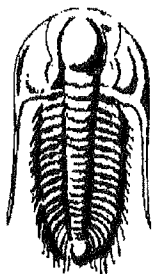


15-009-25179

17-20s-12w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL
AUG 05 2008

KCC

ATTN: Mike Kidwell

17 20S 12W Barton KS

Miller-Reynolds Unit # 1-17

Start Date: 2008.04.12 @ 16:54:28

End Date: 2008.04.13 @ 05:01:58

Job Ticket #: 31184

DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

AUG 06 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

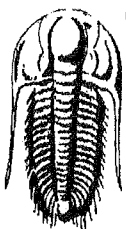
Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

DST # 1

Lansing 'A-F'

2008.04.12



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31184

DST#: 1

Test Start: 2008.04.12 @ 16:54:28

GENERAL INFORMATION:

Formation: **Lansing 'A-F'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:59:58

Time Test Ended: 05:01:58

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **3206.00 ft (KB) To 3282.00 ft (KB) (TVD)**

Total Depth: 3282.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1867.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 718.74 psig @ 3213.00 ft (KB)

Start Date: 2008.04.12

End Date:

2008.04.13

Start Time: 16:54:29

End Time:

05:01:58

Capacity: 7000.00 psig

Last Calib.: 2008.04.13

Time On Btm: 2008.04.12 @ 18:58:28

Time Off Btm: 2008.04.12 @ 23:02:28

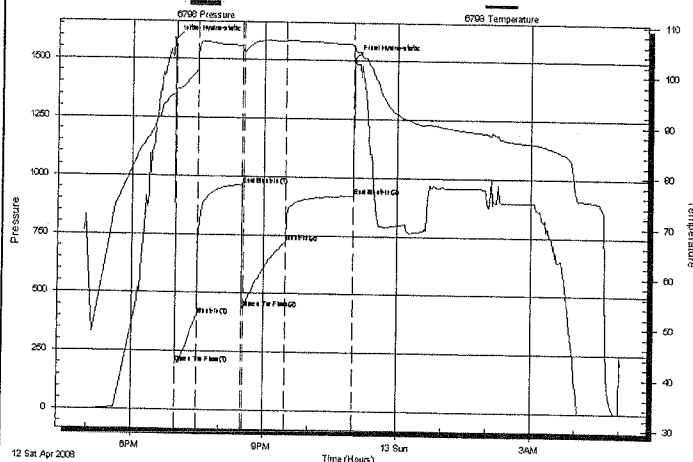
TEST COMMENT: IF Strong blow BOB in 1 min. GTS in 7 1/2 mins. (see gas flow report)

ISI Strong blow BOB in 15 secs. after 10 min. bleed off

FF Strong blow BOB in 10 secs.

FSI Strong blow BOB in 15 secs. after 10

Pressure vs. Time



PRESSURE SUMMARY

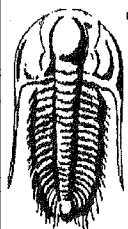
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1583.50	95.89	Initial Hydro-static
2	196.63	95.66	Open To Flow (1)
31	403.09	100.67	Shut-In(1)
92	963.82	105.55	End Shut-In(1)
94	436.07	104.53	Open To Flow (2)
151	718.74	106.55	Shut-In(2)
242	921.38	106.02	End Shut-In(2)
244	1508.38	104.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
242.00	GMCO 5%G 80%O 15%M	1.19
2168.00	Clean GO 5%G 95%O	30.41
0.00	780' GIP	0.00
0.00	Grav 39 API @ 50 deg.	0.00
0.00		0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	1.25	24.83
Last Gas Rate	0.25	1.50	25.22
Max. Gas Rate	0.25	10.00	38.71



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31184

DST#: 1

Test Start: 2008.04.12 @ 16:54:28

Tool Information

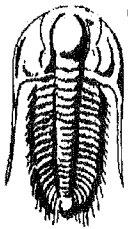
Drill Pipe:	Length: 2948.00 ft	Diameter: 3.80 inches	Volume: 41.35 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 242.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume:	42.54 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3206.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.00 ft			
Tool Length:	99.00 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			3188.00	
Hydraulic tool	5.00			3193.00	
Safety Joint	3.00			3196.00	
Packer	5.00			3201.00	23.00 Bottom Of Top Packer
Packer	5.00			3206.00	
Stubb	1.00			3207.00	
Perforations	5.00			3212.00	
Change Over Sub	1.00			3213.00	
Recorder	0.00	6798	Inside	3213.00	
Recorder	0.00	8358	Inside	3213.00	
Blank Spacing	31.00			3244.00	
Change Over Sub	1.00			3245.00	
Perforations	34.00			3279.00	
Bullnose	3.00			3282.00	76.00 Bottom Packers & Anchor

Total Tool Length: 99.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31184

DST#: 1

Test Start: 2008.04.12 @ 16:54:28

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 44.00 sec/qt

Water Loss: 6.38 in³

Resistivity: 0.00 ohm.m

Salinity: 4100.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

40 deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
242.00	GIMCO 5%G 80%O 15%M	1.190
2168.00	Clean GO 5%G 95%O	30.411
0.00	780' GIP	0.000
0.00	Grav 39 API @ 50 deg.	0.000
0.00		0.000

Total Length: 2410.00 ft Total Volume: 31.601 bbl

Num Fluid Samples: 0

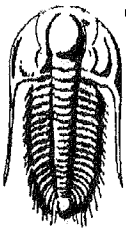
Num Gas Bombs: 1

Serial #: GA-2

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: Reversed fluid after dumping two stands.



