

15-109-20822

30-12s-32w

IND

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KANSAS CORPORATION COMMISSION

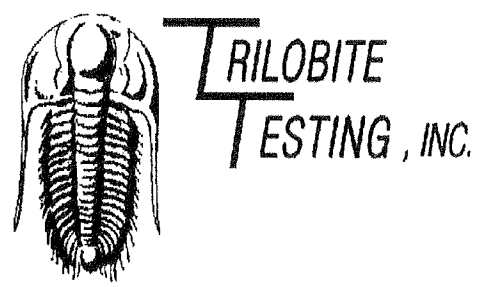
JAN 07 2009

CONSERVATION DIVISION
WICHITA, KS

CONFIDENTIAL

JAN 06 2009

KCC



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, INC**

250 N Water STE 300
Wichita, KS 67202

ATTN: Tom Funk

30 12 32 Logan KS

Munk 1-30

Start Date: 2008.09.23 @ 15:00:25

End Date: 2008.09.23 @ 22:34:24

Job Ticket #: 31020 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling Co, INC

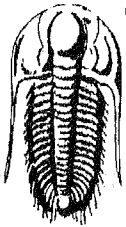
Munk 1-30

30 12 32 Logan KS

DST # 1

Lng E-F

2008.09.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

ATTN: Tom Funk

Job Ticket: 31020

DST#: 1

Test Start: 2008.09.23 @ 15:00:25

GENERAL INFORMATION:

Formation: **Lng E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:55:54

Time Test Ended: 22:34:24

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **4120.00 ft (KB) To 4145.00 ft (KB) (TVD)**

Total Depth: 4145.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 3071.00 ft (KB)

3061.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6753

Inside

Press@RunDepth: 165.85 psig @ 4122.00 ft (KB)

Start Date: 2008.09.23

End Date:

2008.09.23

Capacity: 7000.00 psig

Last Calib.: 2008.09.23

Start Time: 15:00:25

End Time:

22:34:24

Time On Btm: 2008.09.23 @ 17:55:24

Time Off Btm: 2008.09.23 @ 20:30:04

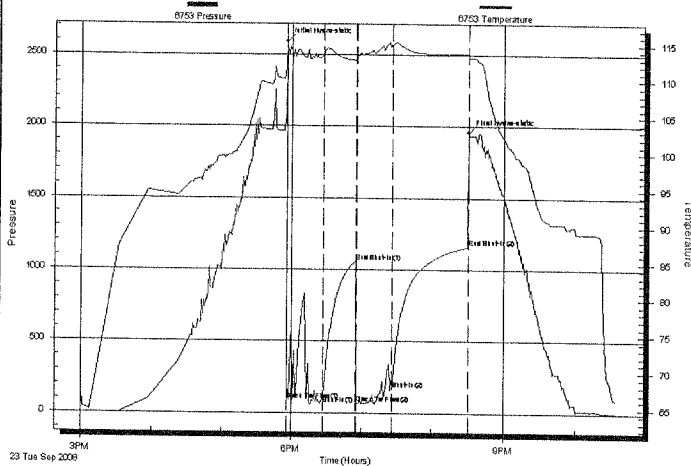
TEST COMMENT: IF: Weak surface blow, died 10 min.

IS: No blow back

FF: No blow

FSI: No blow back

Pressure vs. Time



PRESSURE SUMMARY

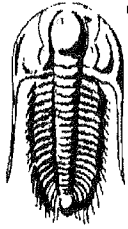
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2585.58	114.65	Initial Hydro-static
1	89.73	113.98	Open To Flow (1)
32	119.18	113.60	Shut-In(1)
60	1056.05	112.88	End Shut-In(1)
60	65.18	113.29	Open To Flow (2)
91	165.85	114.74	Shut-In(2)
155	1158.02	113.74	End Shut-In(2)
155	1956.52	113.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	spot O, 100%M	0.15

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 31020

DST#: 1

ATTN: Tom Funk

Test Start: 2008.09.23 @ 15:00:25

Tool Information

Drill Pipe:	Length: 3519.00 ft	Diameter: 3.80 inches	Volume: 49.36 bbl	Tool Weight: 2000.00 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: 607.00 ft	Diameter: 2.25 inches	Volume: 2.99 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 52.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 79000.00 lb
Depth to Top Packer:	4120.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool slid to bottom 10' took small drink of mud

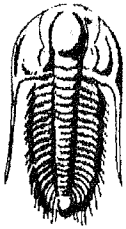
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4093.00	
Shut In Tool	5.00			4098.00	
Hydraulic tool	5.00			4103.00	
Jars	5.00			4108.00	
Safety Joint	3.00			4111.00	
Packer	5.00			4116.00	28.00 Bottom Of Top Packer
Packer	4.00			4120.00	
Stubb	1.00			4121.00	
Perforations	1.00			4122.00	
Recorder	0.00	8322	Inside	4122.00	
Recorder	0.00	6753	Inside	4122.00	
Perforations	20.00			4142.00	
Bullnose	3.00			4145.00	25.00 Bottom Packers & Anchor

