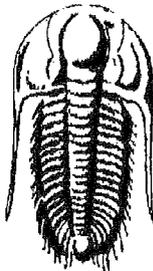


15-039-21024

23-5s-30w

CONFIDENTIAL

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

CONFIDENTIAL
FEB 05 2008
KCC

ATTN: Rocky Milford

23 5 30 Decatur KS

Anna #1-23

Start Date: 2007.10.13 @ 12:45:44

End Date: 2007.10.13 @ 21:35:09

Job Ticket #: 29439 DST #: 1

Murfin Drilling Co Inc

Anna #1-23

23 5 30 Decatur KS

DST # 1

Toronto-C

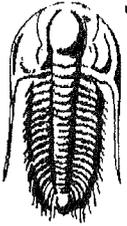
2007.10.13

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

RECEIVED
KANSAS CORPORATION COMMISSION
FEB 08 2008
CONSERVATION DIVISION
WICHITA, KS



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

ATTN: Rocky Milford

Job Ticket: 29439

DST#: 1

Test Start: 2007.10.13 @ 12:45:44

GENERAL INFORMATION:

Formation: **Toronto-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:03:09

Time Test Ended: 21:35:09

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: 3816.00 ft (KB) To 3896.00 ft (KB) (TVD)

Total Depth: 3896.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2794.00 ft (KB)

2789.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6667 Inside

Press@RunDepth: 231.52 psig @ 3817.00 ft (KB)

Start Date: 2007.10.13

End Date: 2007.10.13

Capacity: 7000.00 psig

Start Time: 12:45:44

End Time: 21:21:09

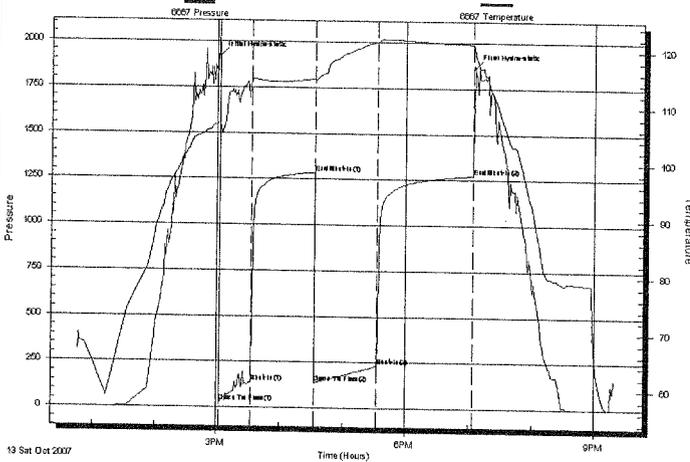
Last Calib.: 2007.10.13

Time On Btm: 2007.10.13 @ 15:02:54

Time Off Btm: 2007.10.13 @ 19:05:23

TEST COMMENT: BOB in 27 min.
No return
BOB in 31 min.
No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1921.61	107.32	Initial Hydro-static
1	29.64	107.04	Open To Flow (1)
30	139.08	114.50	Shut-In(1)
90	1285.36	114.94	End Shut-In(1)
90	139.58	114.71	Open To Flow (2)
151	231.52	121.57	Shut-In(2)
241	1271.28	121.26	End Shut-In(2)
243	1863.64	119.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	SMCW 10%M 90%W	0.93
124.00	MCW 30%M 70%W	1.74
144.00	SWCM 10%W 90%M	2.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29439

DST#: 1

ATTN: Rocky Milford

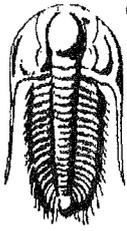
Test Start: 2007.10.13 @ 12:45:44

Tool Information

Drill Pipe:	Length: 3614.00 ft	Diameter: 3.80 inches	Volume: 50.69 bbl	Tool Weight: 1500.00 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
			<u>Total Volume: 51.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3816.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	107.00 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			3790.00	
Shut In Tool	5.00			3795.00	
Hydraulic tool	5.00			3800.00	
Jars	5.00			3805.00	
Safety Joint	2.00			3807.00	
Packer	5.00			3812.00	27.00 Bottom Of Top Packer
Packer	4.00		Inside	3816.00	
Stubb	1.00			3817.00	
Recorder	0.00	6667	Inside	3817.00	
Recorder	0.00	6771	Outside	3817.00	
Perforations	8.00			3825.00	
Change Over Sub	1.00			3826.00	
Drill Pipe	64.00			3890.00	
Change Over Sub	1.00			3891.00	
Bullnose	5.00			3896.00	80.00 Bottom Packers & Anchor
Total Tool Length:	107.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29439

DST#: 1

ATTN: Rocky Milford

Test Start: 2007.10.13 @ 12:45:44

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.15 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	SMCW 10%M 90%W	0.933
124.00	MCW 30%M 70%W	1.739
144.00	SWCM 10%W 90%M	2.020

