

15-039-21052

20-5s-29w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL

JUL 24 2008

KCC

ATTN: Rocky Milford

20 5S 29W Decatur KS

Ritter #1-20

Start Date: 2008.03.30 @ 13:50:11

End Date: 2008.03.30 @ 20:53:41

Job Ticket #: 31565 DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 25 2008

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

Ritter #1-20

20 5S 29W Decatur KS

DST # 1

Toronto - Lans. "C"

2008.03.30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31565

DST#: 1

Test Start: 2008.03.30 @ 13:50:11

GENERAL INFORMATION:

Formation: **Toronto - Lans. "C"**

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

Time Tool Opened: 15:21:41

Time Test Ended: 20:53:41

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **36**

Interval: **3851.00 ft (KB) To 3930.00 ft (KB) (TVD)**

Total Depth: **3930.00 ft (KB) (TVD)**

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

Reference Elevations: **2804.00 ft (KB)**

2799.00 ft (CF)

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

Serial #: 8366

Inside

Press@RunDepth: **42.71 psig @ 3852.00 ft (KB)**

Start Date: **2008.03.30**

End Date: **2008.03.30**

Start Time: **13:50:16**

End Time: **20:53:40**

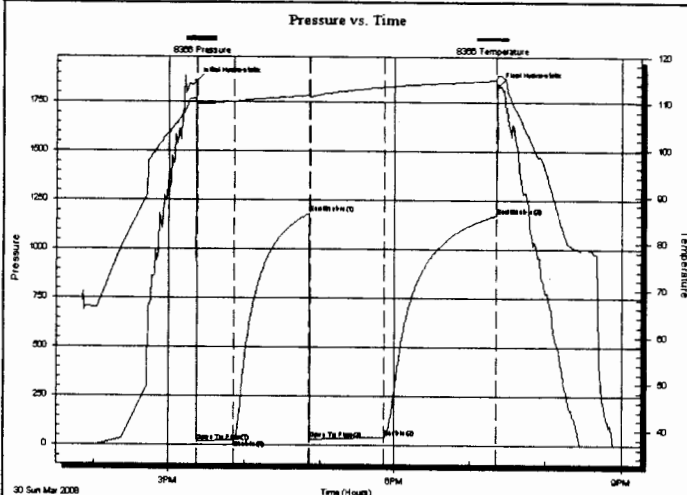
Capacity: **7000.00 psig**

Last Calib.: **2008.03.30**

Time On Btm: **2008.03.30 @ 15:21:11**

Time Off Btm: **2008.03.30 @ 19:22:41**

TEST COMMENT: IF Weak blow built to 1 1/2 "
ISI Bled off No blow back
FF Very weak surface blow (20 min. to close)
FSI Bled off No blow back



PRESSURE SUMMARY

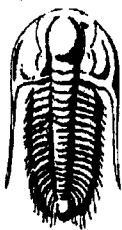
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1854.91	110.64	Initial Hydro-static
1	17.77	109.95	Open To Flow (1)
30	27.25	110.30	Shut-In (1)
90	1182.33	111.65	End Shut-In (1)
91	30.25	111.28	Open To Flow (2)
151	42.71	113.48	Shut-In (2)
240	1173.91	114.98	End Shut-In (2)
242	1834.77	116.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SOOM97%M3%O	0.20

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31565

DST#: 1

Test Start: 2008.03.30 @ 13:50:11

Tool Information

Drill Pipe:	Length: 3424.00 ft	Diameter: 3.80 inches	Volume: 48.03 bbl	Tool Weight:	3000.00 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: 423.00 ft	Diameter: 2.25 inches	Volume: 2.08 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	50.11 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	68000.00 lb
Depth to Top Packer:	3851.00 ft			Final	68000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	79.00 ft				
Tool Length:	107.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3828.00	
Hydraulic tool	5.00			3833.00	
Jars	5.00			3838.00	
Safety Joint	3.00			3841.00	
Packer	5.00			3846.00	28.00 Bottom Of Top Packer
Packer	5.00			3851.00	
Stubb	1.00			3852.00	
Recorder	0.00	8366	Inside	3852.00	
Recorder	0.00	6672	Inside	3852.00	
Perforations	10.00			3862.00	
Blank Spacing	62.00			3924.00	
Perforations	3.00			3927.00	
Bullnose	3.00			3930.00	79.00 Bottom Packers & Anchor

Total Tool Length: 107.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Ritter #1-20