Total Tool Length: 53.00

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CONSERVATION DIVISION
WICHITA, KS



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 31020

DST#: 1

ATTN: Tom Funk

Test Start: 2008.09.23 @ 15:00:25

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:

4400 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 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
30.00	spot O, 100%M	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

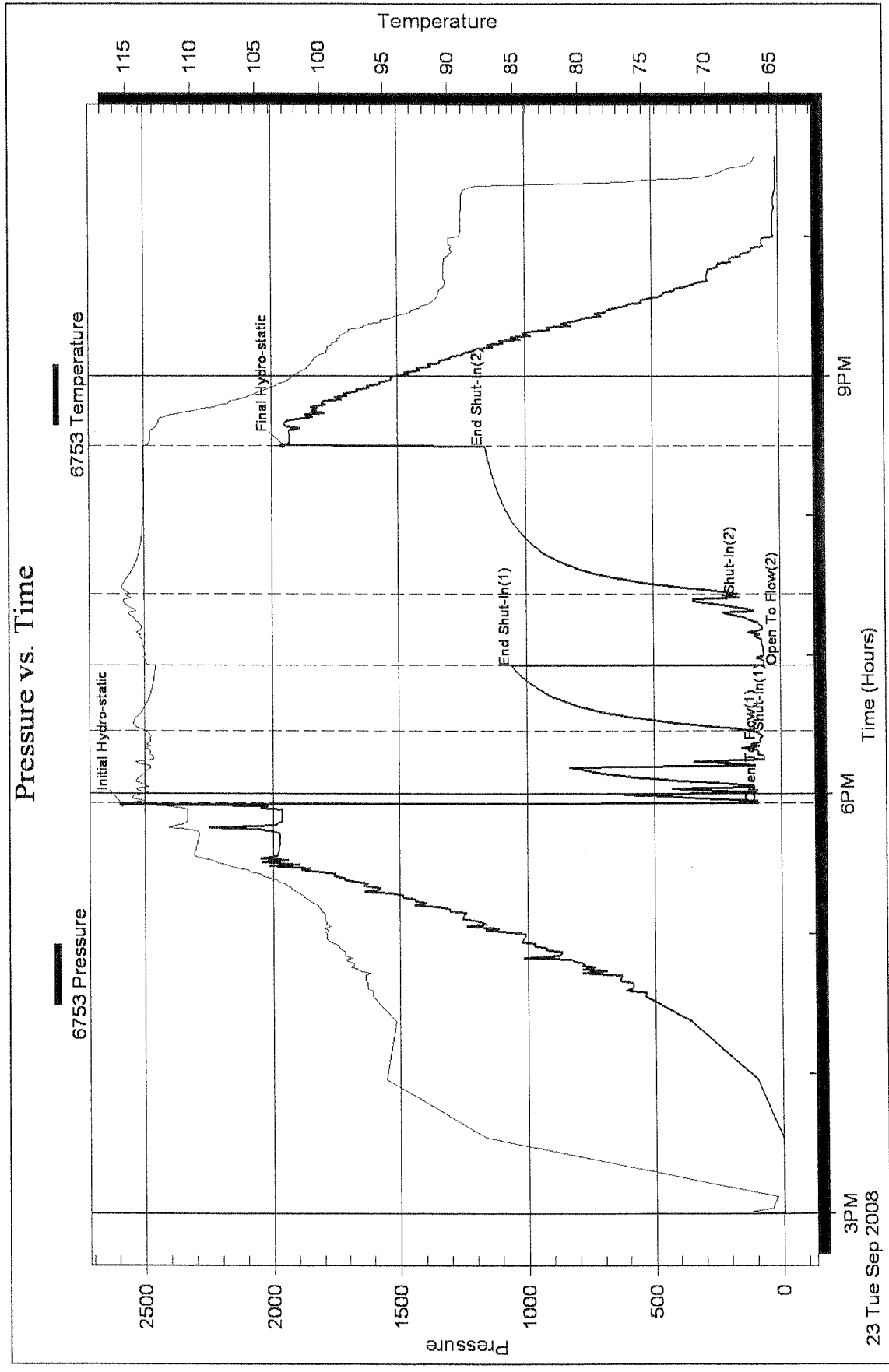
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW=1.120@83F=4400ppm



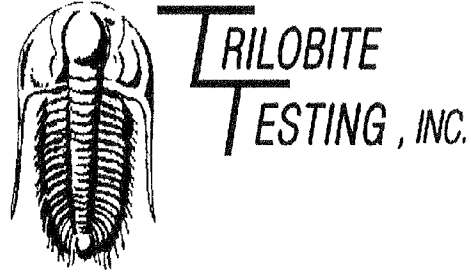
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KANSAS CORPORATION COMMISSION