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31184

DST#: 1

Test Start: 2008.04.12 @ 16:54:28

Gas Rates Information

Temperature: 59 deg C

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
1	10	0.25	1.25	24.83
1	10	0.25	1.25	24.83
1	20	0.25	1.25	24.83
1	30	0.25	10.00	38.71
2	10	0.25	1.00	24.43
2	20	0.25	0.75	24.03
2	30	0.25	1.50	25.22
2	40	0.25	3.00	27.60
2	50	0.25	1.50	25.22
2	60	0.25	1.50	25.22

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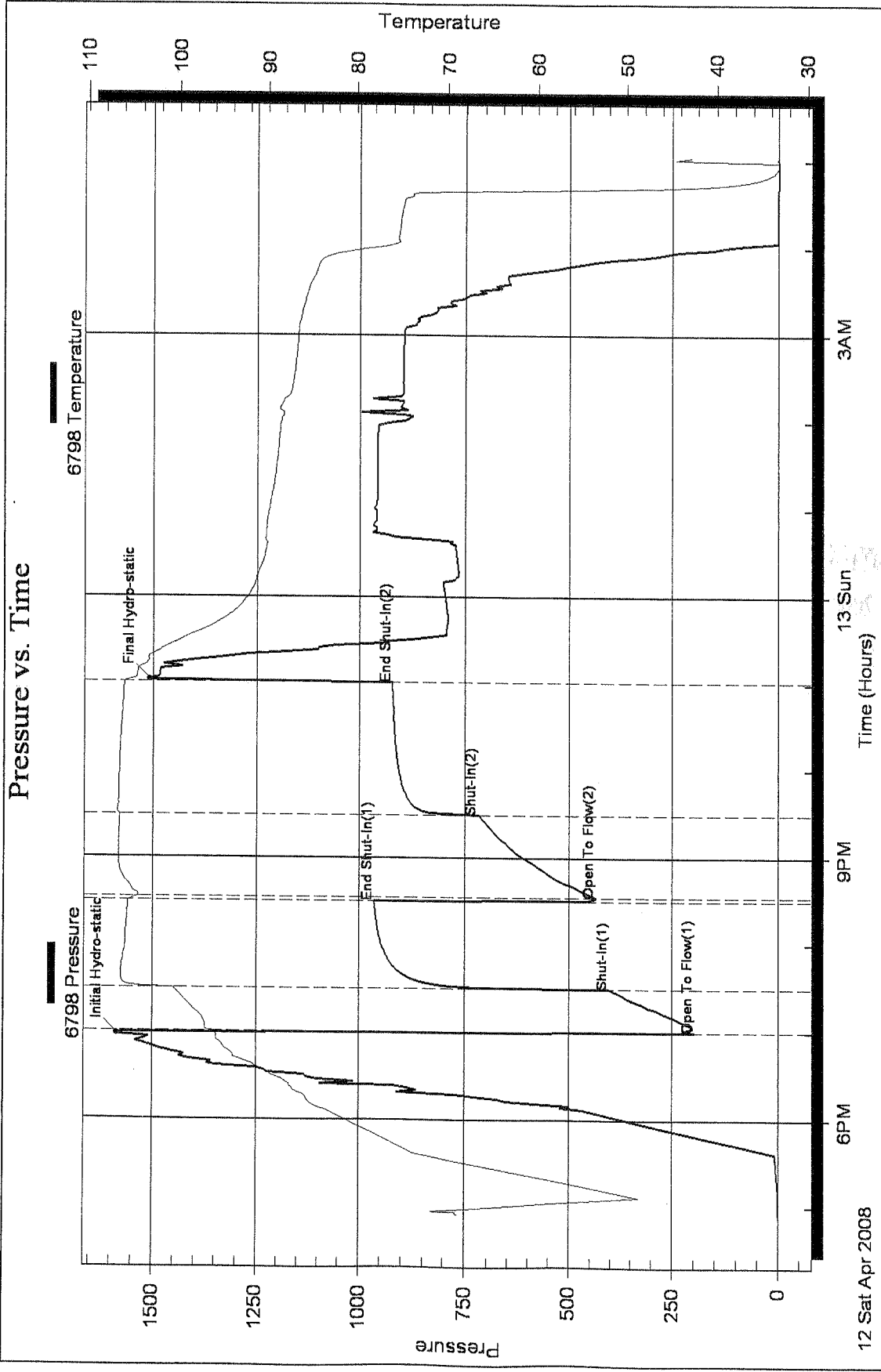
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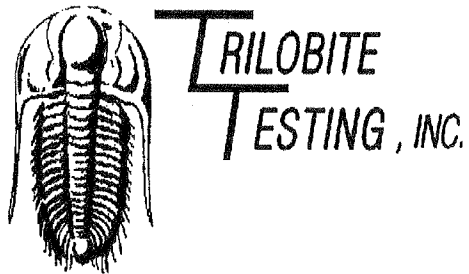
Inside

