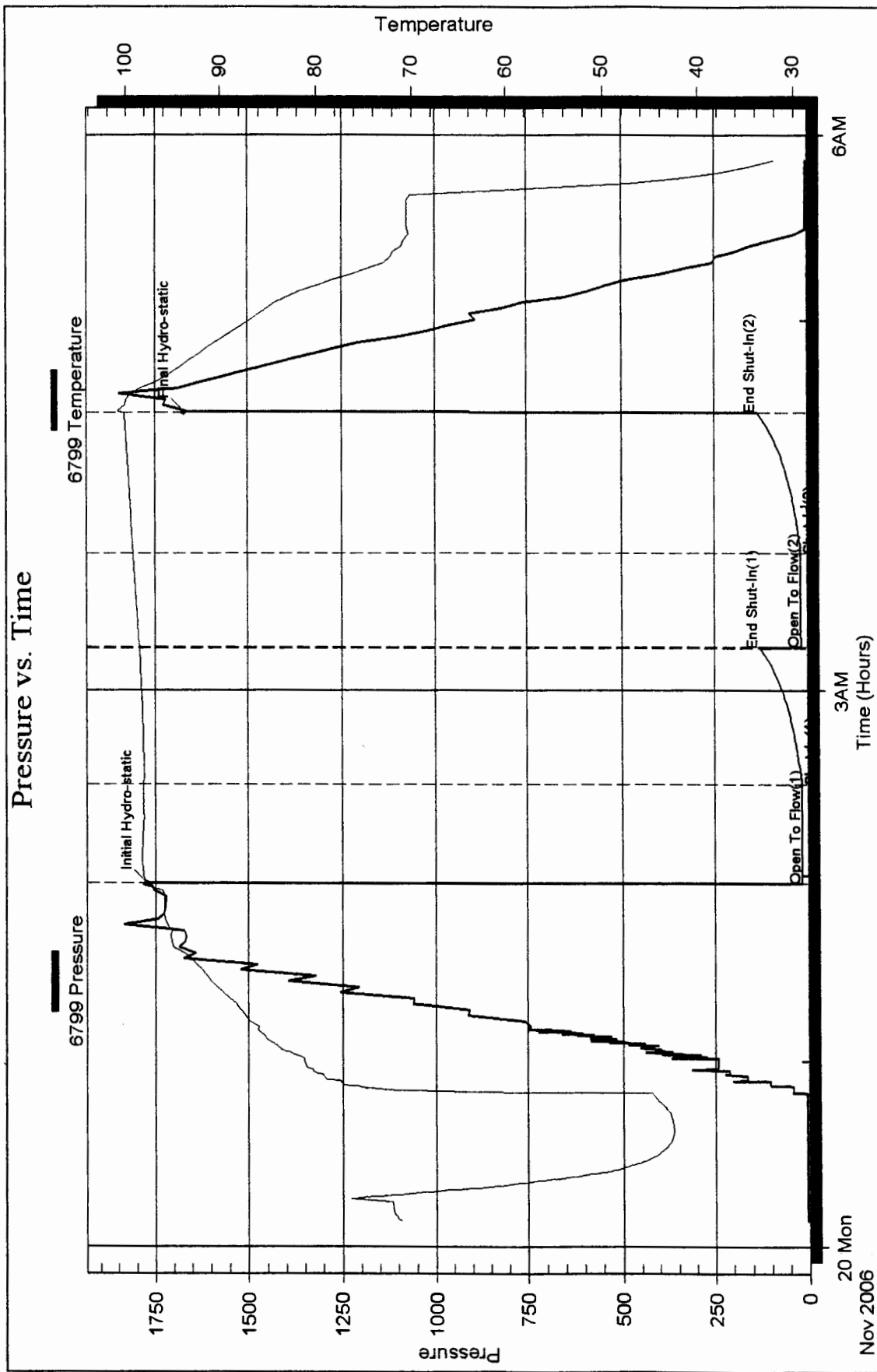
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
PO Box 783188
Wichita KS 67278-3188
ATTN: Jeff Christian

Minks 33AD #1
33 5S 22W Norton KS
Job Ticket: 26054 **DST#: 8**
Test Start: 2006.11.20 @ 11:36:11

GENERAL INFORMATION:

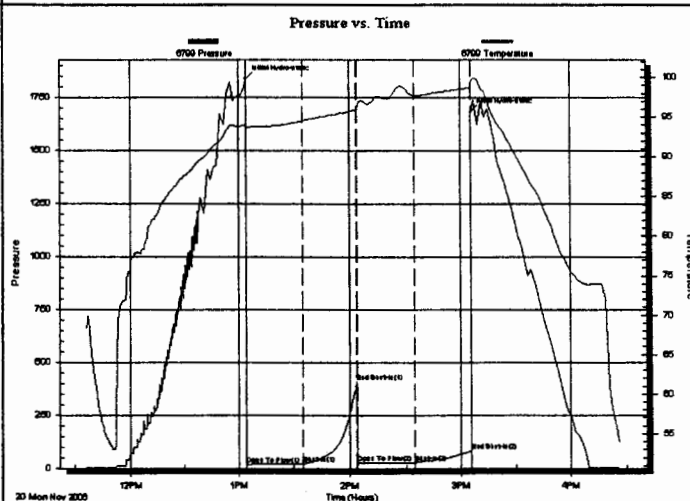
Formation: **L-KC "G"**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 13:04:11
Time Test Ended: 16:27:41
Interval: **3635.00 ft (KB) To 3655.00 ft (KB) (TVD)**
Total Depth: **3655.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Jake Fahrenbruch**
Unit No: **22**
Reference Elevations: **2365.00 ft (KB)**
2360.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 6799

Inside

Press@RunDepth: **27.49 psig @ 3636.00 ft (KB)**
Start Date: **2006.11.20** End Date: **2006.11.20** Capacity: **7000.00 psig**
Start Time: **11:36:13** End Time: **16:27:41** Last Calib.: **2006.11.20**
Time On Btm: **2006.11.20 @ 13:04:01**
Time Off Btm: **2006.11.20 @ 15:05:41**

TEST COMMENT: IF Weak blow built to 1/2 " in bucket Started to die by end of flow period
ISI Bled off no blow back
FF Weak surface blow died in 45 seconds
FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.38	94.03	Initial Hydro-static
1	18.32	93.47	Open To Flow (1)
32	22.42	94.47	Shut-In(1)
60	407.04	95.90	End Shut-In(1)
61	24.51	96.08	Open To Flow(2)
91	27.49	97.66	Shut-In(2)
122	80.70	98.71	End Shut-In(2)
122	1682.83	99.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SOSM -1%O +99%M	0.05

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26054

DST#: 8

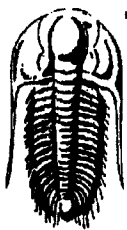
ATTN: Jeff Christian

Test Start: 2006.11.20 @ 11:36:11

Tool Information

Drill Pipe:	Length: 3148.00 ft	Diameter: 3.80 inches	Volume: 44.16 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	46.54 bbl	Tool Chased	1.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	3635.00 ft			Final	64000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3620.00	
Hydraulic tool	5.00			3625.00	
Packer	5.00			3630.00	20.00 Bottom Of Top Packer
Packer	5.00			3635.00	
Stubb	1.00			3636.00	
Recorder	0.00	6799	Inside	3636.00	
Perforations	16.00			3652.00	
Recorder	0.00	3354	Outside	3652.00	
Bullnose	3.00			3655.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26054

DST#: 8

ATTN: Jeff Christian

Test Start: 2006.11.20 @ 11:36:11

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 8.37 in³

Resistivity: ohm.m

Salinity: 1400.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	SOSM-1%O +99%M	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