Total Length: 454.00 ft Total Volume: 4.692 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: rw .261 @ 65*f 28,500

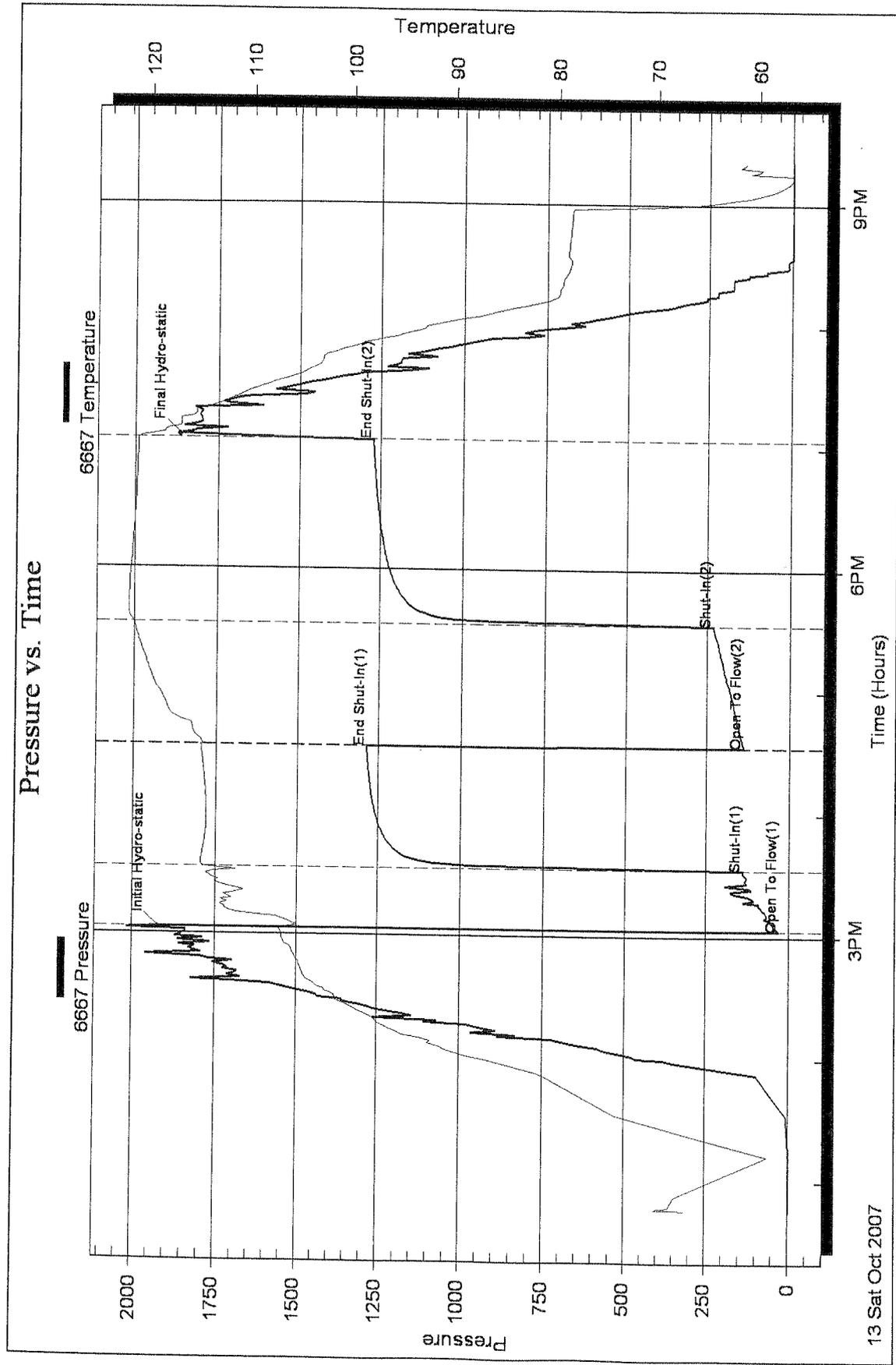
Serial #: 6667

Inside

Murfin Drilling Co Inc

23 5 30 Decatur KS

DST Test Number: 1



Serial #: 6771

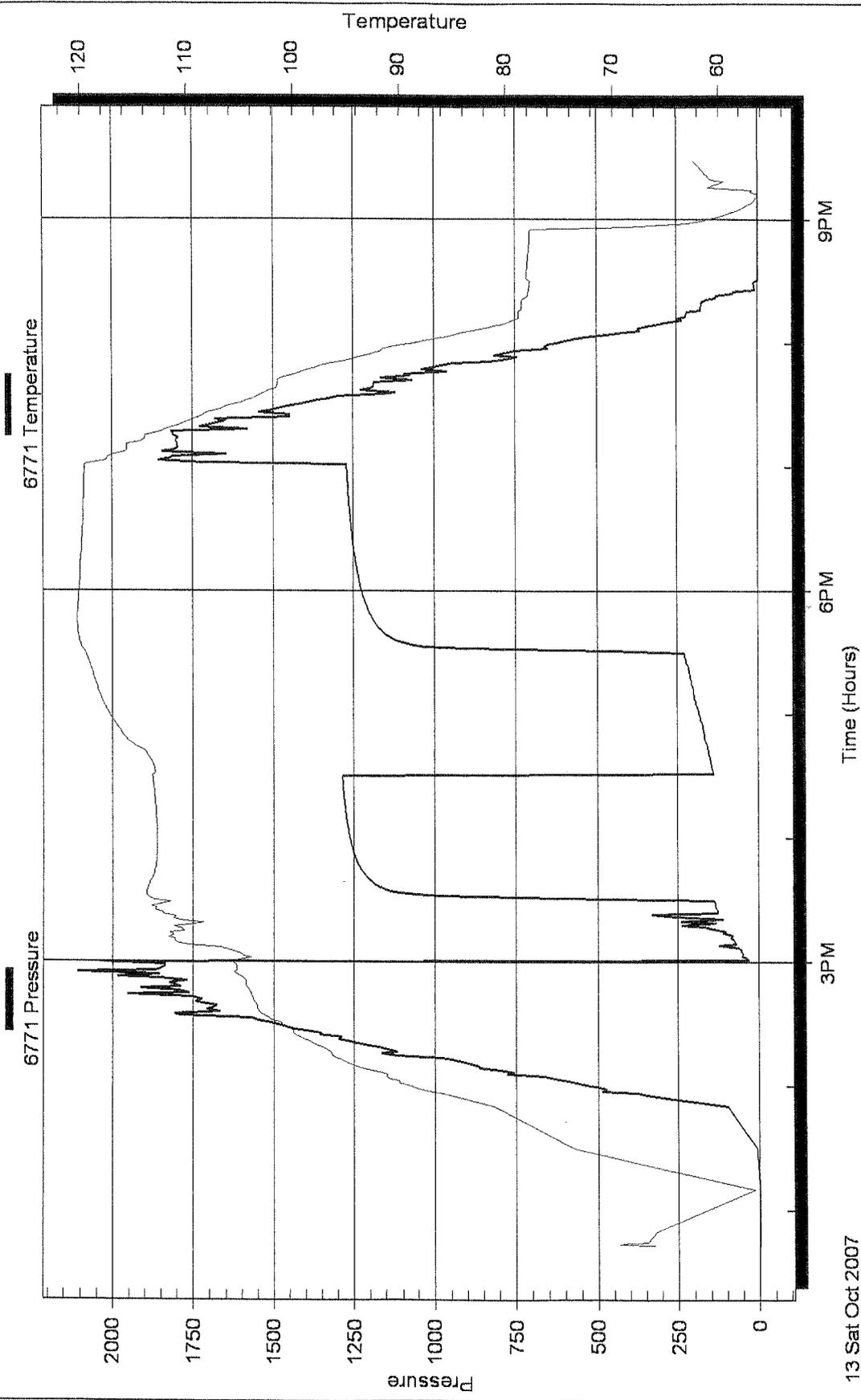
Outside

Murfin Drilling Co Inc

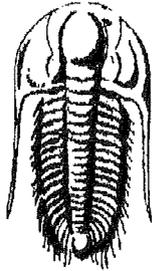
23 5 30 Decatur KS

DST Test Number: 1

Pressure vs. Time



13 Sat Oct 2007



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

