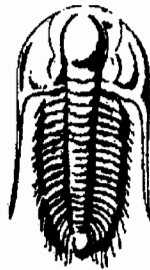


15-051-25393



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.02.28 @ 23:15:04

End Date: 2005.03.01 @ 06:42:34

Job Ticket #: 21246

DST # **RECEIVED**
MAY 11 2005
KCC WICHITA

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21246

DST#: 1

Test Start: 2005.02.28 @ 23:15:04

GENERAL INFORMATION:

Formation: A-D LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:15:04

Time Test Ended: 06:42:34

Interval: 3315.00 ft (KB) To 3386.00 ft (KB) (TVD)

Total Depth: 3386.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Reference Elevations: 2025.00 ft (KB)

2020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 94.10 psig @ 3322.00 ft (KB)

Start Date: 2005.02.28

End Date:

2005.03.01

Start Time: 23:15:05

End Time:

06:42:34

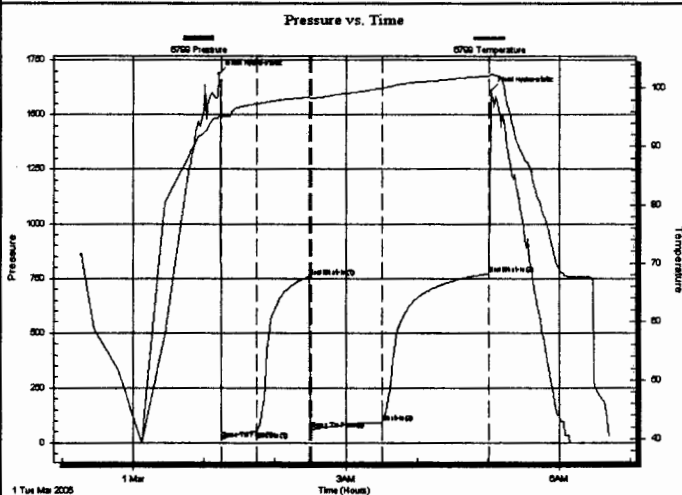
Capacity: 7000.00 psig

Last Calib.: 2005.03.01

Time On Btm: 2005.03.01 @ 01:12:34

Time Off Btm: 2005.03.01 @ 05:02:34

TEST COMMENT: IF-Weak building to 3"
FF-Weak building to 5"
Times-30-45-60-90



PRESSURE SUMMARY

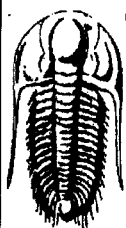
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1685.97	95.09	Initial Hydro-static
3	15.61	95.06	Open To Flow (1)
33	53.94	97.28	Shut-In(1)
77	758.30	98.46	End Shut-In(1)
78	59.98	98.28	Open To Flow (2)
138	94.10	100.01	Shut-In(2)
229	771.46	102.06	End Shut-In(2)
230	1609.39	102.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	OCM 40%o 60%rm	0.61
68.00	OO	0.41

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Fish-Phi Unit # 1-8

250 N Wtr Ste 300
Wichita Ks 67202

8-11-20-ELLis-Ks

Job Ticket: 21246

DST#: 1

ATTN: David Doyel

Test Start: 2005.02.28 @ 23:15:04

Tool Information

Drill Pipe:	Length: 3117.00 ft	Diameter: 3.80 inches	Volume: 43.72 bbl	Tool Weight: 2800.00 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 44.62 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3315.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3295.00	
Shut In Tool	5.00			3300.00	
Hydraulic tool	5.00			3305.00	
Packer	5.00			3310.00	21.00 Bottom Of Top Packer
Packer	5.00			3315.00	
Stubb	1.00			3316.00	
Perforations	5.00			3321.00	
Change Over Sub	1.00			3322.00	
Recorder	0.00	6799	Inside	3322.00	
Drill Pipe	31.00			3353.00	
Change Over Sub	1.00			3354.00	
Recorder	0.00	13254	Outside	3354.00	
Perforations	29.00			3383.00	
Bullnose	3.00			3386.00	71.00 Bottom Packers & Anchor

Total Tool Length: 92.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Fish-Phi Unit # 1-8

250 NWtr Ste 300
Wichita Ks 67202

8-11-20-ELLis-Ks

Job Ticket: 21246

DST#: 1

ATTN: David Doyel

Test Start: 2005.02.28 @ 23:15:04

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	OCM 40%o 60%m	0.610
68.00	CO	0.407