Ref. No: 31020

Trilobite Testing, Inc

JAN 07 2009

CONSERVATION DIVISION
WICHITA, KS



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, INC**

250 N Water STE 300
Wichita, KS 67202

ATTN: Tom Funk

30 12 32 Logan KS

Munk 1-30

Start Date: 2008.09.24 @ 13:37:21

End Date: 2008.09.24 @ 21:41:10

Job Ticket #: 31021 DST #: 2

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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

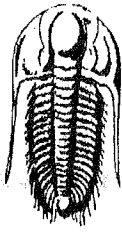
Munk 1-30

30 12 32 Logan KS

DST # 2

Lng I-J

2008.09.24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co, INC
 250 N Water STE 300
 Wichita, KS 67202
 ATTN: Tom Funk

Munk 1-30
30 12 32 Logan KS
 Job Ticket: 31021 **DST#: 2**
 Test Start: 2008.09.24 @ 13:37:21

GENERAL INFORMATION:

Formation: **Lng I-J**
 Deviated: **No** Whipstock: ft (KB)
 Time Tool Opened: 15:37:40
 Time Test Ended: 21:41:10
 Interval: **4223.00 ft (KB) To 4271.00 ft (KB) (TVD)**
 Total Depth: **4271.00 ft (KB) (TVD)**
 Hole Diameter: **7.78 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**
 Tester: **Chris Hagman**
 Unit No: **34**
 Reference Elevations: **3071.00 ft (KB)**
 3061.00 ft (CF)
 KB to GR/CF: **10.00 ft**

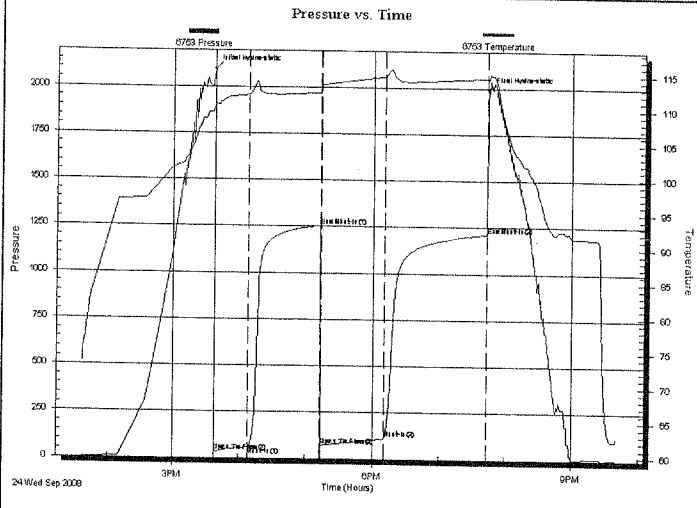
Serial #: 6753

Inside

Press@RunDepth: **110.52 psig @ 4225.00 ft (KB)**
 Start Date: **2008.09.24** End Date: **2008.09.24**
 Start Time: **13:37:21** End Time: **21:41:10**

Capacity: **7000.00 psig**
 Last Calib.: **2008.09.24**
 Time On Btm: **2008.09.24 @ 15:37:20**
 Time Off Btm: **2008.09.24 @ 19:44:10**

TEST COMMENT: IF: 4 inches in 30 min., fair building blow
 IS: No blow back
 FF: 7.5 inches in 60 min., fair building blow
 FS: No blow back



PRESSURE SUMMARY

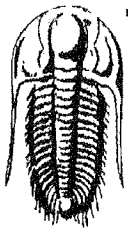
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2092.07	110.41	Initial Hydro-static
1	35.40	110.89	Open To Flow (1)
31	58.72	112.02	Shut-In(1)
95	1253.40	112.35	End Shut-In(1)
96	73.37	113.59	Open To Flow (2)
154	110.52	114.75	Shut-In(2)
246	1211.49	114.56	End Shut-In(2)
247	1987.53	114.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
200.00	gassy muddy oil 5%G,85%O,10%M	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 31021

DST#: 2

ATTN: Tom Funk

Test Start: 2008.09.24 @ 13:37:21

Tool Information

Drill Pipe:	Length: 3614.00 ft	Diameter: 3.80 inches	Volume: 50.69 bbl	Tool Weight: 2000.00 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: 607.00 ft	Diameter: 2.25 inches	Volume: 2.99 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 53.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 79000.00 lb
Depth to Top Packer:	4223.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	76.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