Murfin Drilling Co Inc

17 20S-12W Barton KS

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL
AUG 05 2008
KCC

ATTN: Mike Kidwell

17 20S 12W Barton KS

Miller-Reynolds Unit # 1-17

Start Date: 2008.04.13 @ 22:59:25

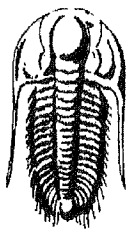
End Date: 2008.04.14 @ 08:06:25

Job Ticket #: 31185 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31185

DST#: 2

Test Start: 2008.04.13 @ 22:59:25

GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:50:25

Time Test Ended: 08:06:25

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **3316.00 ft (KB) To 3431.00 ft (KB) (TVD)**

Total Depth: 3431.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1867.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 174.41 psig @ 3323.00 ft (KB)

Start Date: 2008.04.13

End Date:

2008.04.14

Start Time: 22:59:26

End Time:

08:06:25

Capacity: 7000.00 psig

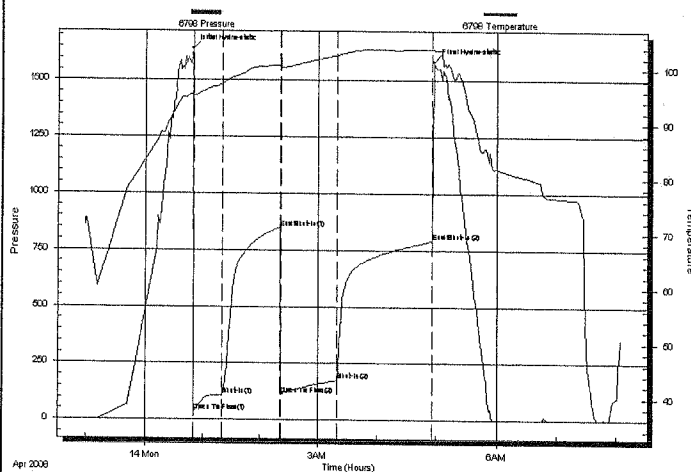
Last Calib.: 2008.04.14

Time On Btm: 2008.04.14 @ 00:48:55

Time Off Btm: 2008.04.14 @ 04:57:55

TEST COMMENT: IF Strong blow BOB in 2 min.15 secs.
ISI Fair blow built to 11".
FF Strong blow BOB in 1 min.
FSI Fair blow BOB in 12 mins.

Pressure vs. Time



PRESSURE SUMMARY

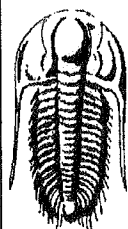
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1638.30	95.54	Initial Hydro-static
2	34.86	95.26	Open To Flow (1)
32	108.57	97.46	Shut-In(1)
92	847.03	100.81	End Shut-In(1)
93	112.45	100.48	Open To Flow (2)
151	174.41	102.61	Shut-In(2)
248	792.47	103.79	End Shut-In(2)
249	1584.42	103.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
242.00	SMCO 70%G 25%O 5%M	1.19
189.00	HGMO 40%G 35%O 25%M	2.65
15.00	SOCM 10%O 90%M	0.21
0.00	2773' GIP	0.00
0.00		0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31185

DST#: 2

Test Start: 2008.04.13 @ 22:59:25

Tool Information

Drill Pipe:	Length: 3075.00 ft	Diameter: 3.80 inches	Volume: 43.13 bbl	Tool Weight:	2300.00 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: 242.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose:	63000.00 lb
		Total Volume:	44.32 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	3316.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	115.00 ft				
Tool Length:	138.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

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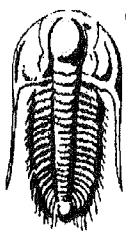
AUG 05 2008

KCC

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3298.00	
Hydraulic tool	5.00			3303.00	
Safety Joint	3.00			3306.00	
Packer	5.00			3311.00	23.00 Bottom Of Top Packer
Packer	5.00			3316.00	
Stubb	1.00			3317.00	
Perforations	5.00			3322.00	
Change Over Sub	1.00			3323.00	
Recorder	0.00	6798	Inside	3323.00	
Recorder	0.00	8358	Inside	3323.00	
Blank Spacing	95.00			3418.00	
Change Over Sub	1.00			3419.00	
Perforations	9.00			3428.00	
Bullnose	3.00			3431.00	115.00 Bottom Packers & Anchor

Total Tool Length: 138.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31185

DST#: 2

Test Start: 2008.04.13 @ 22:59:25

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 6.38 in³

Resistivity: 0.00 ohm.m

Salinity: 6200.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
242.00	SMCGO 70%G 25%O 5%M	1.190
189.00	HGMCO 40%G 35%O 25%M	2.651
15.00	SOCM 10%O 90%M	0.210
0.00	2773' GIP	0.000
0.00		0.000