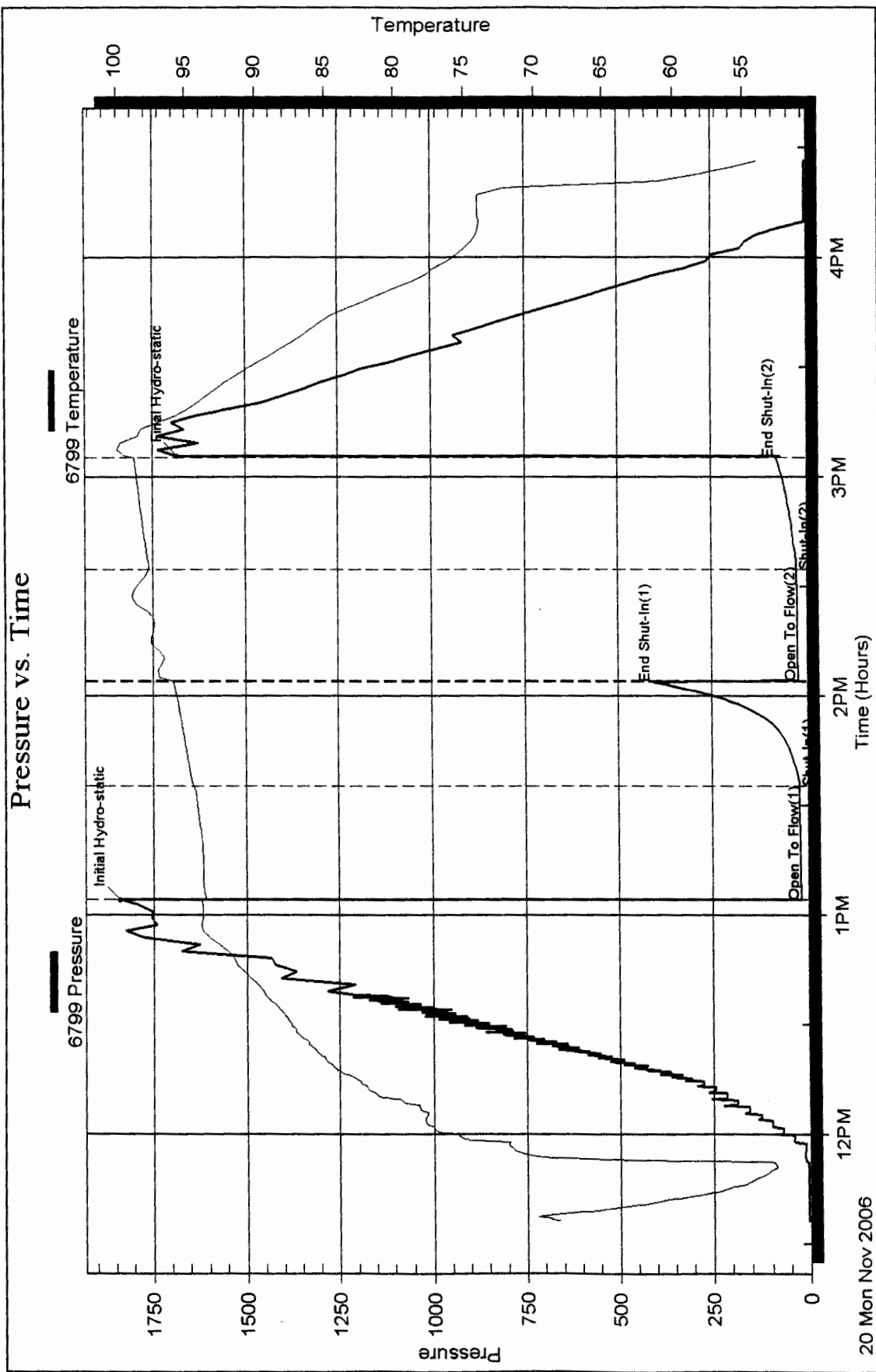
Serial #:

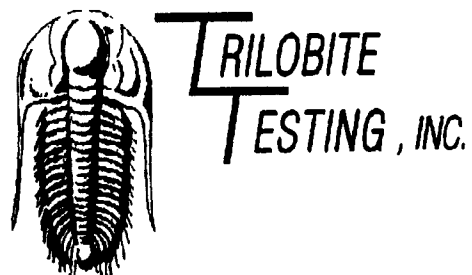
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.20 @ 21:59:47

End Date: 2006.11.21 @ 04:19:47

Job Ticket #: 26055 DST #: 9

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
PO Box 783188
Wichita KS 67278-3188
ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26055

DST#: 9

Test Start: 2006.11.20 @ 21:59:47

GENERAL INFORMATION:

Formation: L-KC "H"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:37:17

Time Test Ended: 04:19:47

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 22

Interval: 3660.00 ft (KB) To 3685.00 ft (KB) (TVD)

Total Depth: 3685.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2365.00 ft (KB)

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 48.73 psig @ 3661.00 ft (KB)

Start Date: 2006.11.20

End Date:

2006.11.21

Capacity: 7000.00 psig

Last Calib.:

2006.11.21

Start Time: 21:59:49

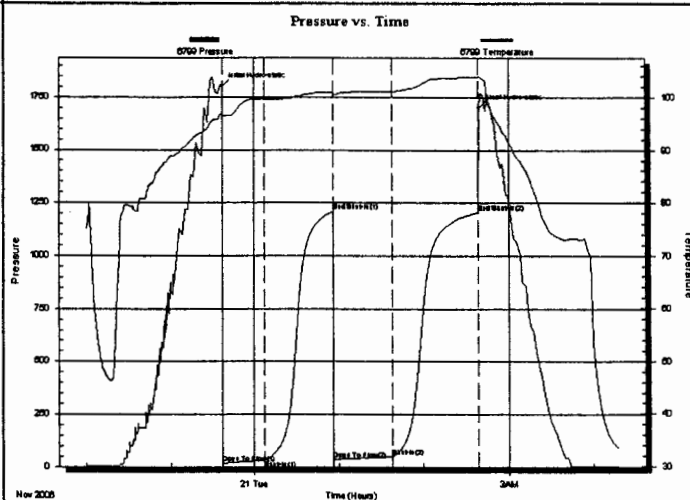
End Time:

04:19:47

Time On Btm: 2006.11.20 @ 23:36:57

Time Off Btm: 2006.11.21 @ 02:39:27

TEST COMMENT: IF Fairly weak blow steady build to 3 " in bucket
ISI Bled off no blow back
FF Fairly weak blow steady build to 6 " in bucket
FSI Bled off no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1800.24	96.90	Initial Hydro-static
1	15.66	96.12	Open To Flow (1)
31	31.30	99.61	Shut-In (1)
79	1207.64	100.99	End Shut-In (1)
80	35.33	100.55	Open To Flow (2)
122	48.73	101.16	Shut-In (2)
182	1204.65	103.83	End Shut-In (2)
183	1699.17	104.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oil 100%	0.15
100.00	Mdy Oil 45%M 55%O	0.49
0.00	Gravity=33 corrected	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26055

DST#: 9

ATTN: Jeff Christian

Test Start: 2006.11.20 @ 21:59:47

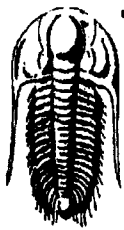
Tool Information

Drill Pipe:	Length: 3179.00 ft	Diameter: 3.80 inches	Volume: 44.59 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume:	46.97 bbl	Tool Chased 1.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3660.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	45.00 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			3645.00	
Hydraulic tool	5.00			3650.00	
Packer	5.00			3655.00	20.00 Bottom Of Top Packer
Packer	5.00			3660.00	
Stubb	1.00			3661.00	
Recorder	0.00	6799	Inside	3661.00	
Perforations	21.00			3682.00	
Recorder	0.00	3354	Outside	3682.00	
Bullnose	3.00			3685.00	25.00 Bottom Packers & Anchor
Total Tool Length:	45.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26055

DST#:9

ATTN: Jeff Christian

Test Start: 2006.11.20 @ 21:59:47

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: 8.77 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
30.00	Oil 100%	0.148
100.00	Mdy Oil 45%M 55%O	0.492
0.00	Gravity=33 corrected	0.000