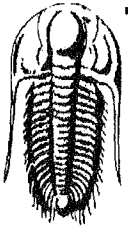
Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4196.00	
Shut In Tool	5.00			4201.00	
Hydraulic tool	5.00			4206.00	
Jars	5.00			4211.00	
Safety Joint	3.00			4214.00	
Packer	5.00			4219.00	28.00 Bottom Of Top Packer
Packer	4.00			4223.00	
Stubb	1.00			4224.00	
Perforations	1.00			4225.00	
Recorder	0.00	8322	Inside	4225.00	
Recorder	0.00	6753	Inside	4225.00	
Perforations	10.00			4235.00	
Change Over Sub	1.00			4236.00	
Drill Pipe	31.00			4267.00	
Change Over Sub	1.00			4268.00	
Bullnose	3.00			4271.00	48.00 Bottom Packers & Anchor
Total Tool Length:	76.00				

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CONSERVATION DIVISION
WICHITA, KS



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, INC
250 N Water STE 300
Wichita, KS 67202
ATTN: Tom Funk

Munk 1-30
30 12 32 Logan KS
Job Ticket: 31021 DST#: 2
Test Start: 2008.09.24 @ 13:37:21

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.39 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4500.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	gassy muddy oil 5%G,85%O,10%M	0.984

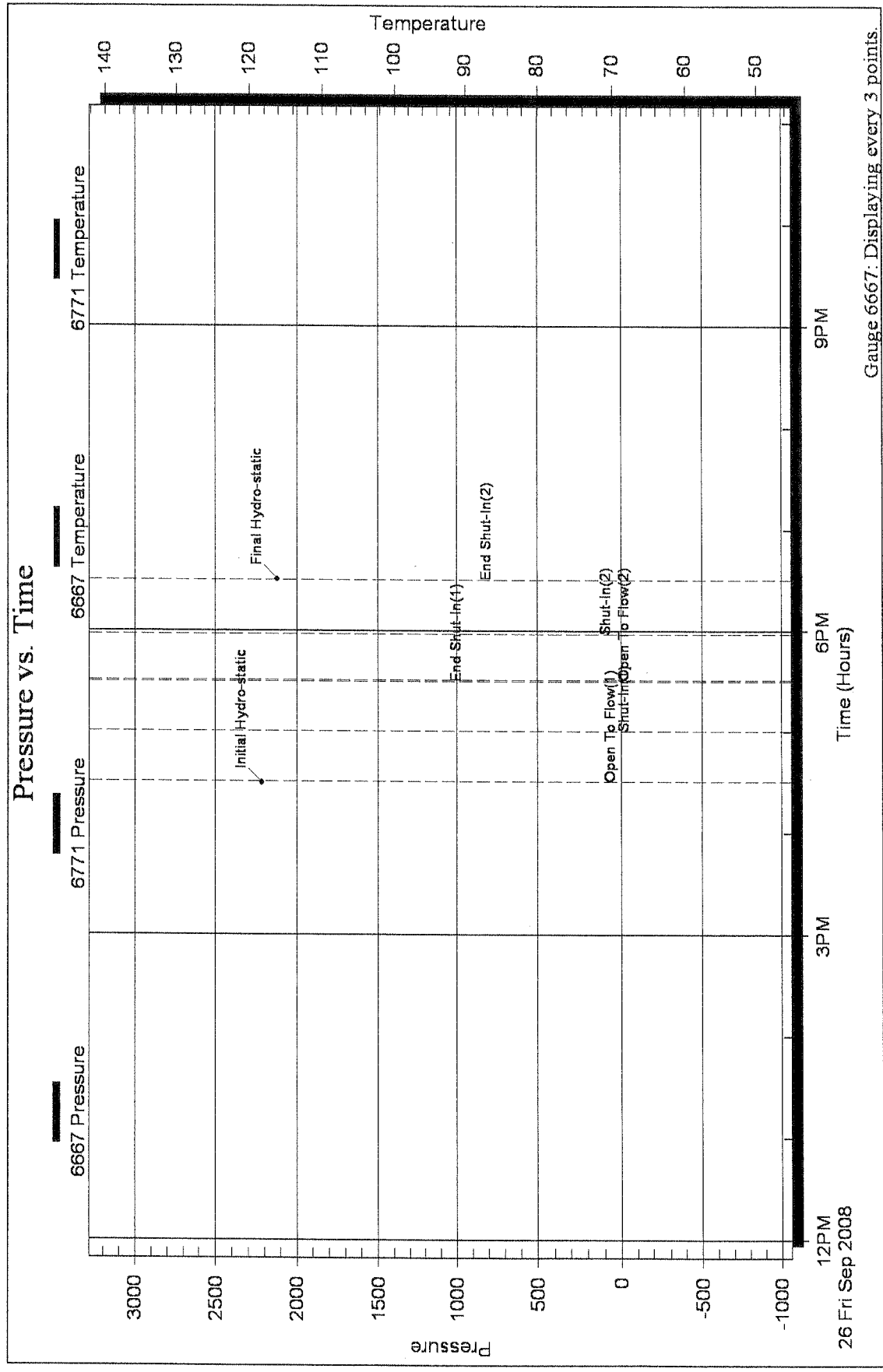
Total Length: 200.00 ft Total Volume: 0.984 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: API=38@70F=37 corrected

Serial #: 6753

Inside Murfin Drilling Co, INC

30 12 32 Logan KS

DST Test Number: 2



Gauge 6667. Displaying every 3 points.