Total Length: 192.00 ft

Total Volume: 1.017 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

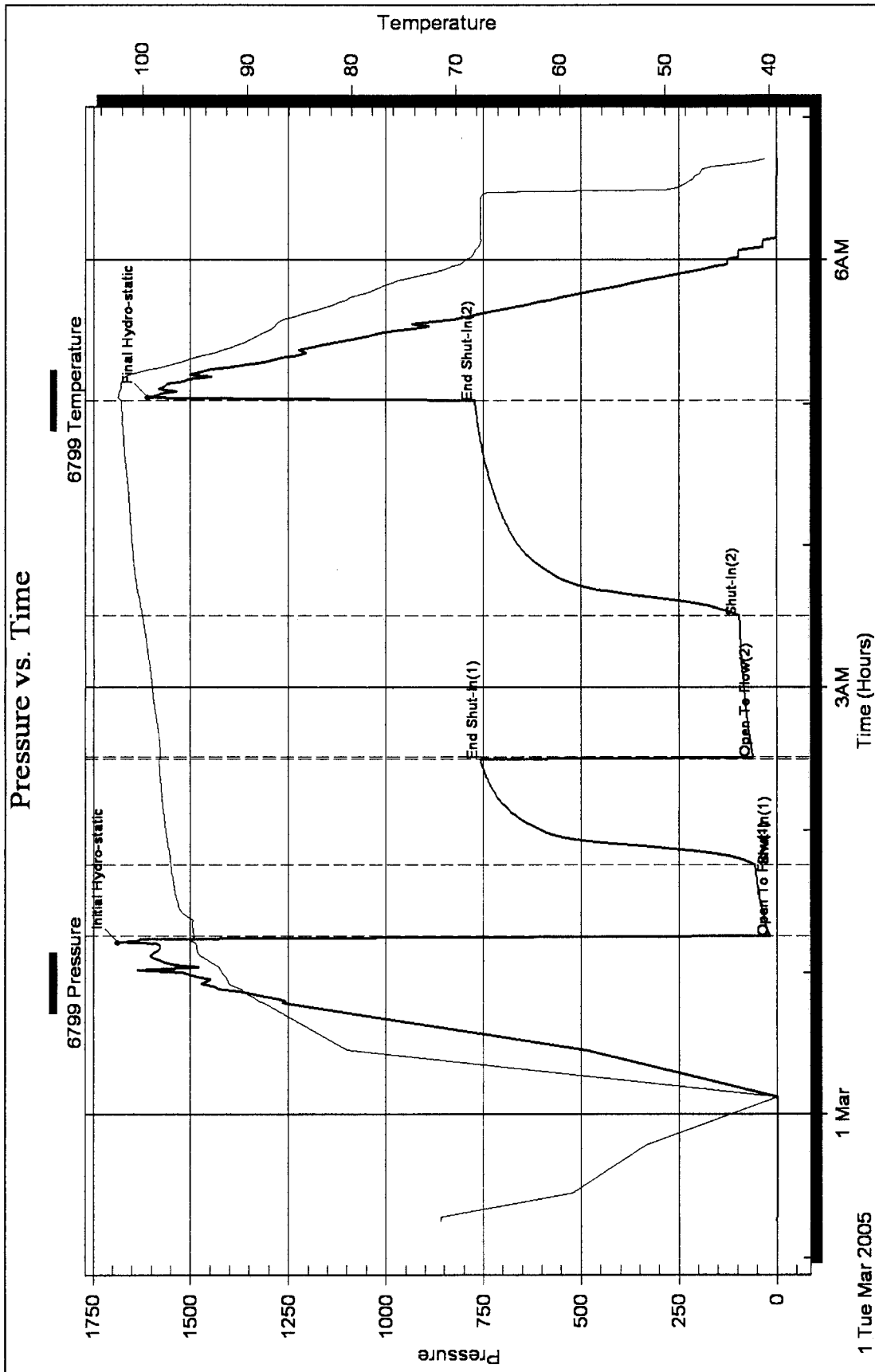
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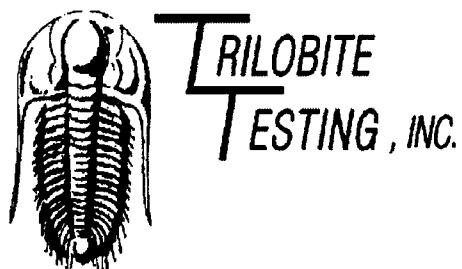
Inside

Murfin Drilling Co Inc

8-11-20-ELLIS-Ks

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.03.01 @ 14:10:36

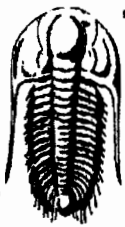
End Date: 2005.03.01 @ 21:06:06

Job Ticket #: 21247 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

Murfin Drilling Co Inc

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLIS-Ks

Job Ticket: 21247

DST#: 2

Test Start: 2005.03.01 @ 14:10:36

GENERAL INFORMATION:

Formation: F-G LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:52:06

Time Test Ended: 21:06:06

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3386.00 ft (KB) To 3424.00 ft (KB) (TVD)

Total Depth: 3424.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2025.00 ft (KB)

2020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 129.00 psig @ 3387.00 ft (KB)

Start Date: 2005.03.01

End Date:

2005.03.01

Start Time: 14:10:37

End Time:

21:06:06

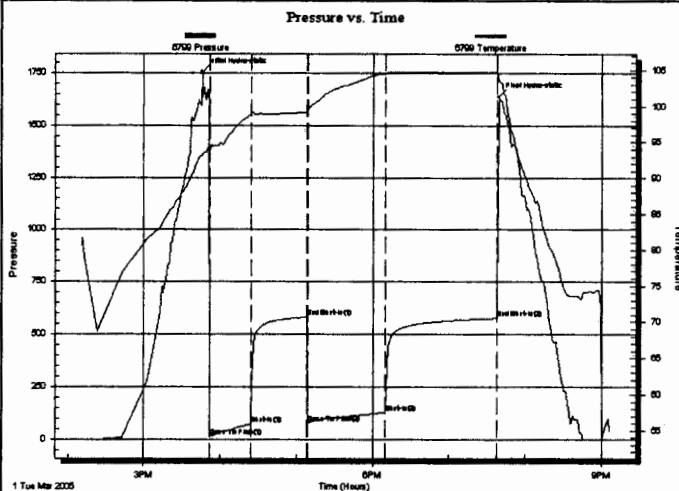
Capacity: 7000.00 psig

Last Calib.: 2005.03.01

Time On Btm: 2005.03.01 @ 15:45:36

Time Off Btm: 2005.03.01 @ 19:39:06

TEST COMMENT: F-Weak building to 3"
FF-Weak building to 4 1/2"
Times-30-45-60-90



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1754.24	93.20	Initial Hydro-static
7	14.39	93.83	Open To Flow (1)
39	74.29	98.88	Shut-In(1)
83	583.02	99.21	End Shut-In(1)
83	78.35	99.18	Open To Flow (2)
145	129.00	104.49	Shut-In(2)
233	577.26	104.73	End Shut-In(2)
234	1639.52	103.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	Mdy Wtr	1.76