23 5 30 Decatur KS

Anna #1-23

Start Date: 2007.10.14 @ 06:55:32

End Date: 2007.10.14 @ 15:40:12

Job Ticket #: 29440 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Murfin Drilling Co Inc

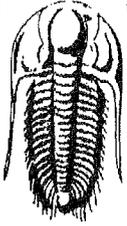
Anna #1-23

23 5 30 Decatur KS

DST # 2

E-G

2007.10.14



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202
ATTN: Rocky Milford

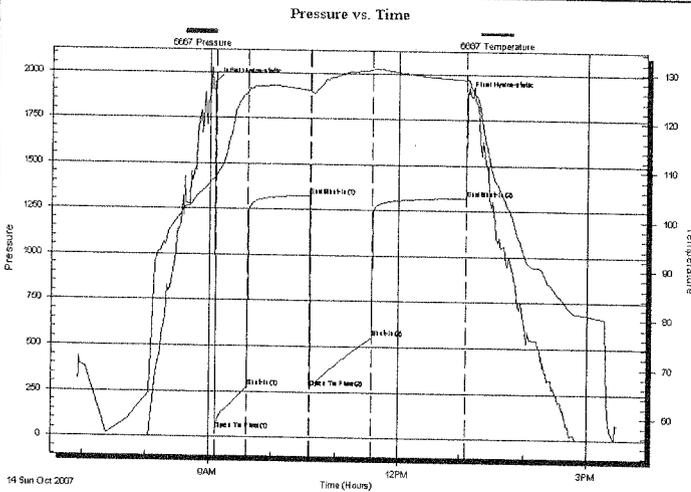
Anna #1-23
23 5 30 Decatur KS
Job Ticket: 29440 **DST#: 2**
Test Start: 2007.10.14 @ 06:55:32