Trilobite Testing, Inc

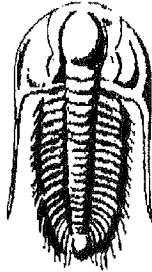
Ref. No: 31021

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CONSERVATION DIVISION
WICHITA, KS

Printed: 2008.10.03 @ 13:45:13 Page 5



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, INC**

250 N Water STE 300
Wichita, KS 67202

ATTN: Tom Funk

30 12 32 Logan KS

Munk 1-30

Start Date: 2008.09.25 @ 04:43:16

End Date: 2008.09.25 @ 13:37:34

Job Ticket #: 31022 DST #: 3

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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

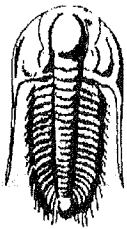
Munk 1-30

30 12 32 Logan KS

DST # 3

Lng K

2008.09.25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 31022

DST#: 3

ATTN: Tom Funk

Test Start: 2008.09.25 @ 04:43:16

GENERAL INFORMATION:

Formation: **Lng K**

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

Time Tool Opened: 07:20:35

Time Test Ended: 13:37:34

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **4273.00 ft (KB) To 4296.00 ft (KB) (TVD)**

Total Depth: 4296.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 3071.00 ft (KB)

3061.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6753

Inside

Press@RunDepth: 337.98 psig @ 4275.00 ft (KB)

Start Date: 2008.09.25

End Date:

2008.09.25

Capacity: 7000.00 psig

Last Calib.: 2008.09.25

Start Time: 04:43:16

End Time:

13:37:34

Time On Btm: 2008.09.25 @ 07:20:15

Time Off Btm: 2008.09.25 @ 11:26:05

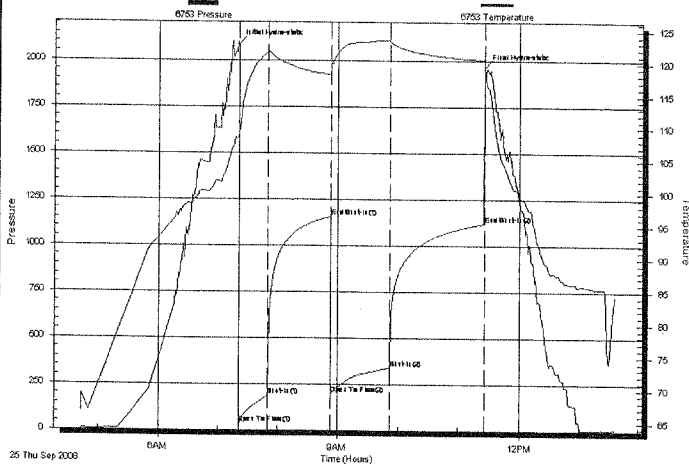
TEST COMMENT: IF: BOB 20 min., strong building blow

IS: No blow back

FF: BOB 30 min., strong building blow

FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

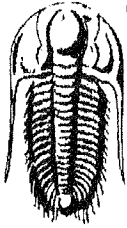
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2084.46	108.67	Initial Hydro-static
1	34.05	109.27	Open To Flow (1)
31	187.50	121.65	Shut-In(1)
93	1154.90	118.27	End Shut-In(1)
93	196.06	119.97	Open To Flow (2)
152	337.98	123.52	Shut-In(2)
246	1118.27	120.51	End Shut-In(2)
246	1963.97	120.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
700.00	100%W	4.29

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, INC
250 N Water STE 300
Wichita, KS 67202
ATTN: Tom Funk

Munk 1-30
30 12 32 Logan KS
Job Ticket: 31022 **DST#: 3**
Test Start: 2008.09.25 @ 04:43:16

Tool Information

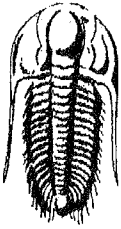
Drill Pipe:	Length: 3645.00 ft	Diameter: 3.80 inches	Volume: 51.13 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 607.00 ft	Diameter: 2.25 inches	Volume: 2.99 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 54.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4273.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 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			4246.00	
Shut In Tool	5.00			4251.00	
Hydraulic tool	5.00			4256.00	
Jars	5.00			4261.00	
Safety Joint	3.00			4264.00	
Packer	5.00			4269.00	28.00 Bottom Of Top Packer
Packer	4.00			4273.00	
Stubb	1.00			4274.00	
Perforations	1.00			4275.00	
Recorder	0.00	8322	Inside	4275.00	
Recorder	0.00	6753	Inside	4275.00	
Perforations	18.00			4293.00	
Bullnose	3.00			4296.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00