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 Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21247

DST#: 2

Test Start: 2005.03.01 @ 14:10:36

Tool Information

Drill Pipe:	Length: 3210.00 ft	Diameter: 3.80 inches	Volume: 45.03 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	45000.00 lb
			Total Volume: 45.93 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3386.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.00 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
Change Over Sub	1.00			3366.00	
Shut In Tool	5.00			3371.00	
Hydraulic tool	5.00			3376.00	
Packer	5.00			3381.00	21.00 Bottom Of Top Packer
Packer	5.00			3386.00	
Stubb	1.00			3387.00	
Recorder	0.00	6799	Inside	3387.00	
Perforations	34.00			3421.00	
Recorder	0.00	13254	Outside	3421.00	
Bullnose	3.00			3424.00	38.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21247

DST#: 2

Test Start: 2005.03.01 @ 14:10:36

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 6.78 in³

Resistivity: ohm.m

Salinity: 6400.00 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

70000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	Mdy Wtr	1.761

Total Length: 245.00 ft

Total Volume: 1.761 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

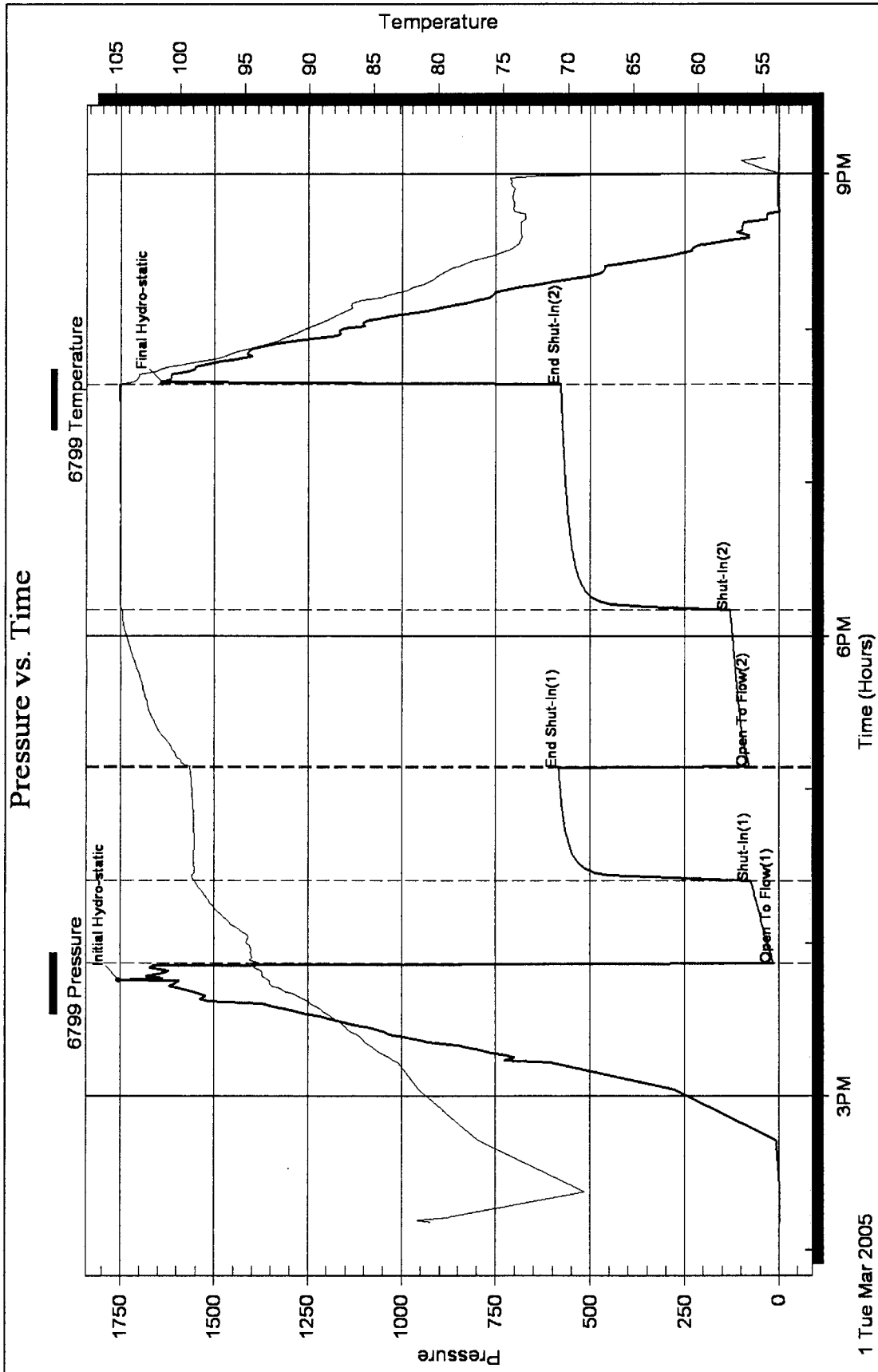
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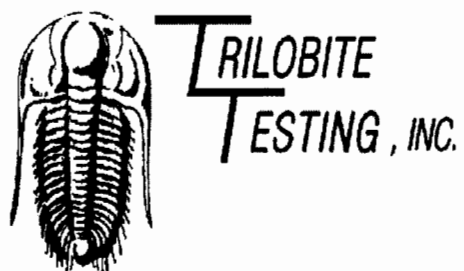
Inside