Total Length: 130.00 ft

Total Volume: 0.640 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

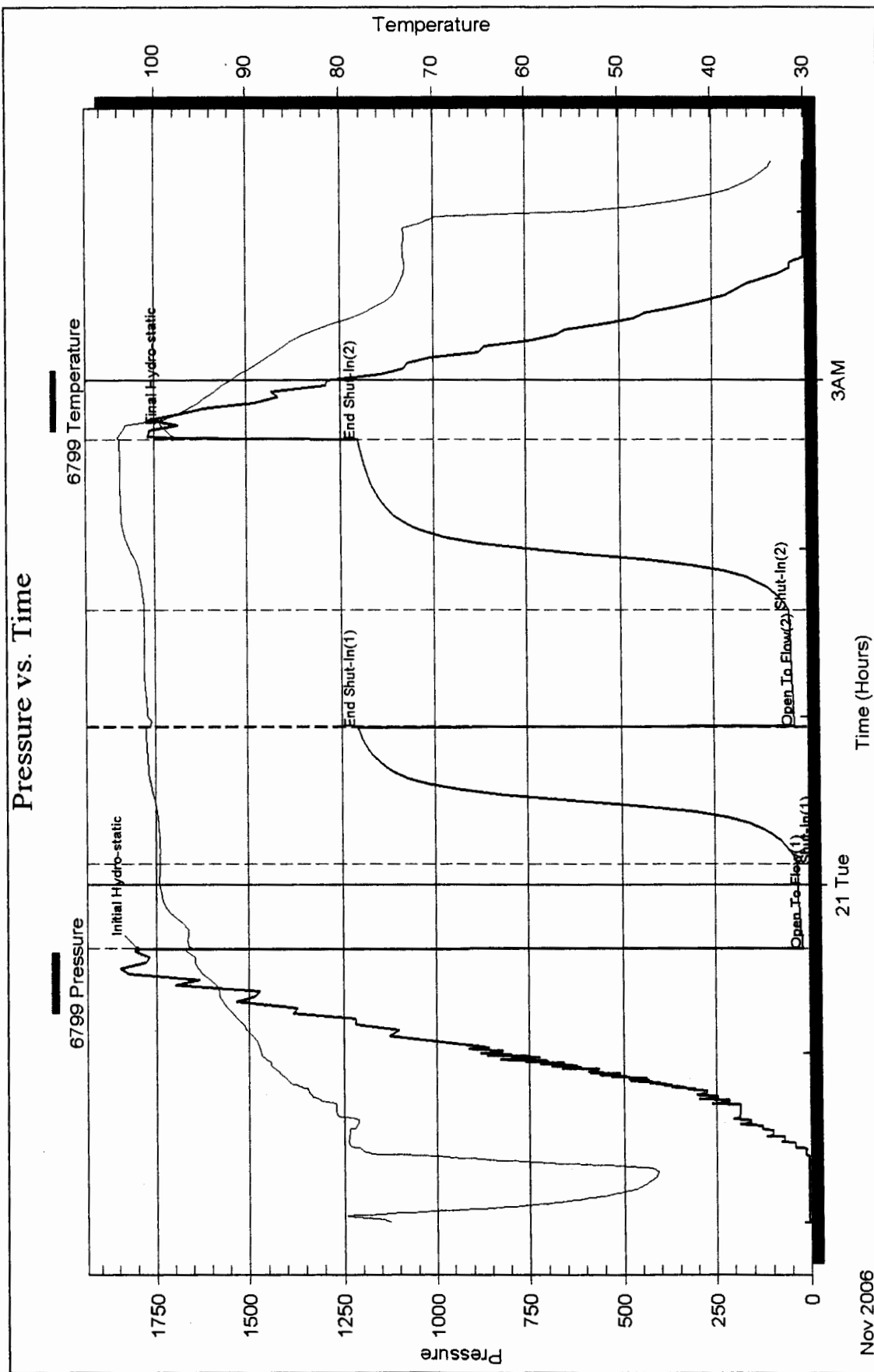
Serial #:

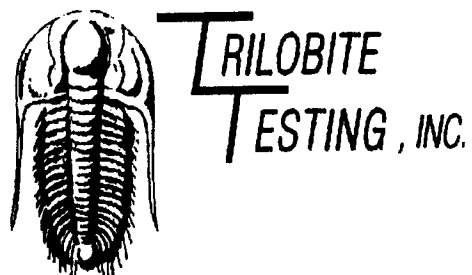
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.21 @ 09:24:50

End Date: 2006.11.21 @ 16:07:20

Job Ticket #: 26056 DST #: 10

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
PO Box 783188
Wichita KS 67278-3188
ATTN: Jeff Christian

Minks 33AD #1
33 5S 22W Norton KS
Job Ticket: 26056 **DST#: 10**
Test Start: 2006.11.21 @ 09:24:50

GENERAL INFORMATION:

Formation: **L-KC "J"**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: **11:10:30**
Time Test Ended: **16:07:20**

Test Type: **Conventional Bottom Hole**
Tester: **Jake Fahrenbruch**
Unit No: **22**

Interval: **3690.00 ft (KB) To 3718.00 ft (KB) (TVD)**
Total Depth: **3718.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2365.00 ft (KB)**
2360.00 ft (CF)
KB to GR/CF: **5.00 ft**