250 N Water Ste 300
Wichita KS 67202

20 5S 29W Decatur KS

Job Ticket: 31565

DST#: 1

ATTN: Rocky Milford

Test Start: 2008.03.30 @ 13:50:11

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: 5.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	SOCM 97%M 3%O	0.197

Total Length: 40.00 ft

Total Volume: 0.197 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

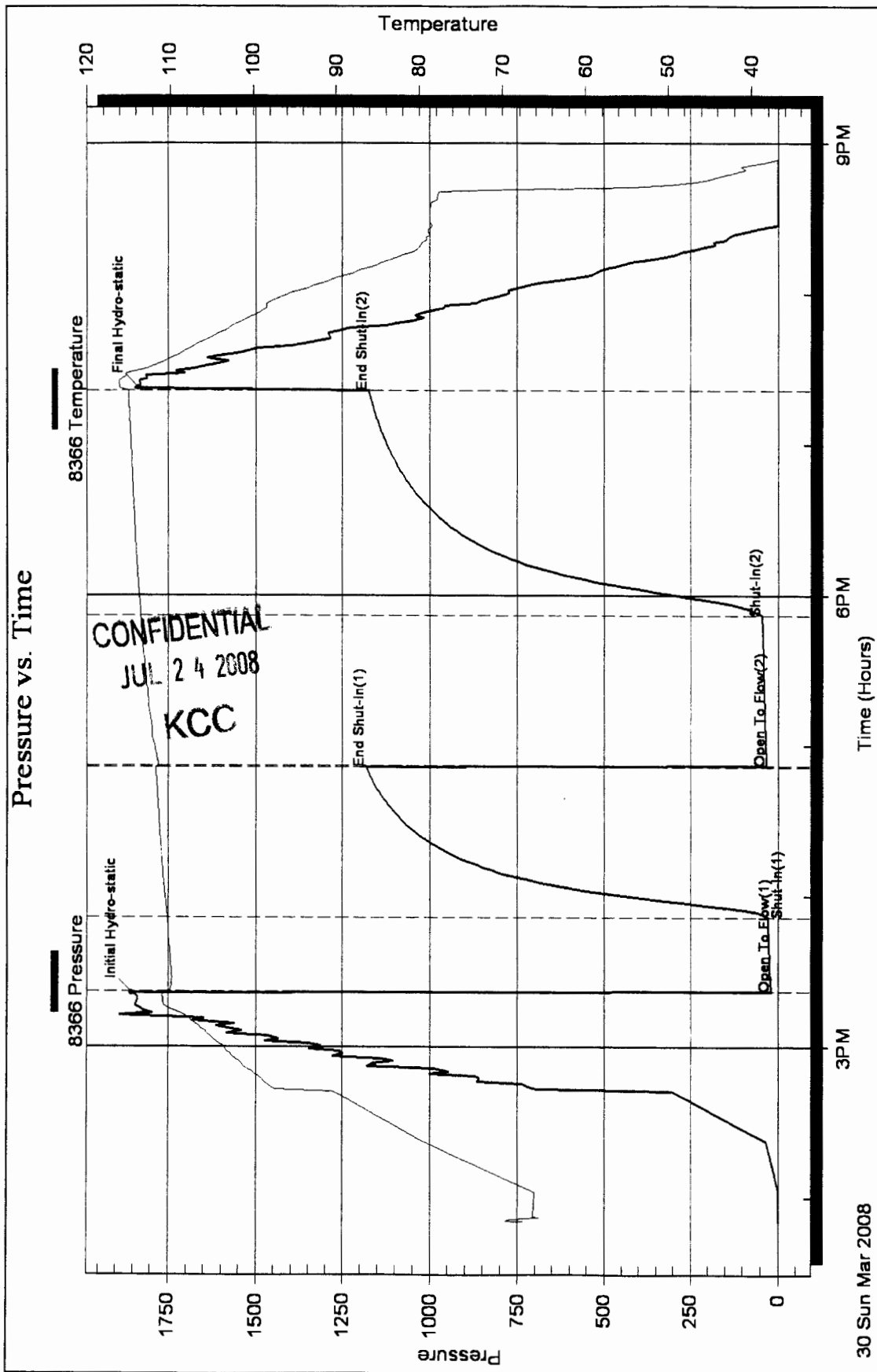
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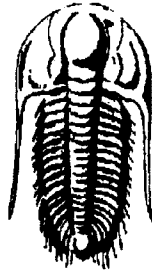
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
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CONFIDENTIAL
JUL 24 2008
KCC