Murfin Drilling Co Inc

8-11-20-ELLis-Ks

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.03.02 @ 07:35:27

End Date: 2005.03.02 @ 15:09:57

Job Ticket #: 21248 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

Murfin Drilling Co Inc

250 NWtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21248

DST#: 3

Test Start: 2005.03.02 @ 07:35:27

GENERAL INFORMATION:

Formation: H-I-J-K-L LK

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:30:27

Time Test Ended: 15:09:57

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3442.00 ft (KB) To 3540.00 ft (KB) (TVD)

Total Depth: 3540.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2025.00 ft (KB)

2020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799 Inside

Press@RunDepth: 32.62 psig @ 3449.00 ft (KB)

Start Date: 2005.03.02

End Date:

2005.03.02

Start Time: 07:35:28

End Time:

15:09:57

Capacity: 7000.00 psig

Last Calib.: 2005.03.02

Time On Btm: 2005.03.02 @ 09:27:27

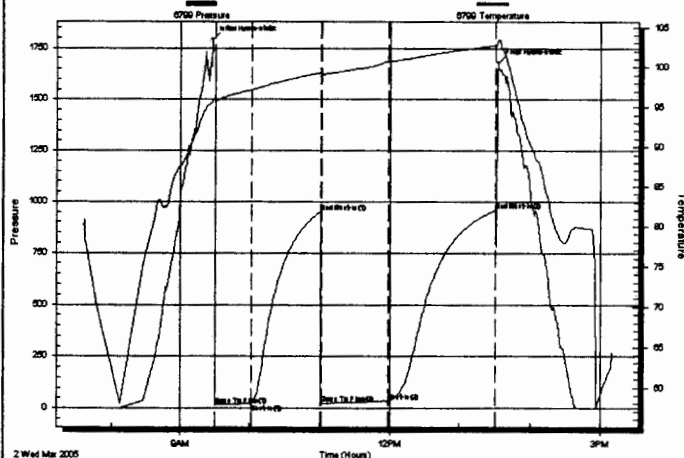
Time Off Btm: 2005.03.02 @ 13:32:27

TEST COMMENT: F-Weak building to 1/2"

FF-No blow

Times-30-60-60-90

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1790.78	95.67	Initial Hydro-static
3	16.73	95.72	Open To Flow (1)
34	21.10	97.17	Shut-In(1)
93	949.13	99.31	End Shut-In(1)
94	23.20	99.07	Open To Flow (2)
151	32.62	100.67	Shut-In(2)
243	958.70	102.72	End Shut-In(2)
245	1679.48	103.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud w/ oil spots	0.07

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Fish-Phi Unit # 1-8

250 N Wtr Ste 300
Wichita Ks 67202

8-11-20-ELLis-Ks

Job Ticket: 21248

DST#: 3

ATTN: David Doyel

Test Start: 2005.03.02 @ 07:35:27

Tool Information

Drill Pipe:	Length: 3244.00 ft	Diameter: 3.80 inches	Volume: 45.50 bbl	Tool Weight:	2900.00 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	60000.00 lb
		Total Volume:	46.40 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3442.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	98.00 ft				
Tool Length:	119.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3422.00	
Shut In Tool	5.00			3427.00	
Hydraulic tool	5.00			3432.00	
Packer	5.00			3437.00	21.00 Bottom Of Top Packer
Packer	5.00			3442.00	
Stubb	1.00			3443.00	
Perforations	5.00			3448.00	
Change Over Sub	1.00			3449.00	
Recorder	0.00	6799	Inside	3449.00	
Drill Pipe	61.00			3510.00	
Change Over Sub	1.00			3511.00	
Recorder	0.00	13254	Outside	3511.00	
Perforations	26.00			3537.00	
Bullnose	3.00			3540.00	98.00 Bottom Packers & Anchor

Total Tool Length: 119.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Fish-Phi Unit # 1-8

250 N Wtr Ste 300
Wichita Ks 67202

8-11-20-ELLis-Ks

Job Ticket: 21248

DST#: 3

ATTN: David Doyel

Test Start: 2005.03.02 @ 07:35:27

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: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud w / oil spots	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:

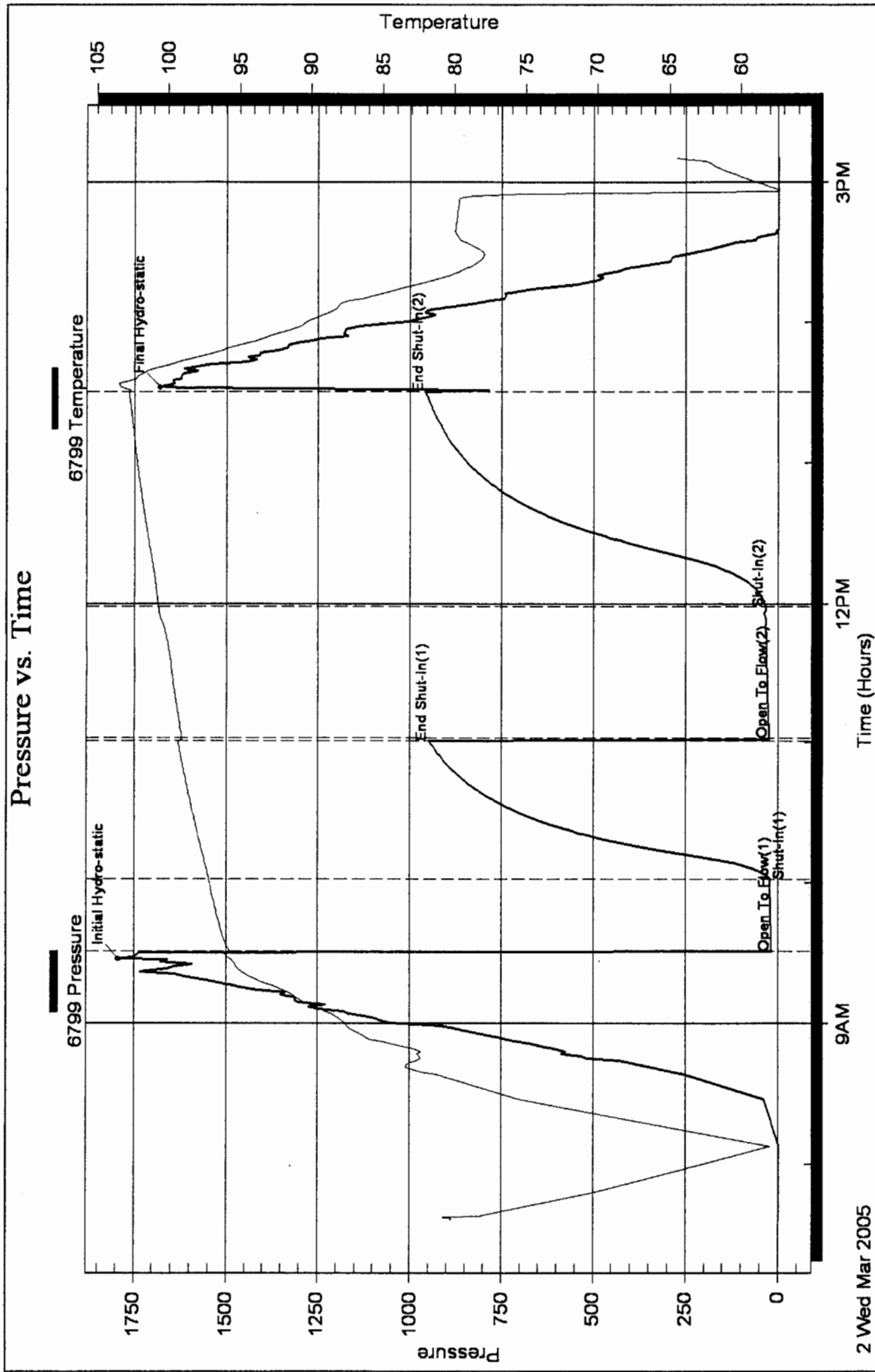
Serial #: 6799

Inside

Murfin Drilling Co Inc

8-11-20-ELIS-Ks

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 21248

Printed: 2005.03.14 @ 09:57:06 Page 5



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.03.02 @ 23:40:32

End Date: 2005.03.03 @ 05:16:02

Job Ticket #: 21249 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

Murfin Drilling Co Inc

250 NWtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21249

DST#: 4

Test Start: 2005.03.02 @ 23:40:32

GENERAL INFORMATION:

Formation: Cong Sd

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:38:32

Time Test Ended: 05:16:02

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3536.00 ft (KB) To 3610.00 ft (KB) (TVD)

Total Depth: 3610.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2025.00 ft (KB)

2020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799 Inside

Press@RunDepth: 25.90 psig @ 3543.00 ft (KB)

Start Date: 2005.03.02

End Date:

2005.03.03

Start Time: 23:40:33

End Time:

05:16:02

Capacity: 7000.00 psig

Last Calib.: 2005.03.03

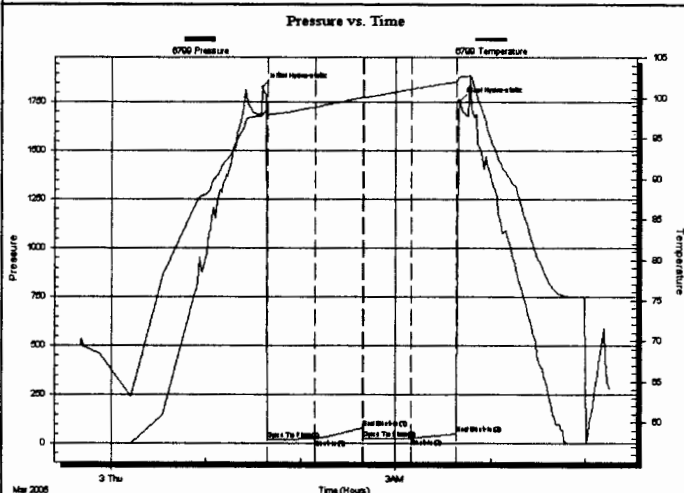
Time On Btm: 2005.03.03 @ 01:35:32

Time Off Btm: 2005.03.03 @ 03:40:02

TEST COMMENT: IF-Weak died in 20 min

FF-No blow

Times-30-30-30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.10	97.88	Initial Hydro-static
3	18.35	97.63	Open To Flow (1)
34	22.63	98.87	Shut-In(1)
64	79.52	100.06	End Shut-In(1)
64	23.35	100.06	Open To Flow (2)
95	25.90	101.11	Shut-In(2)
123	50.72	102.04	End Shut-In(2)
125	1757.75	102.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	DM	0.05

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 Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21249

DST#: 4

Test Start: 2005.03.02 @ 23:40:32

Tool Information

Drill Pipe:	Length: 3338.00 ft	Diameter: 3.80 inches	Volume: 46.82 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 47.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3536.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	95.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3516.00	
Shut In Tool	5.00			3521.00	
Hydraulic tool	5.00			3526.00	
Packer	5.00			3531.00	21.00 Bottom Of Top Packer
Packer	5.00			3536.00	
Stubb	1.00			3537.00	
Perforations	5.00			3542.00	
Change Over Sub	1.00			3543.00	
Recorder	0.00	6799	Inside	3543.00	
Drill Pipe	31.00			3574.00	
Change Over Sub	1.00			3575.00	
Recorder	0.00	13254	Outside	3575.00	
Perforations	32.00			3607.00	
Bullnose	3.00			3610.00	74.00 Bottom Packers & Anchor
Total Tool Length:		95.00			