GENERAL INFORMATION:

Formation: **E-G**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 09:05:42
Time Test Ended: 15:40:12
Interval: **3914.00 ft (KB) To 3955.00 ft (KB) (TVD)**
Total Depth: 3955.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 2794.00 ft (KB)
2789.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6667 **Inside**
Press@RunDepth: 551.95 psig @ 3915.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2007.10.14 End Date: 2007.10.14 Last Calib.: 2007.10.14
Start Time: 06:55:32 End Time: 15:29:12 Time On Btm: 2007.10.14 @ 09:05:27
Time Off Btm: 2007.10.14 @ 13:06:42

TEST COMMENT: BOB in 7 min.
No return
BOB in 9 min.
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1943.77	108.90	Initial Hydro-static
1	39.41	107.79	Open To Flow (1)
31	273.01	125.92	Shut-In(1)
90	1327.54	126.30	End Shut-In(1)
91	276.70	126.02	Open To Flow (2)
150	551.95	130.59	Shut-In(2)
240	1321.70	128.70	End Shut-In(2)
242	1889.07	128.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
806.00	100%W	9.63
186.00	SMCW 10%M 90%W w/Oil spots	2.61
154.00	MCW 25%M 75%W w/Oil scum & spots	2.16

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29440

DST#: 2

ATTN: Rocky Milford

Test Start: 2007.10.14 @ 06:55:32

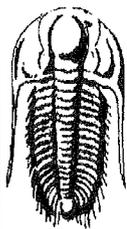
Tool Information

Drill Pipe:	Length: 3716.00 ft	Diameter: 3.80 inches	Volume: 52.13 bbl	Tool Weight: 1500.00 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: 75000.00 lb
			<u>Total Volume: 53.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3914.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	61.00 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			3895.00	
Shut In Tool	5.00			3900.00	
Hydraulic tool	5.00			3905.00	
Packer	5.00			3910.00	20.00 Bottom Of Top Packer
Packer	4.00			3914.00	
Stubb	1.00			3915.00	
Recorder	0.00	6667	Inside	3915.00	
Recorder	0.00	6771	Outside	3915.00	
Perforations	35.00			3950.00	
Bullnose	5.00			3955.00	41.00 Bottom Packers & Anchor
Total Tool Length:	61.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29440

DST#: 2

ATTN: Rocky Milford

Test Start: 2007.10.14 @ 06:55:32

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
806.00	100%W	9.630
186.00	SMCW 10%M 90%W w/Oil spots	2.609
154.00	MCW 25%M 75%W w/Oil scum & spots	2.160

Total Length: 1146.00 ft Total Volume: 14.399 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