ATTN: Rocky Milford

20 5S 29W Decatur KS

Ritter #1-20

Start Date: 2008.03.31 @ 06:18:30

End Date: 2008.03.31 @ 15:32:30

Job Ticket #: 31566 DST #: 2

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 25 2008

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31566

DST#: 2

Test Start: 2008.03.31 @ 06:18:30

GENERAL INFORMATION:

Formation: **Lans. "E-G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:27:00

Time Test Ended: 15:32:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: **3945.00 ft (KB) To 3995.00 ft (KB) (TVD)**

Total Depth: 3995.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2804.00 ft (KB)

2799.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 546.30 psig @ 3946.00 ft (KB)

Start Date: 2008.03.31

End Date:

2008.03.31

Start Time:

06:18:35

End Time:

15:32:30

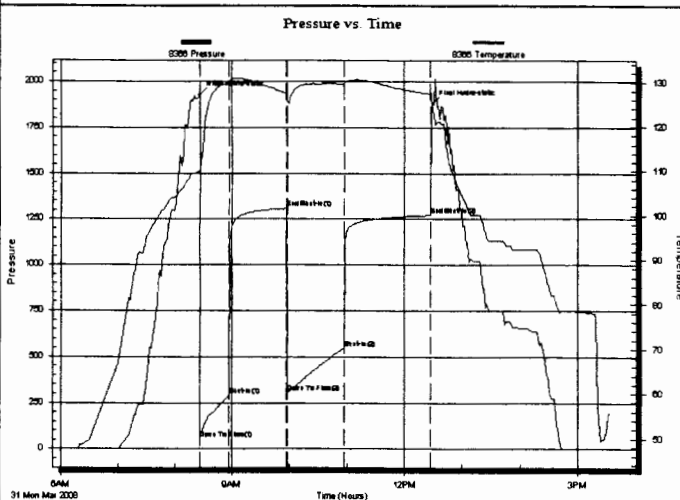
Capacity: 7000.00 psig

Last Calib.: 2008.03.31

Time On Btm: 2008.03.31 @ 08:26:30

Time Off Btm: 2008.03.31 @ 12:29:30

TEST COMMENT: IF Very strong blow BOB (11" +) in 3 1/2 min.
ISI Bled off Strong blow back BOB in 11 min.
FF Strong blow BOB in 6 1/2 min.
FSI Bled off Strong blow back BOB in 20 min.



PRESSURE SUMMARY

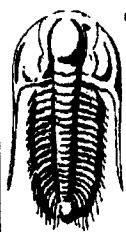
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1925.12	110.10	Initial Hydro-static
1	53.25	109.96	Open To Flow (1)
31	289.72	129.65	Shut-In (1)
91	1307.28	127.49	End Shut-In (1)
91	305.25	126.90	Open To Flow (2)
151	546.30	129.55	Shut-In (2)
241	1271.17	127.32	End Shut-In (2)
243	1881.19	123.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GCMO 45%O 42%M 13%G	0.59
1280.00	SMGO 90%O 7%G 3%M	15.19
0.00	GIP = 1315' +	0.00
0.00	Gravity = 35 API @ 48 deg F	0.00
0.00	Corrected Gravity = 36.2 API	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

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31566

DST#: 2

Test Start: 2008.03.31 @ 06:18:30

Tool Information

Drill Pipe:	Length: 3515.00 ft	Diameter: 3.80 inches	Volume: 49.31 bbl	Tool Weight:	2500.00 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: 423.00 ft	Diameter: 2.25 inches	Volume: 2.08 bbl	Weight to Pull Loose:	84000.00 lb
		Total Volume:	51.39 bbl	Tool Chased	2.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	3945.00 ft			Final	72000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	50.00 ft				
Tool Length:	78.00 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			3922.00	
Hydraulic tool	5.00			3927.00	
Jars	5.00			3932.00	
Safety Joint	3.00			3935.00	
Packer	5.00			3940.00	28.00 Bottom Of Top Packer
Packer	5.00			3945.00	
Stubb	1.00			3946.00	
Recorder	0.00	8366	Inside	3946.00	
Recorder	0.00	6672	Inside	3946.00	
Perforations	10.00			3956.00	
Blank Spacing	33.00			3989.00	
Perforations	3.00			3992.00	
Bullnose	3.00			3995.00	50.00 Bottom Packers & Anchor