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CONSERVATION DIVISION
WICHITA, KS



**TRILOBITE
TESTING, INC**

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FLUID SUMMARY

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 31022

DST#: 3

ATTN: Tom Funk

Test Start: 2008.09.25 @ 04:43:16

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:

30000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
700.00	100%W	4.290

Total Length: 700.00 ft

Total Volume: 4.290 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

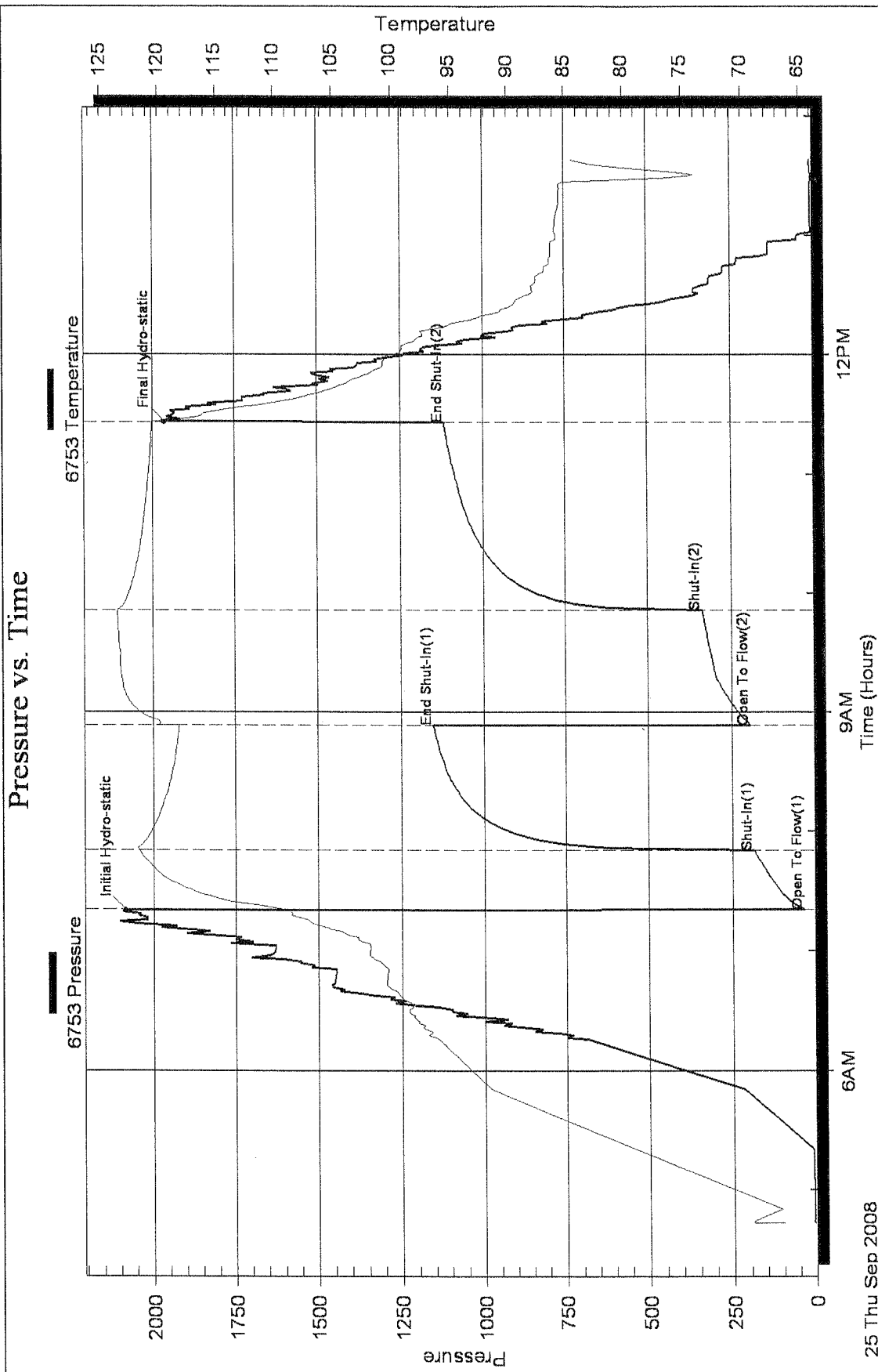
Serial #:

Laboratory Name:

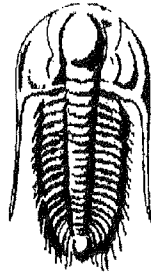
Laboratory Location:

Recovery Comments: RW=.183@88F=30000ppm

Pressure vs. Time



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 CONSERVATION DIVISION
 WICHITA, KS