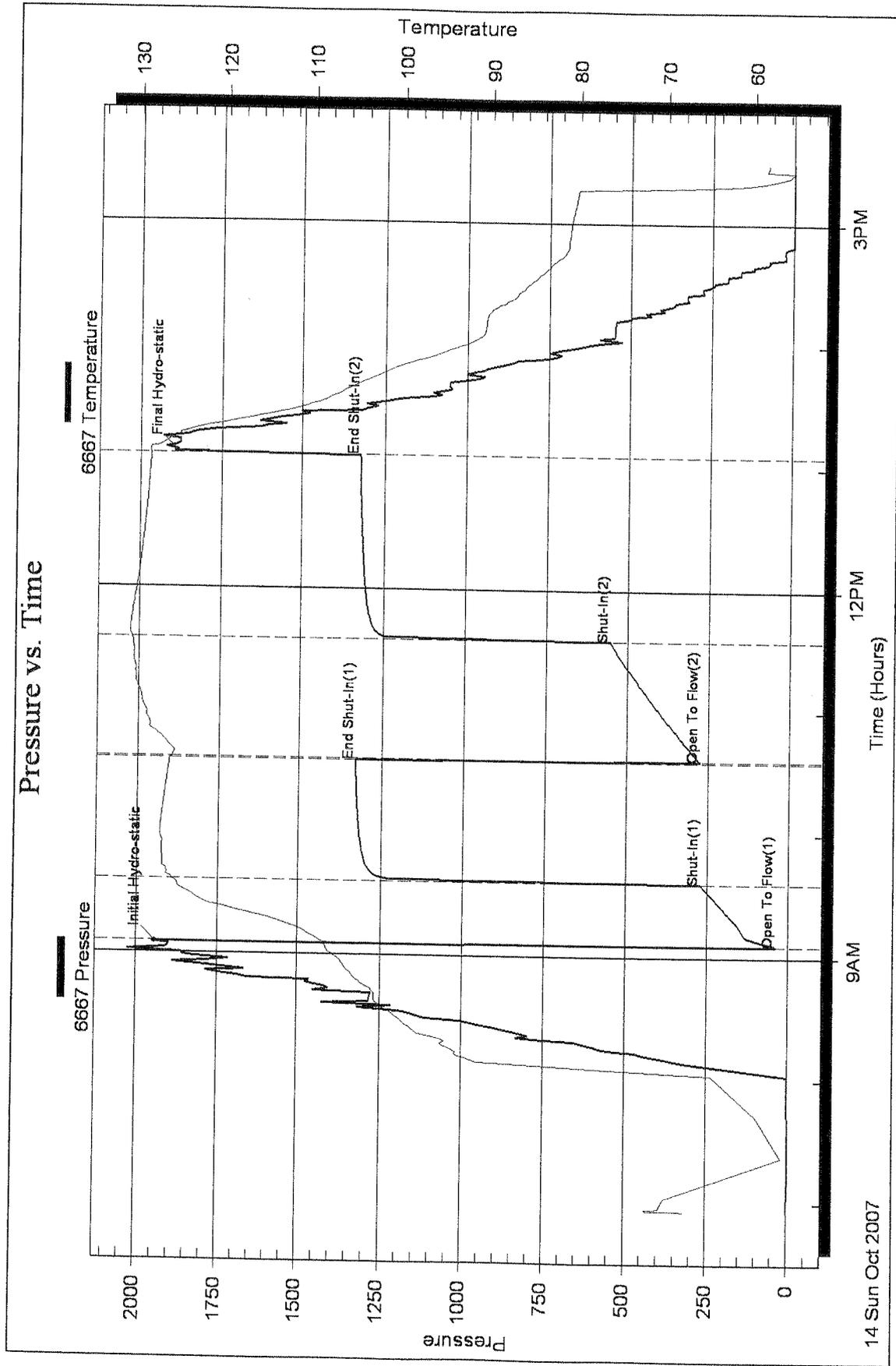
Serial #: 6667

Inside

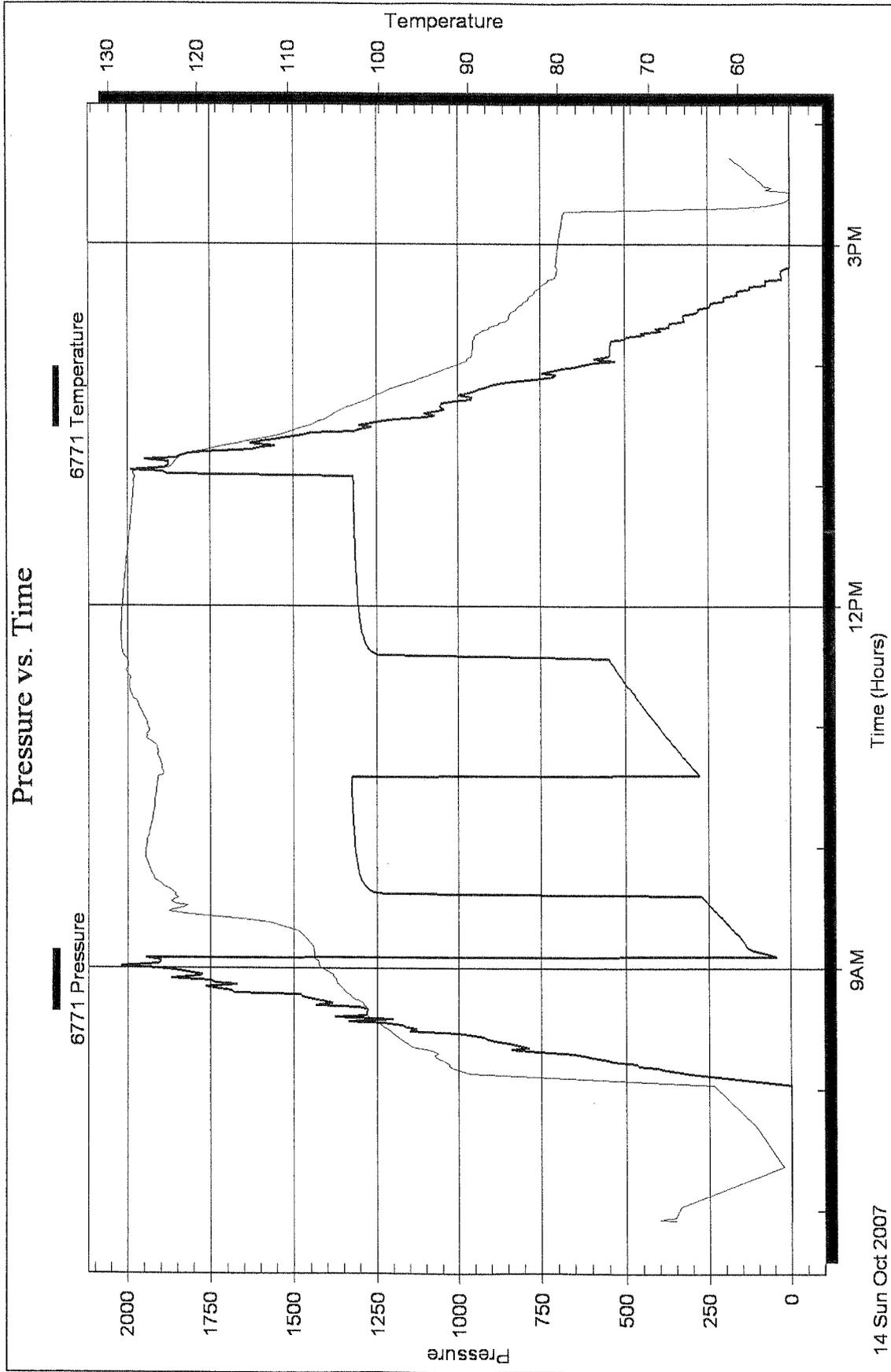
Murfin Drilling Co Inc

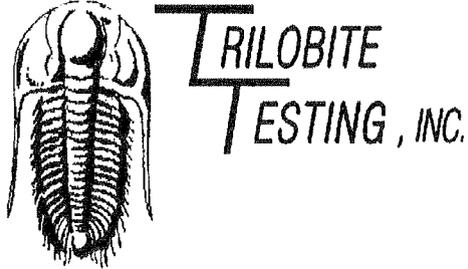
23 5 30 Decatur KS

DST Test Number: 2



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202

ATTN: Rocky Milford

23 5 30 Decatur KS

Anna #1-23

Start Date: 2007.10.15 @ 03:16:05

End Date: 2007.10.15 @ 11:35:14

Job Ticket #: 29441 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Murfin Drilling Co Inc

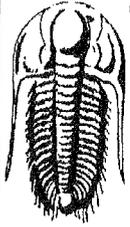
Anna #1-23

23 5 30 Decatur KS

DST # 3

H-K

2007.10.15



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water Ste 300
 Wichita KS 67202
 ATTN: Rocky Milford

Anna #1-23
23 5 30 Decatur KS
 Job Ticket: 29441 **DST#: 3**
 Test Start: 2007.10.15 @ 03:16:05

GENERAL INFORMATION:

Formation: **H-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:04:00
 Time Test Ended: 11:35:14

Test Type: Conventional Bottom Hole
 Tester: Shane McBride
 Unit No: 40

Interval: **3958.00 ft (KB) To 4050.00 ft (KB) (TVD)**