Total Tool Length: 78.00



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Ritter #1-20

250 N Water Ste 300
Wichita KS 67202

20 5S 29W Decatur KS

Job Ticket: 31566

DST#: 2

ATTN: Rocky Milford

Test Start: 2008.03.31 @ 06:18:30

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GCMO 45%O 42%M 13%G	0.590
1280.00	SMGO 90%O 7%G 3%M	15.195
0.00	GIP = 1315' +	0.000
0.00	Gravity = 35 API @ 48 deg F	0.000
0.00	Corrected Gravity = 36.2 API	0.000

Total Length: 1400.00 ft

Total Volume: 15.785 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

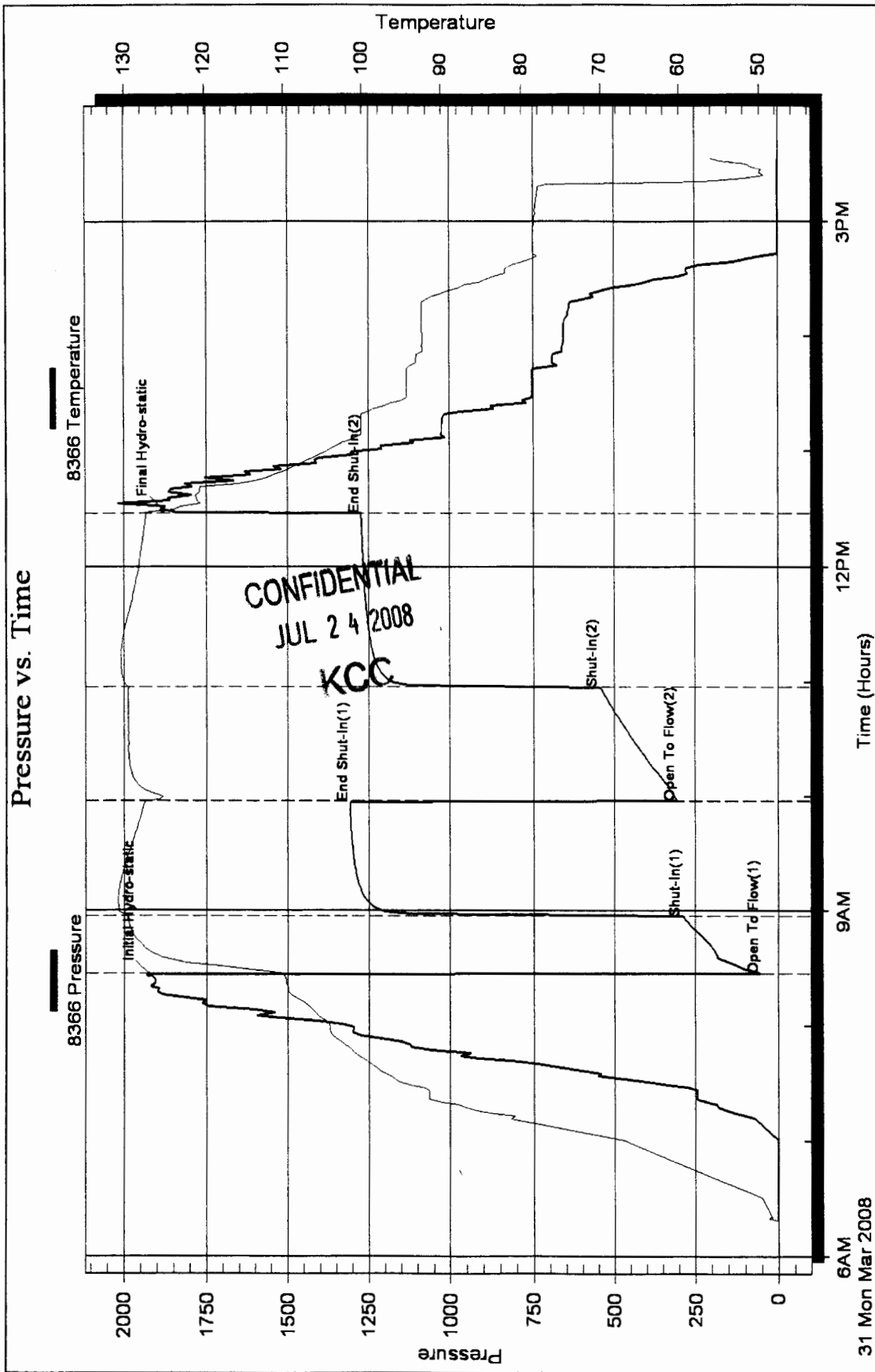
Serial #:

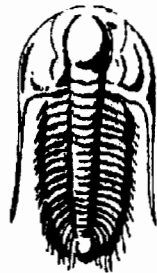
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL

JUL 24 2008

KCC

ATTN: Rocky Milford

20 5S 29W Decatur KS

Ritter #1-20

Start Date: 2008.04.01 @ 02:19:09

End Date: 2008.04.01 @ 09:14:39

Job Ticket #: 31567

DST #: 3

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 25 2008

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31567

DST#: 3

Test Start: 2008.04.01 @ 02:19:09

GENERAL INFORMATION:

Formation: **Lans. "H - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:59:09

Time Test Ended: 09:14:39

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: **3993.00 ft (KB) To 4083.00 ft (KB) (TVD)**

Total Depth: 4083.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2804.00 ft (KB)

2799.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 36.89 psig @ 3994.00 ft (KB)

Start Date: 2008.04.01

End Date:

2008.04.01

Start Time: 02:19:14

End Time:

09:14:38

Capacity: 7000.00 psig

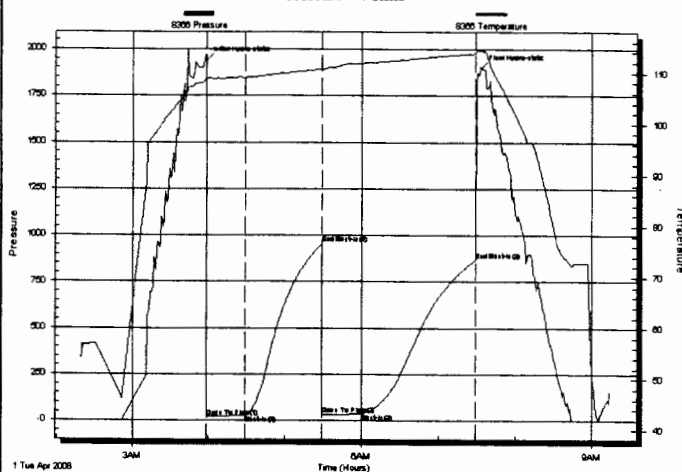
Last Calib.: 2008.04.01

Time On Btm: 2008.04.01 @ 03:58:39

Time Off Btm: 2008.04.01 @ 07:33:09

TEST COMMENT: IF Weak blow built to 1 "
ISI Bled off No blow back
FF No blow
FSI No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1936.31	109.16	Initial Hydro-static
1	19.34	108.65	Open To Flow (1)
31	28.13	109.09	Shut-In (1)
90	952.35	110.72	End Shut-In (1)
91	31.45	110.50	Open To Flow (2)
121	36.89	111.88	Shut-In (2)
210	867.18	113.83	End Shut-In (2)
215	1897.55	114.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	VSOCM 98%M 2%O	0.20

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

Ritter #1-20

20 5S 29W Decatur KS

Job Ticket: 31567

DST#: 3

Test Start: 2008.04.01 @ 02:19:09

Tool Information

Drill Pipe:	Length: 3549.00 ft	Diameter: 3.80 inches	Volume: 49.78 bbl	Tool Weight: 2600.00 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: 423.00 ft	Diameter: 2.25 inches	Volume: 2.08 bbl	Weight to Pull Loose: 78000.00 lb
		Total Volume:	51.86 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	3993.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	118.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3970.00	
Hydraulic tool	5.00			3975.00	
Jars	5.00			3980.00	
Safety Joint	3.00			3983.00	
Packer	5.00			3988.00	28.00 Bottom Of Top Packer
Packer	5.00			3993.00	
Stubb	1.00			3994.00	
Recorder	0.00	8366	Inside	3994.00	
Recorder	0.00	6672	Inside	3994.00	
Perforations	21.00			4015.00	
Blank Spacing	62.00			4077.00	
Perforations	3.00			4080.00	
Bullnose	3.00			4083.00	90.00 Bottom Packers & Anchor

Total Tool Length: 118.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

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250 N Water Ste 300
Wichita KS 67202

20 5S 29W Decatur KS

Job Ticket: 31567

DST#: 3

ATTN: Rocky Milford

Test Start: 2008.04.01 @ 02:19:09

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	VSOCM98%M2%O	0.197

Total Length: 40.00 ft

Total Volume: 0.197 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