Total Length: 446.00 ft

Total Volume: 4.051 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

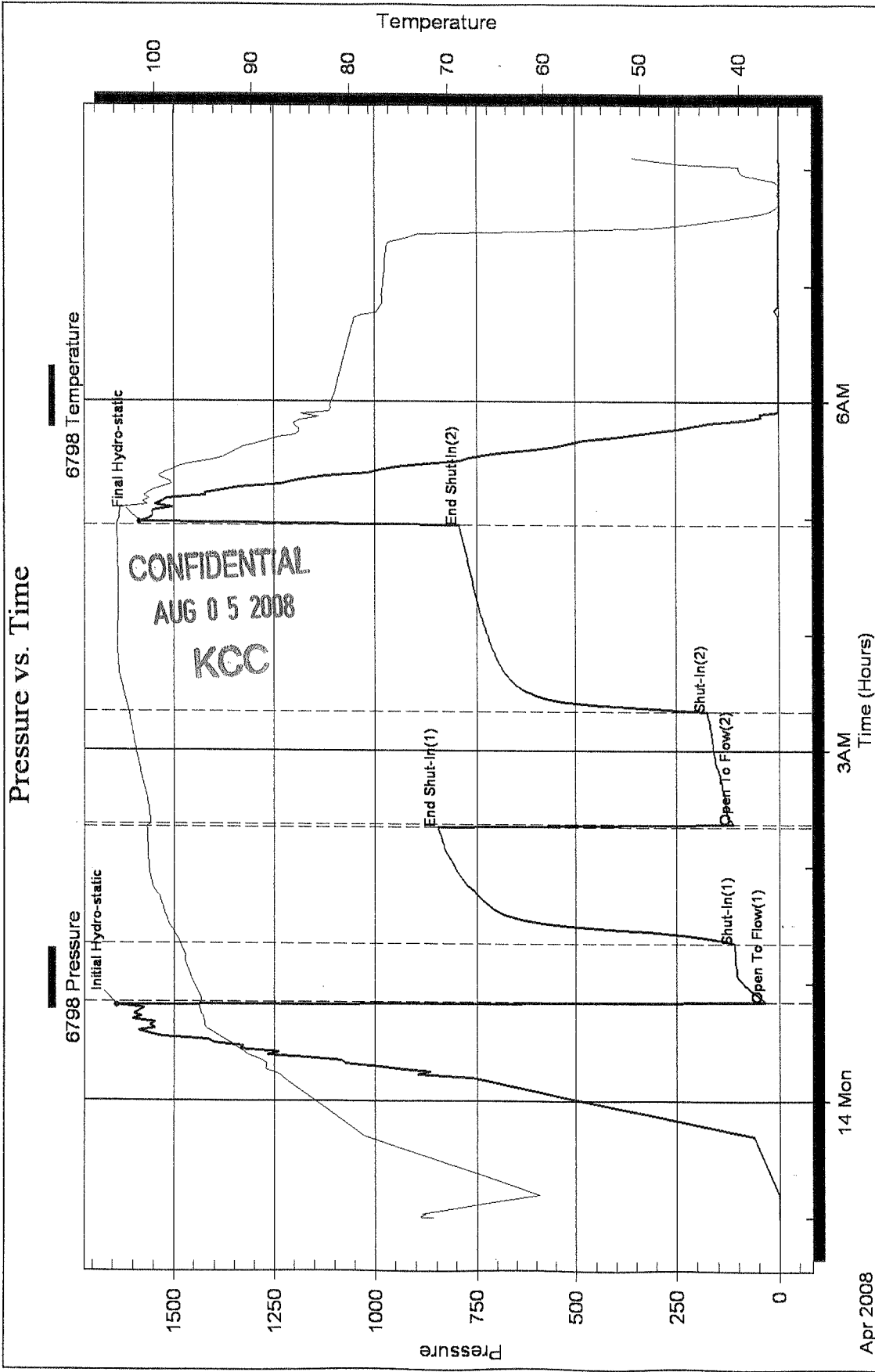
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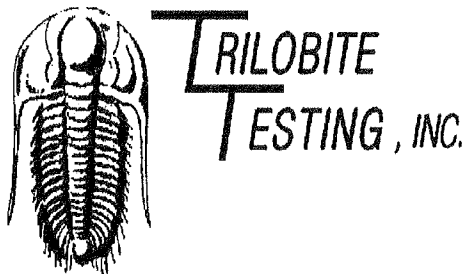
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

CONFIDENTIAL

AUG 05 2008

KCC

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

17 20S 12W Barton KS

Miller-Reynolds Unit # 1-17

Start Date: 2008.04.14 @ 15:56:35

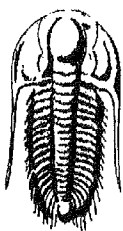
End Date: 2008.04.14 @ 22:06:35

Job Ticket #: 31186 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31186

DST#: 3

Test Start: 2008.04.14 @ 15:56:35

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:36:35

Time Test Ended: 22:06:35

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **3426.00 ft (KB) To 3460.00 ft (KB) (TVD)**

Total Depth: 3460.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1867.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **6798** Inside

Press@RunDepth: 18.21 psig @ 3427.00 ft (KB)

Start Date: 2008.04.14

End Date:

2008.04.14

Start Time: 15:56:36

End Time:

22:06:35

Capacity: 7000.00 psig

Last Calib.: 2008.04.14

Time On Btm: 2008.04.14 @ 17:35:05

Time Off Btm: 2008.04.14 @ 20:08:05

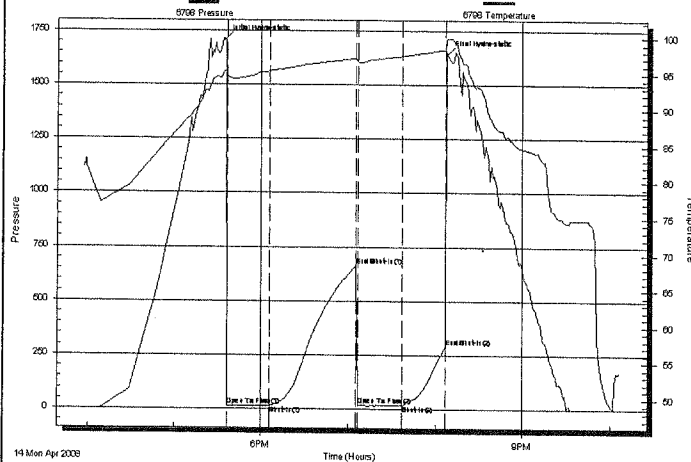
TEST COMMENT: IF Weak blow built to 3/4 "

ISI No blow

FF Very weak intermittent surface blow

FSI No blow

Pressure vs. Time



PRESSURE SUMMARY

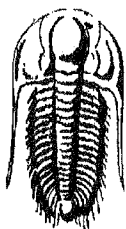
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1707.44	95.37	Initial Hydro-static
2	14.87	94.63	Open To Flow (1)
31	15.54	95.31	Shut-In(1)
91	661.78	97.12	End Shut-In(1)
92	17.19	96.65	Open To Flow (2)
122	18.21	97.42	Shut-In(2)
152	290.35	98.32	End Shut-In(2)
153	1644.38	99.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Clean GO 10%G 90%O	0.01
6.00	SGMCO 10%G 70%O 20%M	0.03
0.00	15' GIP	0.00
0.00		0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31186

DST#: 3

Test Start: 2008.04.14 @ 15:56:35

Tool Information

Drill Pipe:	Length: 3171.00 ft	Diameter: 3.80 inches	Volume: 44.48 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: 242.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose:	62000.00 lb
		Total Volume:	45.67 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3426.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	57.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

CONFIDENTIAL

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3408.00	
Hydraulic tool	5.00			3413.00	
Safety Joint	3.00			3416.00	
Packer	5.00			3421.00	23.00 Bottom Of Top Packer
Packer	5.00			3426.00	
Stubb	1.00			3427.00	
Recorder	0.00	6798	Inside	3427.00	
Recorder	0.00	8358	Inside	3427.00	
Perforations	30.00			3457.00	
Bullnose	3.00			3460.00	34.00 Bottom Packers & Anchor
Total Tool Length:	57.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Miller-Reynolds Unit # 1-17

250 N Water Ste 300
Wichita KS 67202

17 20S 12W Barton KS

Job Ticket: 31186

DST#: 3

ATTN: Mike Kidwell

Test Start: 2008.04.14 @ 15:56:35

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 6.38 in³

Resistivity: 0.00 ohm.m

Salinity: 5200.00 ppm

Filter Cake: 0.20 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
2.00	Clean GO 10%G 90%O	0.010
6.00	SGMCO 10%G 70%O 20%M	0.030
0.00	15' GIP	0.000
0.00		0.000

Total Length:

8.00 ft

Total Volume:

0.040 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

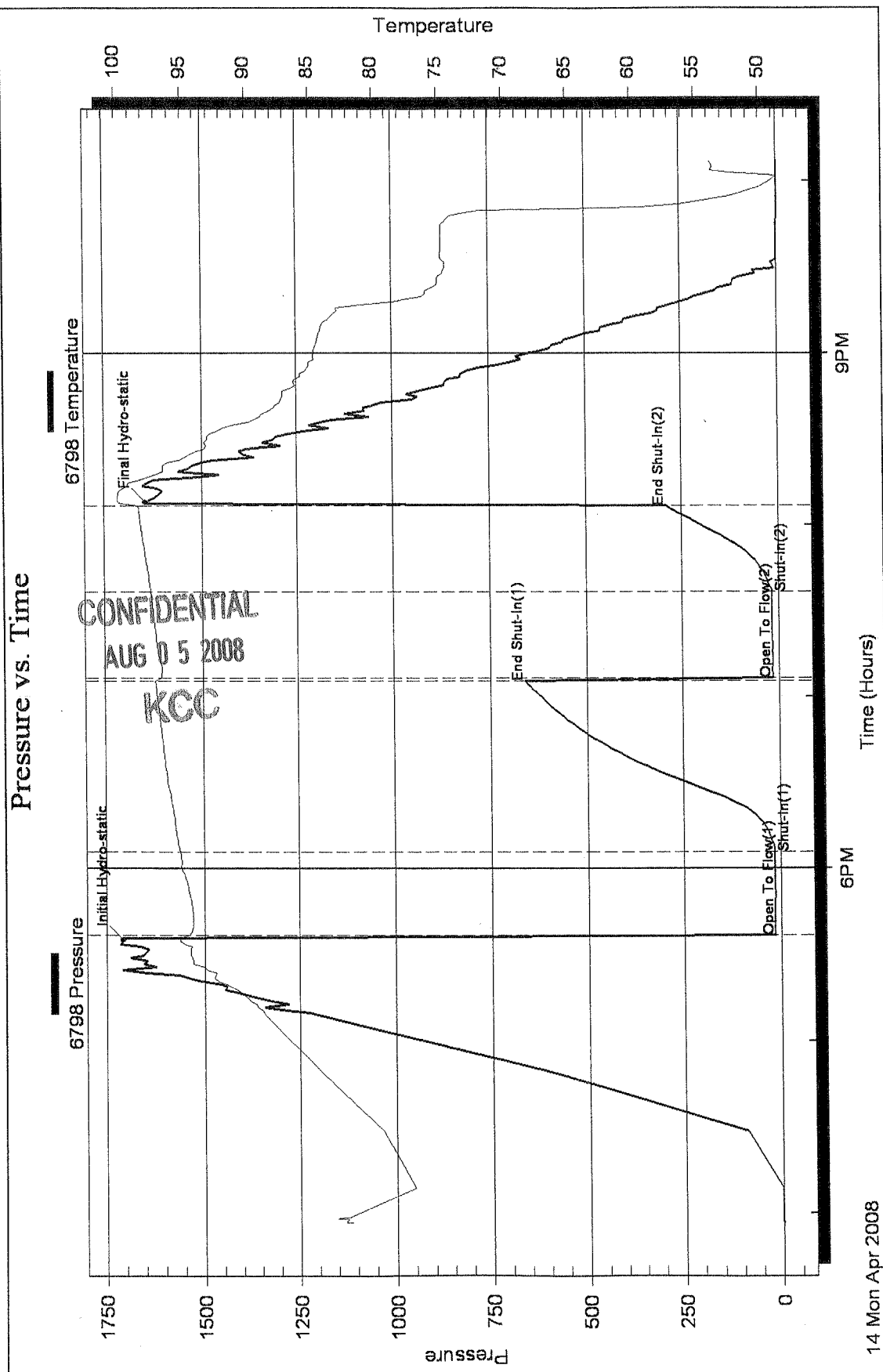
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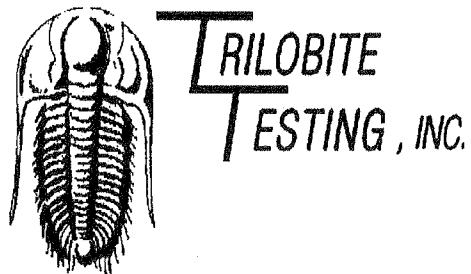
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL
AUG 05 2008
KCC

ATTN: Mike Kidwell

17 20S 12W Barton KS

Miller-Reynolds Unit # 1-17

Start Date: 2008.04.15 @ 06:09:46

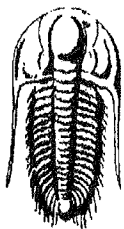
End Date: 2008.04.15 @ 14:54:46

Job Ticket #: 31187 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31187

DST#: 4

Test Start: 2008.04.15 @ 06:09:46

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:26:46

Time Test Ended: 14:54:46

Interval: **3460.00 ft (KB) To 3475.00 ft (KB) (TVD)**

Total Depth: 3475.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Reference Elevations: 1867.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 109.22 psig @ 3461.00 ft (KB)

Start Date: 2008.04.15

End Date:

2008.04.15

Start Time: 06:09:47

End Time:

14:54:46

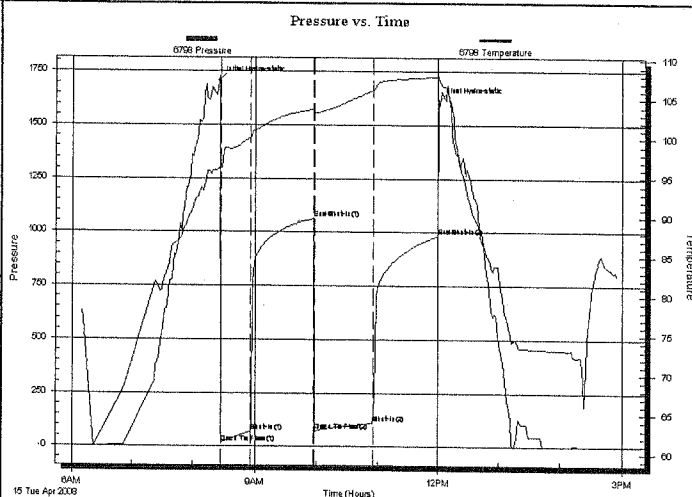
Capacity: 7000.00 psig

Last Calib.: 2008.04.15

Time On Btm: 2008.04.15 @ 08:25:16

Time Off Btm: 2008.04.15 @ 12:01:16

TEST COMMENT: IF Fair blow built to 9 1/2 "
ISI Weak blow built to 1/2 "
FF Fair blow BOB in 40 mins.
FSI Weak blow built to 1/4 "



PRESSURE SUMMARY

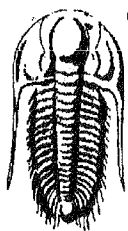
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1706.70	96.17	Initial Hydro-static
2	16.40	96.21	Open To Flow (1)
31	69.67	100.16	Shut-In(1)
92	1063.96	103.72	End Shut-In(1)
93	72.58	103.35	Open To Flow (2)
150	109.22	106.18	Shut-In(2)
215	982.51	107.82	End Shut-In(2)
216	1614.10	107.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
11.00	SG&MCO 5%g 75%o 20%cm	0.05
170.00	Clean Gsy Oil 5%g 95%o	0.84
78.00	Clean GO 5%G 95%O	1.09
0.00	30' GIP	0.00
0.00	Grav. = 37 API @ 80 deg.	0.00
0.00		0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31187