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21249

DST#: 4

Test Start: 2005.03.02 @ 23:40:32

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 6.79 in³

Resistivity: ohm.m

Salinity: 7100.00 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	DM	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

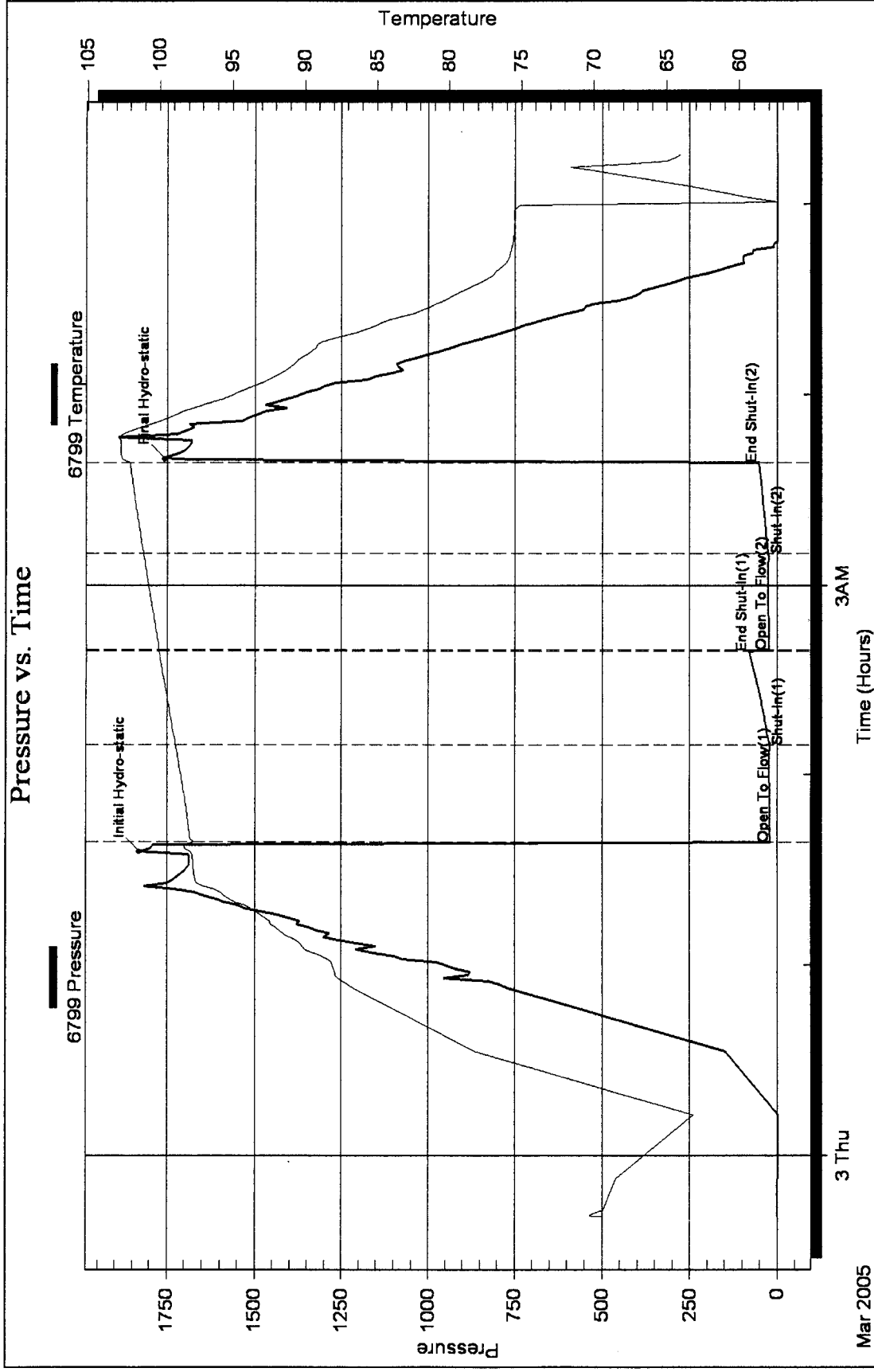
Serial #:

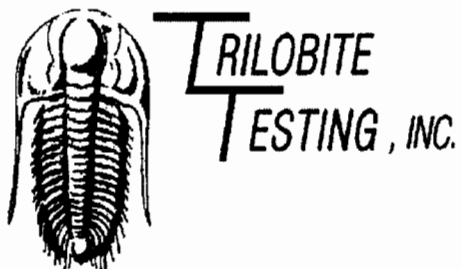
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.03.03 @ 11:15:14

End Date: 2005.03.03 @ 19:09:44

Job Ticket #: 21250 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

Murfin Drilling Co Inc

250 NWtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21250

DST#: 5

Test Start: 2005.03.03 @ 11:15:14

GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: 13:09:14

Time Test Ended: 19:09:44

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3536.00 ft (KB) To 3630.00 ft (KB) (TVD)**

Total Depth: **3630.00 ft (KB) (TVD)**

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

Reference Elevations: **2025.00 ft (KB)**

2020.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: **6799**

Inside

Press@RunDepth: **72.52 psig @ 3543.00 ft (KB)**

Start Date: **2005.03.03**

End Date:

2005.03.03

Start Time: **11:15:15**

End Time:

19:09:44

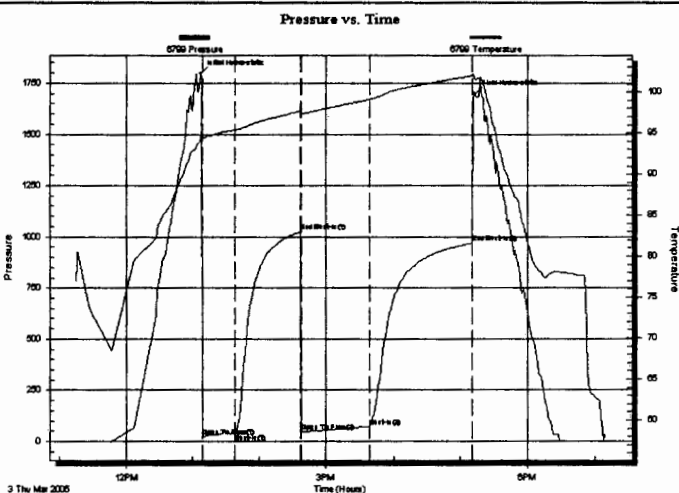
Capacity: **7000.00 psig**

Last Calib.: **2005.03.03**

Time On Btm: **2005.03.03 @ 13:07:14**

Time Off Btm: **2005.03.03 @ 17:12:44**

TEST COMMENT: **F-Weak building to 3"**
FF-Weak 1/2" steady blow
Times-30-60-60-90



PRESSURE SUMMARY

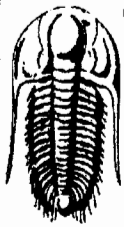
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1796.99	94.54	Initial Hydro-static
2	22.67	94.32	Open To Flow (1)
32	37.86	95.36	Shut-In(1)
90	1024.97	97.67	End Shut-In(1)
91	47.53	97.38	Open To Flow (2)
151	72.52	99.12	Shut-In(2)
244	969.19	101.98	End Shut-In(2)
246	1699.21	101.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM 70%o 30% m	0.30
70.00	CGsyO 5%g 95%o	0.34

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 Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21250

DST#: 5

Test Start: 2005.03.03 @ 11:15:14

Tool Information

Drill Pipe:	Length: 3338.00 ft	Diameter: 3.80 inches	Volume: 46.82 bbl	Tool Weight:	2800.00 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	45000.00 lb
			Total Volume: 47.72 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3536.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	94.00 ft				
Tool Length:	115.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3516.00	
Shut In Tool	5.00			3521.00	
Hydraulic tool	5.00			3526.00	
Packer	5.00			3531.00	21.00 Bottom Of Top Packer
Packer	5.00			3536.00	
Stubb	1.00			3537.00	
Perforations	5.00			3542.00	
Change Over Sub	1.00			3543.00	
Recorder	0.00	6799	Inside	3543.00	
Drill Pipe	61.00			3604.00	
Change Over Sub	1.00			3605.00	
Recorder	0.00	13254	Outside	3605.00	
Perforations	22.00			3627.00	
Bullnose	3.00			3630.00	94.00 Bottom Packers & Anchor

Total Tool Length: 115.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21250

DST#: 5

Test Start: 2005.03.03 @ 11:15:14

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 7.19 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCM 70%o 30%m	0.295
70.00	CGsyO 5%g 95%o	0.344