 Total Depth: 4050.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2794.00 ft (KB)
 2789.00 ft (CF)
 KB to GR/CF: 5.00 ft

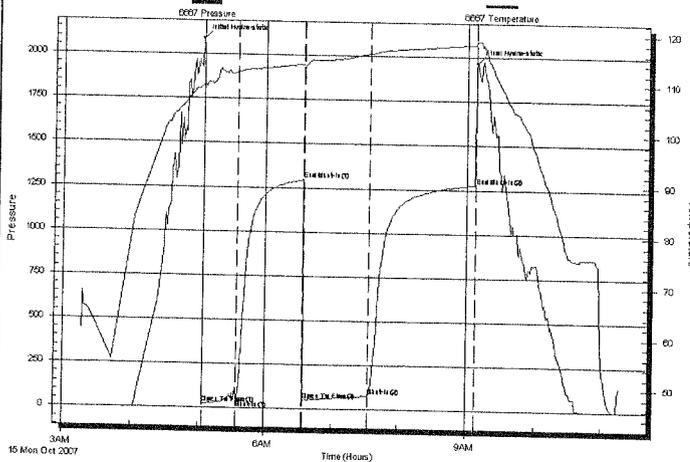
Serial #: 6667 Inside

Press@RunDepth: 77.06 psig @ 3959.00 ft (KB)
 Start Date: 2007.10.15 End Date: 2007.10.15
 Start Time: 03:16:05 End Time: 11:17:14

Capacity: 7000.00 psig
 Last Calib.: 2007.10.15
 Time On Btm: 2007.10.15 @ 05:02:45
 Time Off Btm: 2007.10.15 @ 09:08:00

TEST COMMENT: 1/2 " @ open built to 1 1/4 "
 No return
 1/4 " @ open built to 1 "
 No return

Pressure vs. Time



PRESSURE SUMMARY

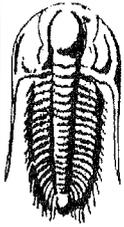
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2088.13	109.38	Initial Hydro-static
2	21.75	109.14	Open To Flow (1)
32	44.81	112.02	Shut-In(1)
91	1294.88	113.75	End Shut-In(1)
92	49.59	113.46	Open To Flow (2)
151	77.06	115.90	Shut-In(2)
245	1276.79	117.92	End Shut-In(2)
246	1967.95	118.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Free Oil 100%O	0.00
124.00	OWCM 5%O 10%W 85%M	0.61