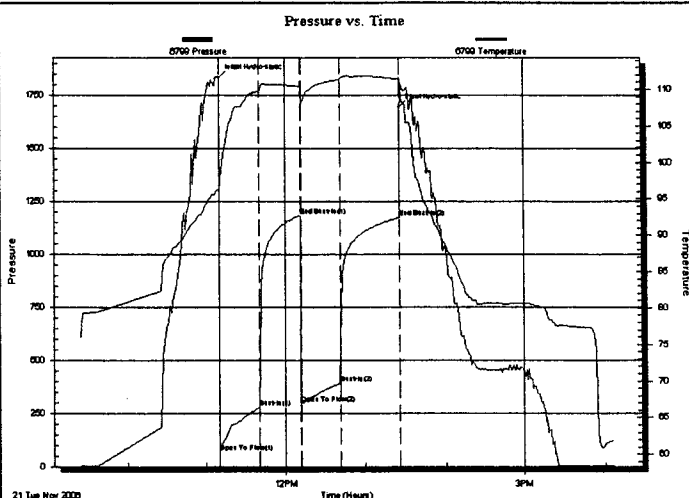
Serial #: 6799

Inside

Press@RunDepth: **391.04 psig @ 3691.00 ft (KB)**
Start Date: **2006.11.21** End Date: **2006.11.21**
Start Time: **09:24:52** End Time: **16:07:20**

Capacity: **7000.00 psig**
Last Calib.: **2006.11.21**
Time On Btm: **2006.11.21 @ 11:10:10**
Time Off Btm: **2006.11.21 @ 13:25:30**

TEST COMMENT: IF Strong blow built to BOB in 2.75 minutes.
ISI Bled off strong blow back building to BOB in 9 minutes.
FF Strong blow built to BOB in 3.5 minutes.
FSI Bled off strong blow back building to BOB in 8



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1830.58	96.32	Initial Hydro-static
1	65.08	96.07	Open To Flow (1)
31	278.20	109.78	Shut-In (1)
62	1182.11	110.43	End Shut-In (1)
62	296.08	109.32	Open To Flow (2)
92	391.04	111.34	Shut-In (2)
135	1172.11	111.38	End Shut-In (2)
136	1691.79	111.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCMW 18%O 37%M 45%W	0.30
60.00	MO 50%M 50%O	0.30
910.00	Oil 100%O	9.46
0.00	1400' GIP	0.00
0.00	Corrected Gravity= 37	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

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26056

DST#: 10

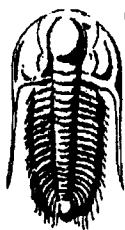
ATTN: Jeff Christian

Test Start: 2006.11.21 @ 09:24:50

Tool Information

Drill Pipe:	Length: 3209.00 ft	Diameter: 3.80 inches	Volume: 45.01 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: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	78000.00 lb
		Total Volume:	47.39 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	65000.00 lb
Depth to Top Packer:	3690.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 ft				
Tool Length:	48.00 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			3675.00	
Hydraulic tool	5.00			3680.00	
Packer	5.00			3685.00	20.00 Bottom Of Top Packer
Packer	5.00			3690.00	
Stubb	1.00			3691.00	
Recorder	0.00	6799	Inside	3691.00	
Perforations	24.00			3715.00	
Recorder	0.00	3354	Outside	3715.00	
Bullnose	3.00			3718.00	28.00 Bottom Packers & Anchor
Total Tool Length:	48.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26056

DST#: 10

ATTN: Jeff Christian

Test Start: 2006.11.21 @ 09:24:50

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: 63.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCCMW 18%O 37%M 45%W	0.295
60.00	MO 50%M 50%O	0.295
910.00	Oil 100%O	9.458
0.00	1400' GIP	0.000
0.00	Corrected Gravity= 37	0.000