Total Length: 130.00 ft

Total Volume: 0.639 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

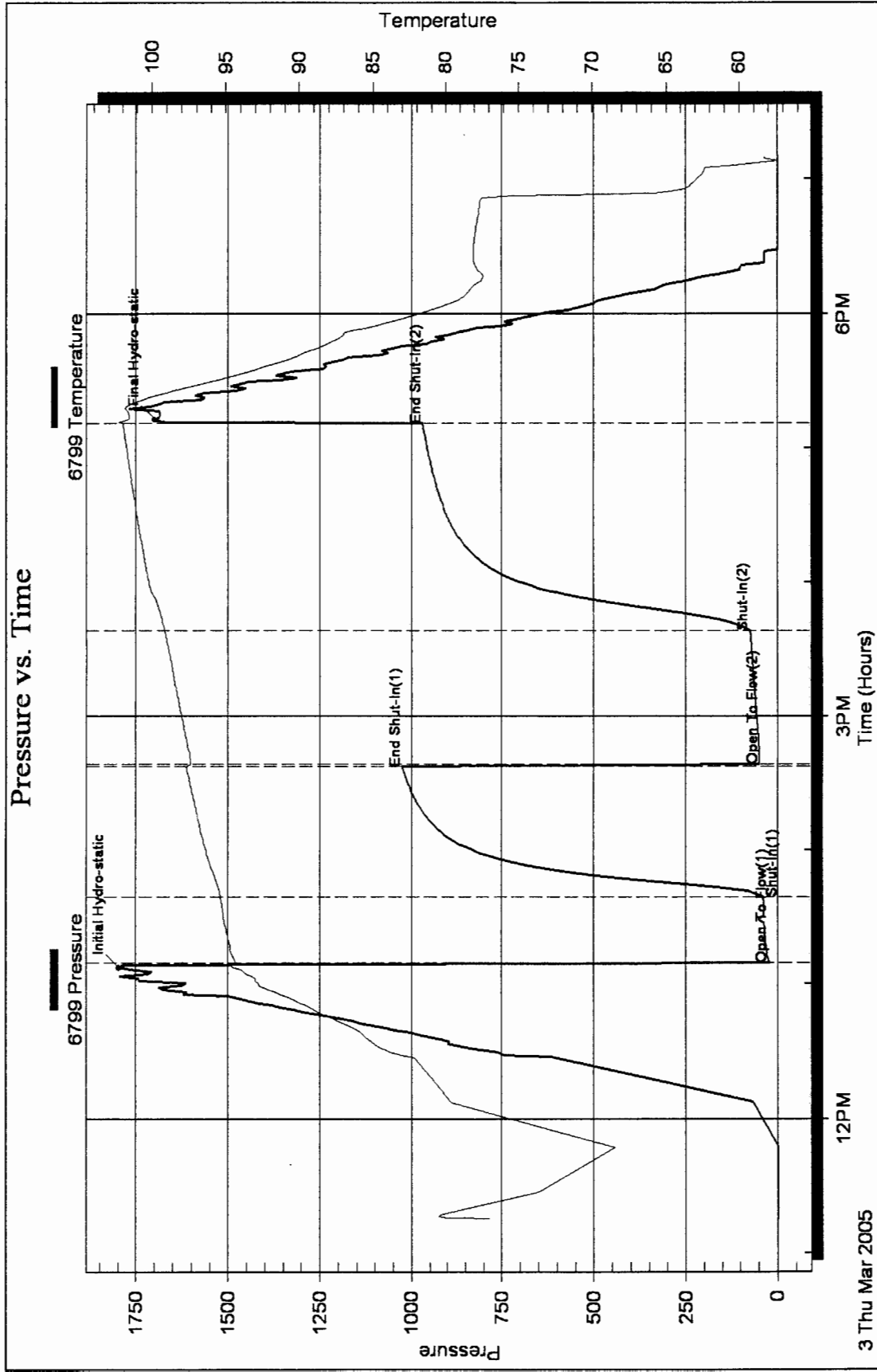
Serial #: 6799

Inside

Murfin Drilling Co Inc

8-11-20-ELLIS-Ks

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

8-11-20-ELLis-Ks

Fish-Phi Unit # 1-8

Start Date: 2005.03.04 @ 03:00:56

End Date: 2005.03.04 @ 08:39:56

Job Ticket #: 21876 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

Murfin Drilling Co Inc

250 NWtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21876

DST#: 6

Test Start: 2005.03.04 @ 03:00:56

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:05:56

Time Test Ended: 08:39:56

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3630.00 ft (KB) To 3640.00 ft (KB) (TVD)

Total Depth: 3640.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2025.00 ft (KB)

2020.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 13.71 psig @ 3631.00 ft (KB)

Start Date: 2005.03.04

End Date:

2005.03.04

Start Time: 03:00:57

End Time:

08:39:56

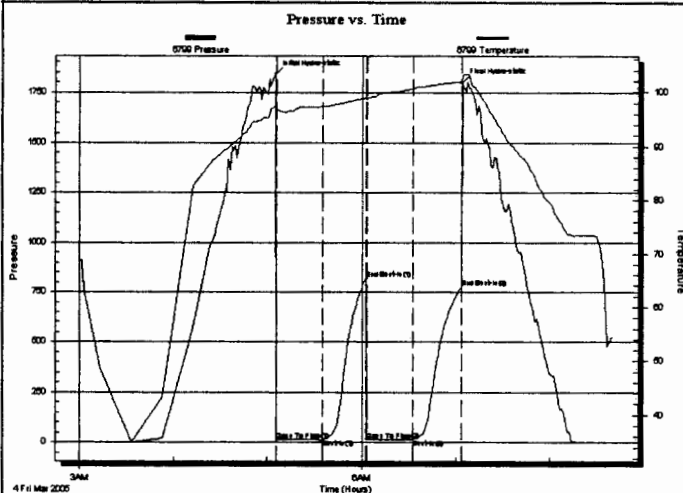
Capacity: 7000.00 psig

Last Calib.: 2005.03.04

Time On Btm: 2005.03.04 @ 05:05:26

Time Off Btm: 2005.03.04 @ 07:03:56

TEST COMMENT: IF-Weak died in 20 min
FF-No blow
Times-30-30-30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.02	97.54	Initial Hydro-static
1	11.93	96.91	Open To Flow (1)
30	12.93	97.33	Shut-In (1)
57	817.86	98.91	End Shut-In (1)
58	12.60	98.72	Open To Flow (2)
87	13.71	100.67	Shut-In (2)
118	774.64	101.95	End Shut-In (2)
119	1801.04	102.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DMw/oil spots	0.02

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 NWtr Ste 300
Wichita Ks 67202

ATTN: David Doyel

Fish-Phi Unit # 1-8

8-11-20-ELLis-Ks

Job Ticket: 21876

DST#: 6

Test Start: 2005.03.04 @ 03:00:56

Tool Information

Drill Pipe:	Length: 3431.00 ft	Diameter: 3.80 inches	Volume: 48.13 bbl	Tool Weight: 1100.00 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: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 45000.00 lb
			Total Volume: 49.03 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3630.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	31.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3610.00	
Shut In Tool	5.00			3615.00	
Hydraulic tool	5.00			3620.00	
Packer	5.00			3625.00	21.00 Bottom Of Top Packer
Packer	5.00			3630.00	
Stubb	1.00			3631.00	
Recorder	0.00	6799	Inside	3631.00	
Perforations	6.00			3637.00	
Recorder	0.00	13254	Outside	3637.00	
Bullnose	3.00			3640.00	10.00 Bottom Packers & Anchor
Total Tool Length:	31.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Fish-Phi Unit # 1-8

250 NWtr Ste 300
Wichita Ks 67202

8-11-20-ELLis-Ks

Job Ticket: 21876

DST#: 6

ATTN: David Doyel

Test Start: 2005.03.04 @ 03:00:56

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 7.19 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	DM w/oil spots	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