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, INC**

250 N Water STE 300
Wichita, KS 67202

ATTN: Tom Funk

30 12 32 Logan KS

Munk 1-30

Start Date: 2008.09.26 @ 14:35:05

End Date: 2008.09.26 @ 20:40:14

Job Ticket #: 33403 DST #: 4

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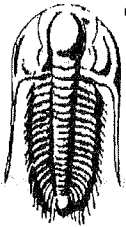
JAN 07 2009

CONSERVATION DIVISION
WICHITA, KS

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

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

ATTN: Tom Funk

Job Ticket: 33403

DST#: 4

Test Start: 2008.09.26 @ 14:35:05

GENERAL INFORMATION:

Formation: **Pawnee, Myric St, Fort**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:30:30

Time Test Ended: 20:40:14

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **4466.00 ft (KB) To 4586.00 ft (KB) (TVD)**

Total Depth: 4586.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 3071.00 ft (KB)

3061.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6667

Inside

Press@RunDepth: 46.82 psig @ 4467.00 ft (KB)

Start Date: 2008.09.26

End Date:

2008.09.26

Capacity: 7000.00 psig

Last Calib.: 2008.09.26

Start Time: 14:35:05

End Time:

20:24:14

Time On Btm: 2008.09.26 @ 16:30:00

Time Off Btm: 2008.09.26 @ 18:30:30

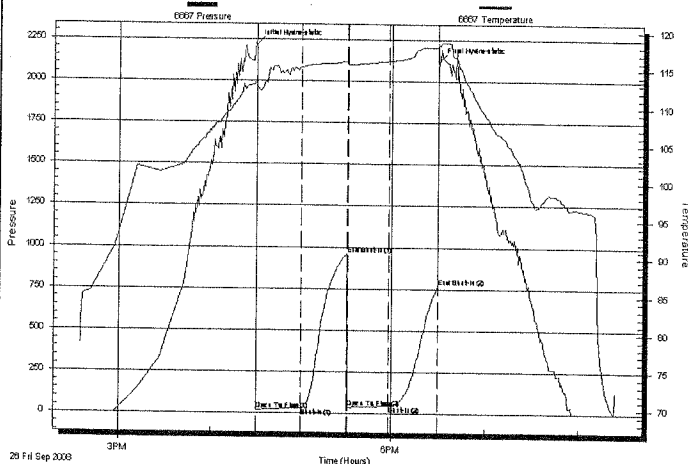
TEST COMMENT: 1/2" in blow died in 27 min.

No return

No blow

No return

Pressure vs. Time



PRESSURE SUMMARY

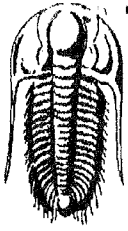
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2215.92	113.55	Initial Hydro-static
1	20.57	112.76	Open To Flow (1)
30	33.94	115.30	Shut-In(1)
60	958.69	116.06	End Shut-In(1)
61	38.21	115.74	Open To Flow (2)
88	46.82	116.16	Shut-In(2)
120	768.16	118.04	End Shut-In(2)
121	2119.53	118.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud 100% m	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

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 33403

DST#: 4

ATTN: Tom Funk

Test Start: 2008.09.26 @ 14:35:05

Tool Information

Drill Pipe:	Length: 3864.00 ft	Diameter: 3.80 inches	Volume: 54.20 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: 606.00 ft	Diameter: 2.25 inches	Volume: 2.98 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 57.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4466.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	120.00 ft			
Tool Length:	147.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

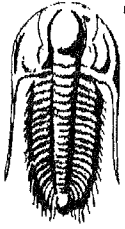
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4440.00	
Shut In Tool	5.00			4445.00	
Hydraulic tool	5.00			4450.00	
Jars	5.00			4455.00	
Safety Joint	2.00			4457.00	
Packer	5.00			4462.00	27.00 Bottom Of Top Packer
Packer	4.00			4466.00	
Stubb	1.00			4467.00	
Recorder	0.00	6667	Inside	4467.00	
Recorder	0.00	6771	Outside	4467.00	
Perforations	17.00			4484.00	
Change Over Sub	1.00			4485.00	
Drill Pipe	95.00			4580.00	
Change Over Sub	1.00			4581.00	
Bullnose	5.00			4586.00	120.00 Bottom Packers & Anchor

Total Tool Length: 147.00

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WICHITA, KS



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 33403

DST#: 4

ATTN: Tom Funk

Test Start: 2008.09.26 @ 14:35:05

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:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4100.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	mud 100%m	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