Total Length: 1030.00 ft

Total Volume: 10.048 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

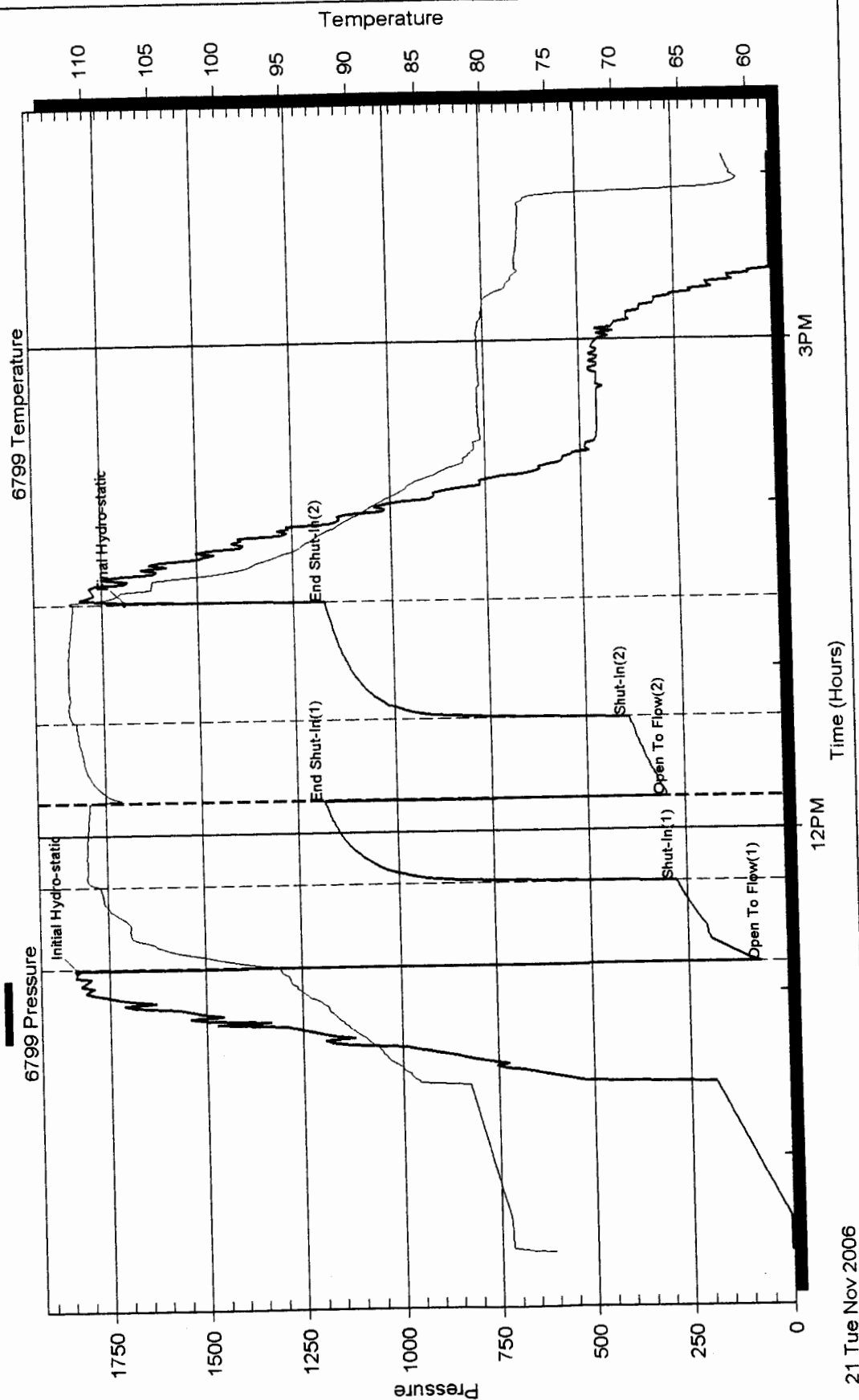
Serial #:

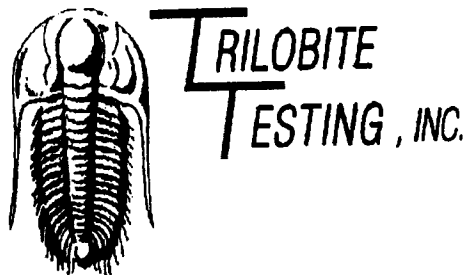
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

33 5S 22W Norton KS

Minks 33AD #1

Start Date: 2006.11.22 @ 07:07:03

End Date: 2006.11.22 @ 15:24:53

Job Ticket #: 26057 DST #: 11

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

PO Box 783188
Wichita KS 67278-3188

ATTN: Jeff Christian

Minks 33AD #1

33 5S 22W Norton KS

Job Ticket: 26057

DST#:11

Test Start: 2006.11.22 @ 07:07:03

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:07:13

Time Test Ended: 15:24:53

Test Type: Conventional Straddle

Tester: Jake Fahrenbruch

Unit No: 22

Interval: **3824.00 ft (KB) To 3854.00 ft (KB) (TVD)**

Total Depth: 3874.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2365.00 ft (KB)

2360.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 537.75 psig @ 3825.00 ft (KB)

Start Date: 2006.11.22

End Date:

2006.11.22

Start Time: 07:07:05

End Time:

15:24:52

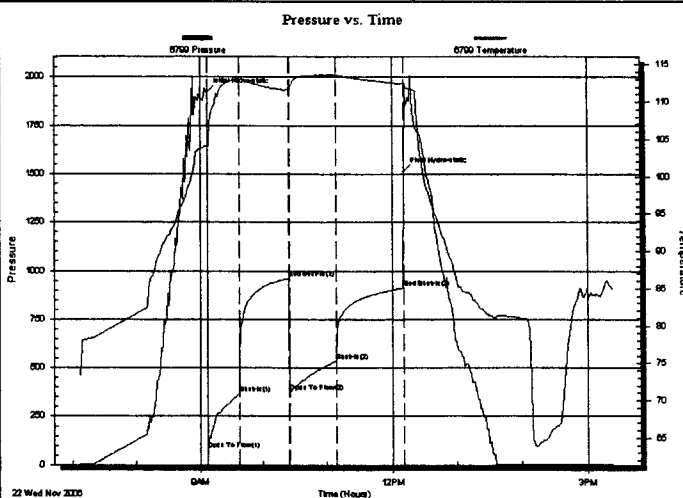
Capacity: 7000.00 psig

Last Calib.: 2006.11.22

Time On Btm: 2006.11.22 @ 09:07:03

Time Off Btm: 2006.11.22 @ 12:10:53

TEST COMMENT: IF Strong blow built to BOB in 3.5 minutes
ISI Bled off blow back built to .5 " in bucket
FF Strong blow , built to BOB in 4.5 minutes.
FSI Bled off blow back built to .5 " in bucket



PRESSURE SUMMARY

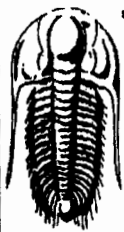
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1920.38	104.06	Initial Hydro-static
1	78.80	102.89	Open To Flow (1)
31	368.38	113.15	Shut-In (1)
78	962.31	111.62	End Shut-In (1)
79	374.77	111.34	Open To Flow (2)
122	537.75	113.58	Shut-In (2)
184	912.06	112.43	End Shut-In (2)
184	1513.09	112.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2150.00	Salt Water 100W = 28,200 ppm CHL	25.76
240.00	SO&MCW 2%O 5%M 93%W	3.37
180.00	HOCWM 20%O 35%W 45%M	2.52
60.00	HOCWM 25%O 35%W 45%M	0.84
30.00	Oil gravity= 24 corrected	0.42

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26057

DST#: 11

ATTN: Jeff Christian

Test Start: 2006.11.22 @ 07:07:03

Tool Information

Drill Pipe:	Length: 3334.00 ft	Diameter: 3.80 inches	Volume: 46.77 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:	25000.00 lb
Drill Collar:	Length: 483.00 ft	Diameter: 2.25 inches	Volume: 2.38 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	49.15 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	65000.00 lb
Depth to Top Packer:	3824.00 ft			Final	75000.00 lb
Depth to Bottom Packer:	3854.00 ft				
Interval between Packers:	30.00 ft				
Tool Length:	70.00 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			3809.00	
Hydraulic tool	5.00			3814.00	
Packer	5.00			3819.00	20.00 Bottom Of Top Packer
Packer	5.00			3824.00	
Stubb	1.00			3825.00	
Recorder	0.00	6799	Inside	3825.00	
Perforations	26.00			3851.00	
Recorder	0.00	10270	Outside	3851.00	
Blank Off Sub	3.00			3854.00	30.00 Tool Interval
Packer	3.00			3857.00	
Perforations	14.00			3871.00	
Recorder	0.00	3354	Fluid	3871.00	
Bullnose	3.00			3874.00	20.00 Bottom Packers & Anchor

Total Tool Length: 70.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Minks 33AD #1

PO Box 783188
Wichita KS 67278-3188

33 5S 22W Norton KS

Job Ticket: 26057

DST#: 11

ATTN: Jeff Christian

Test Start: 2006.11.22 @ 07:07:03

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: 63.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 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
2150.00	Salt Water 100W = 28,200 ppm CHL	25.759
240.00	SO&MCW 2%O 5%M 93%W	3.367
180.00	HOCWM 20%O 35%W 45%M	2.525
60.00	HOCWM 25%O 35%W 45%M	0.842
30.00	Oil gravity= 24 corrected	0.421

Total Length: 2660.00 ft

Total Volume: 32.914 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6799

Inside

Ritchie Exploration Inc

33 5S 22W Norton KS

DST Test Number: 11