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29441

DST#: 3

ATTN: Rocky Milford

Test Start: 2007.10.15 @ 03:16:05

Tool Information

Drill Pipe:	Length: 3777.00 ft	Diameter: 3.80 inches	Volume: 52.98 bbl	Tool Weight: 1500.00 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: 75000.00 lb
			<u>Total Volume: 53.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3958.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	92.00 ft			
Tool Length:	112.00 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			3939.00	
Shut In Tool	5.00			3944.00	
Hydraulic tool	5.00			3949.00	
Packer	5.00			3954.00	20.00 Bottom Of Top Packer
Packer	4.00			3958.00	
Stubb	1.00			3959.00	
Recorder	0.00	6667	Inside	3959.00	
Recorder	0.00	6771	Outside	3959.00	
Perforations	20.00			3979.00	
Change Over Sub	1.00			3980.00	
Drill Pipe	64.00			4044.00	
Change Over Sub	1.00			4045.00	
Bullnose	5.00			4050.00	92.00 Bottom Packers & Anchor
Total Tool Length:	112.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Anna #1-23

250 N Water Ste 300
Wichita KS 67202

23 5 30 Decatur KS

Job Ticket: 29441

DST#: 3

ATTN: Rocky Milford

Test Start: 2007.10.15 @ 03:16:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.59 in³
Resistivity: 0.00 ohm.m
Salinity: 900.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 0 deg API
Water Salinity: 0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Free Oil 100%O	0.005
124.00	OWCM 5%O 10%W 85%M	0.610

Total Length: 125.00 ft Total Volume: 0.615 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