DST#: 4

Test Start: 2008.04.15 @ 06:09:46

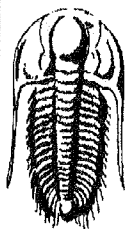
Tool Information

Drill Pipe:	Length: 3265.00 ft	Diameter: 3.80 inches	Volume: 45.80 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:	0.00 lb
Drill Collar:	Length: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	62000.00 lb
		Total Volume:	46.69 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3460.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	15.00 ft				
Tool Length:	38.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

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Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3442.00	
Hydraulic tool	5.00			3447.00	
Safety Joint	3.00			3450.00	
Packer	5.00			3455.00	23.00 Bottom Of Top Packer
Packer	5.00			3460.00	
Stubb	1.00			3461.00	
Recorder	0.00	6798	Inside	3461.00	
Recorder	0.00	8358	Inside	3461.00	
Perforations	11.00			3472.00	
Bullnose	3.00			3475.00	15.00 Bottom Packers & Anchor
Total Tool Length:	38.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31187

DST#: 4

Test Start: 2008.04.15 @ 06:09:46

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 72.00 sec/qt

Water Loss: 6.38 in³

Resistivity: 0.00 ohm.m

Salinity: 5200.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

35 deg API

ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
11.00	SG&MCO 5%g 75%o 20%m	0.054
170.00	Clean Gsy Oil 5%g 95%o	0.836
78.00	Clean GO 5%G 95%O	1.094
0.00	30' GIP	0.000
0.00	Grav. = 37 API @ 80 deg.	0.000
0.00		0.000

Total Length: 259.00 ft

Total Volume: 1.984 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

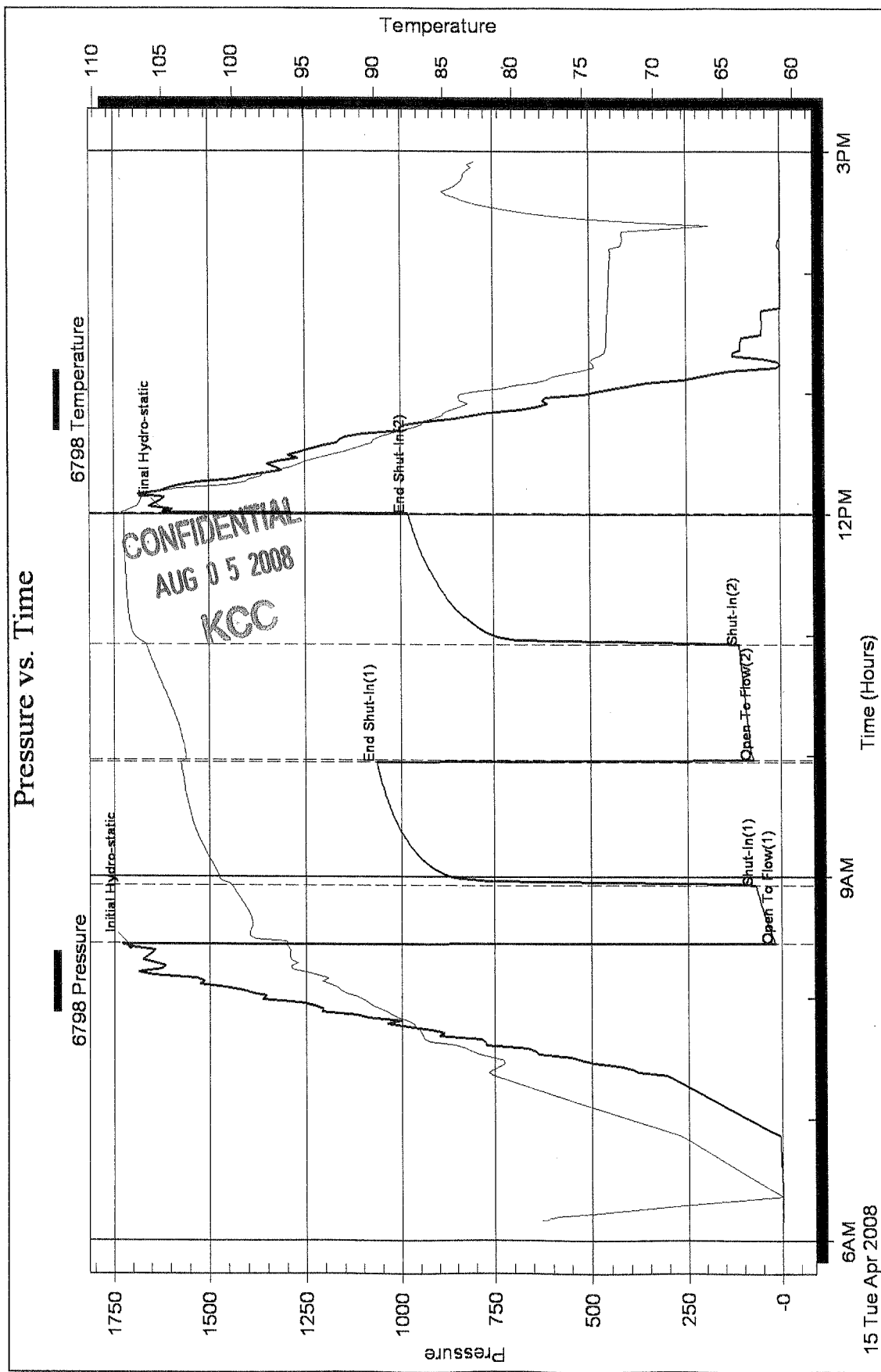
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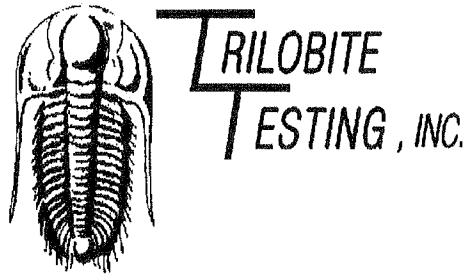
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL
AUG 05 2008
KCC

ATTN: Mike Kidwell

17 20S 12W Barton KS

Miller-Reynolds Unit # 1-17

Start Date: 2008.04.15 @ 21:41:37

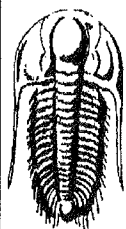
End Date: 2008.04.16 @ 05:53:07

Job Ticket #: 31188 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31188

DST#: 5

Test Start: 2008.04.15 @ 21:41:37

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:58:37

Time Test Ended: 05:53:07

Test Type: Conventional Bottom Hole

Tester: Jerry Adams

Unit No: 45

Interval: **3478.00 ft (KB) To 3495.00 ft (KB) (TVD)**

Total Depth: 3495.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1867.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 138.36 psig @ 3479.00 ft (KB)

Start Date: 2008.04.15

End Date:

2008.04.16

Start Time: 21:41:38

End Time:

05:53:07

Capacity: 7000.00 psig

Last Calib.: 2008.04.16

Time On Btm: 2008.04.15 @ 23:57:37

Time Off Btm: 2008.04.16 @ 03:33:37

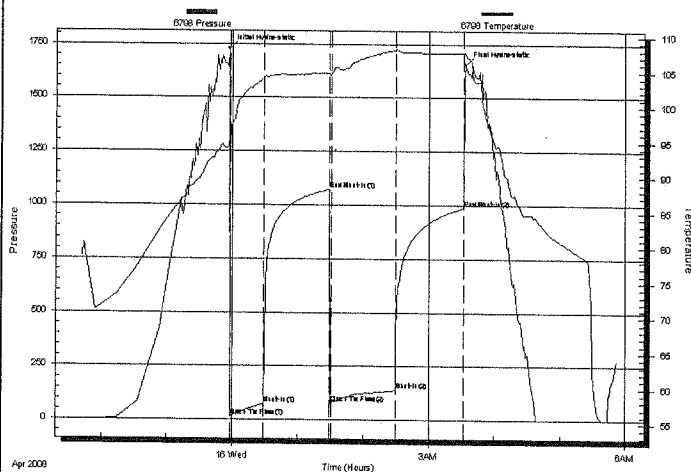
TEST COMMENT: IF Fair blow built to 7 "

ISI No blow

FF Fair blow built to 9 "

FSI No blow

Pressure vs. Time



PRESSURE SUMMARY

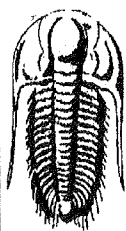
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1727.04	95.57	Initial Hydro-static
1	14.76	94.68	Open To Flow (1)
32	75.05	104.08	Shut-In(1)
92	1072.59	104.85	End Shut-In(1)
93	78.22	104.62	Open To Flow(2)
152	138.36	108.09	Shut-In(2)
215	987.37	107.70	End Shut-In(2)
216	1655.64	107.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
230.00	SMCW 90%W 10%M	1.13
0.00	RW .425 @ 60 deg.	0.00
0.00		0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

250 N Water Ste 300
Wichita KS 67202

ATTN: Mike Kidwell

Miller-Reynolds Unit # 1-17

17 20S 12W Barton KS

Job Ticket: 31188

DST#: 5

Test Start: 2008.04.15 @ 21:41:37

Tool Information

Drill Pipe:	Length: 3234.00 ft	Diameter: 3.80 inches	Volume: 45.36 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: 242.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 65000.00 lb
			Total Volume: 46.55 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3478.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	40.00 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			3460.00	
Hydraulic tool	5.00			3465.00	
Safety Joint	3.00			3468.00	
Packer	5.00			3473.00	23.00 Bottom Of Top Packer
Packer	5.00			3478.00	
Stubb	1.00			3479.00	
Recorder	0.00	6798	inside	3479.00	
Recorder	0.00	8358	inside	3479.00	
Perforations	13.00			3492.00	
Bullnose	3.00			3495.00	17.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Miller-Reynolds Unit # 1-17

250 N Water Ste 300
Wichita KS 67202

17 20S 12W Barton KS

Job Ticket: 31188

DST#: 5

ATTN: Mike Kidwell

Test Start: 2008.04.15 @ 21:41:37

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:

22000 ppm

Viscosity: 64.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
230.00	SMCW 90%W 10%M	1.131
0.00	RW 425 @ 60 deg.	0.000
0.00		0.000

Total Length: 230.00 ft

Total Volume: 1.131 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