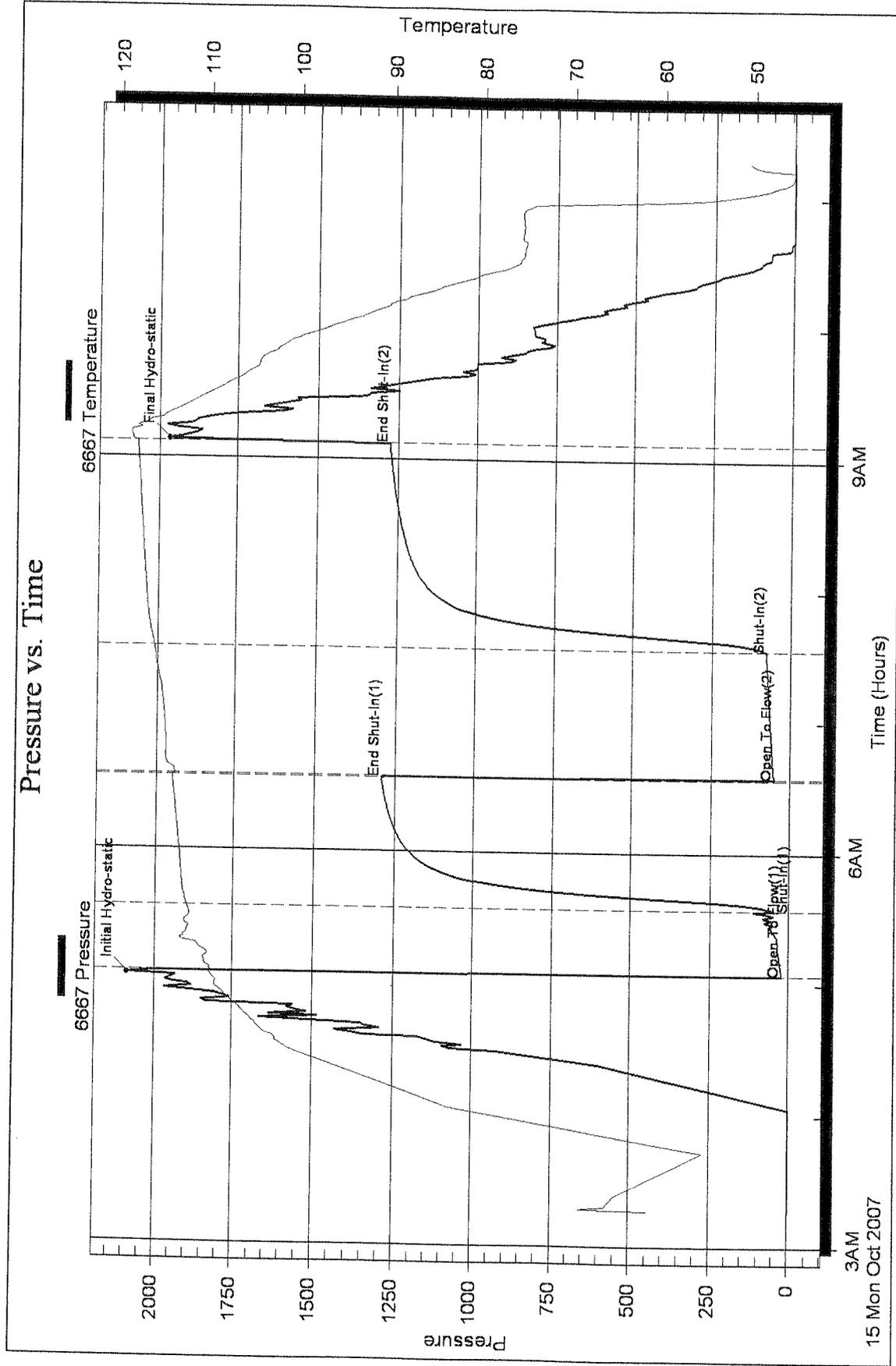
Serial #: 6667

Inside

Murfin Drilling Co Inc

23 5 30 Decatur KS

DST Test Number: 3



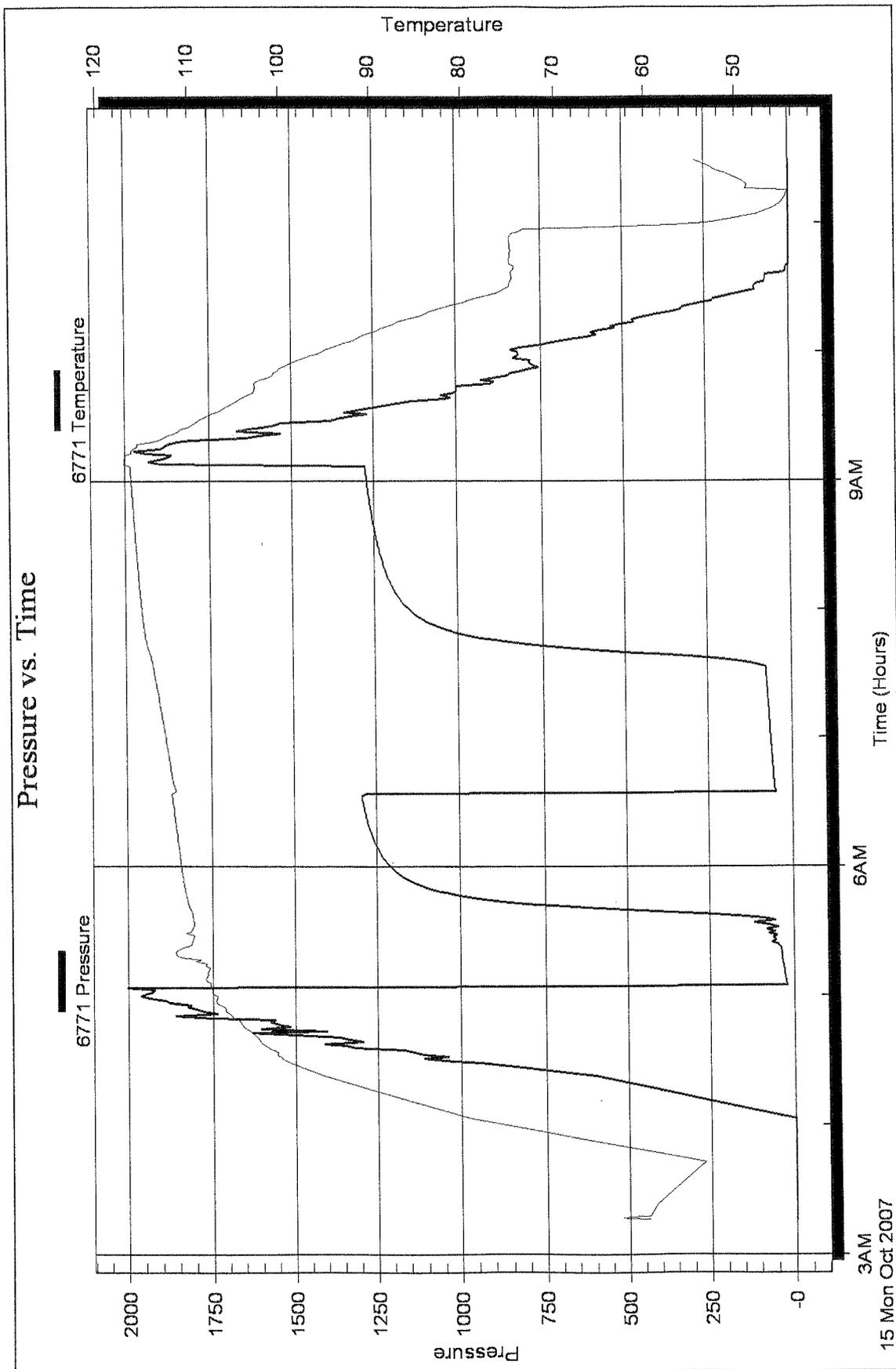
DST Test Number: 3

23 5 30 Decatur KS

Outside Murfin Drilling Co Inc

Serial #: 6771

Pressure vs. Time



Ref. No: 29441

Printed: 2007.10.17 @ 10:21:00 Page 7

Triobite Testing, Inc