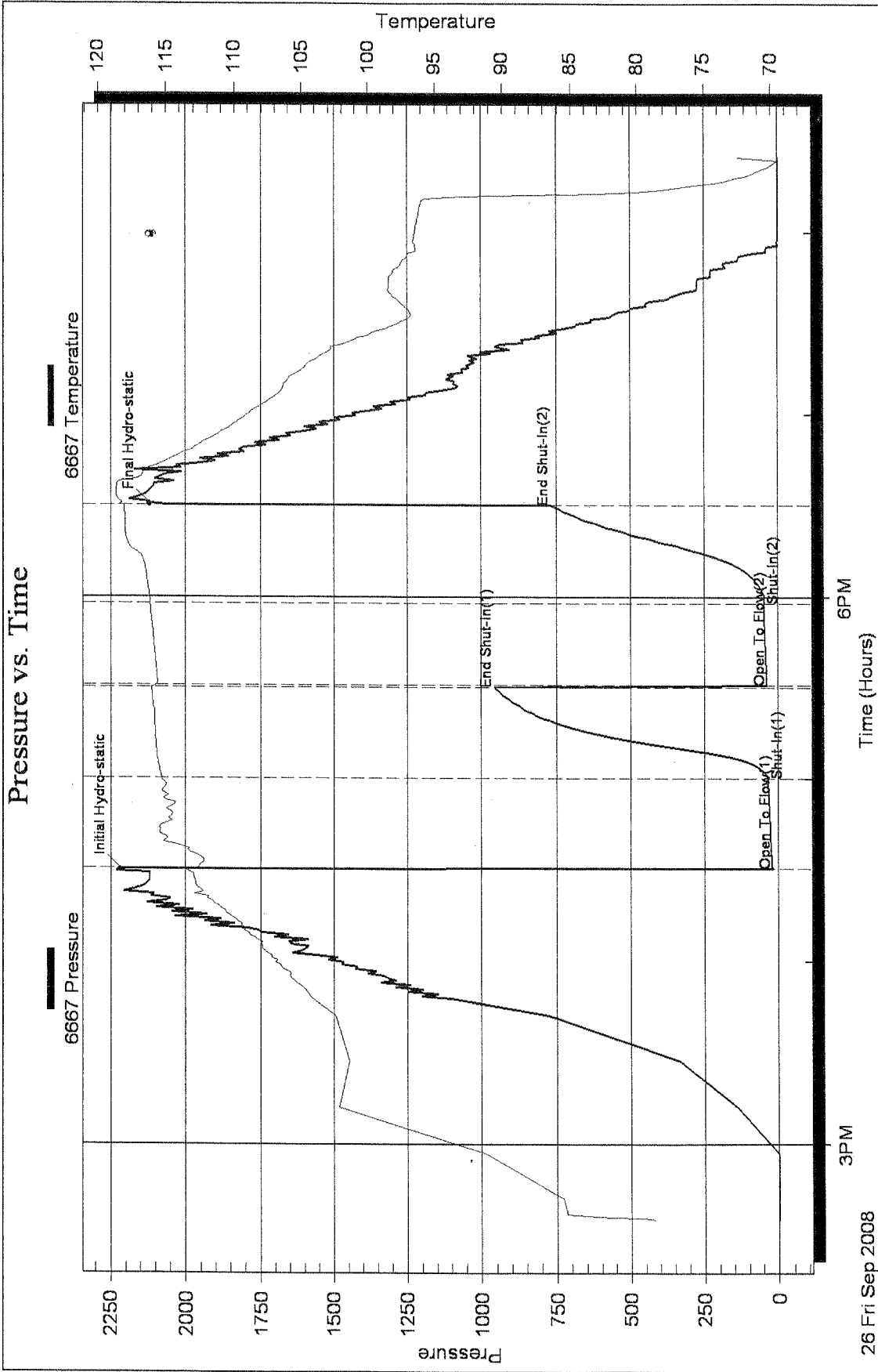
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

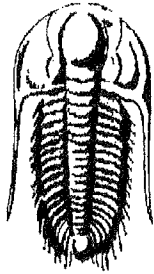
Pressure vs. Time



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WICHITA, KS



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co, INC**

250 N Water STE 300
Wichita, KS 67202

ATTN: Tom Funk

30 12 32 Logan KS

Munk 1-30

Start Date: 2008.09.27 @ 04:50:53

End Date: 2008.09.27 @ 12:30:02

Job Ticket #: 33404 DST #: 5

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WICHITA, KS

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co, INC

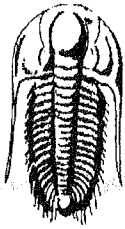
Munk 1-30

30 12 32 Logan KS

DST # 5

Johnson

2008.09.27



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

ATTN: Tom Funk

Job Ticket: 33404

DST#: 5

Test Start: 2008.09.27 @ 04:50:53

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:41:18

Time Test Ended: 12:30:02

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 40

Interval: **4579.00 ft (KB) To 4630.00 ft (KB) (TVD)**

Total Depth: 4630.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 3071.00 ft (KB)

3061.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6667

Inside

Press@RunDepth: 38.28 psig @ 4580.00 ft (KB)

Start Date: 2008.09.27

End Date:

2008.09.27

Capacity: 7000.00 psig

Last Calib.: 2008.09.27

Start Time: 04:50:53

End Time:

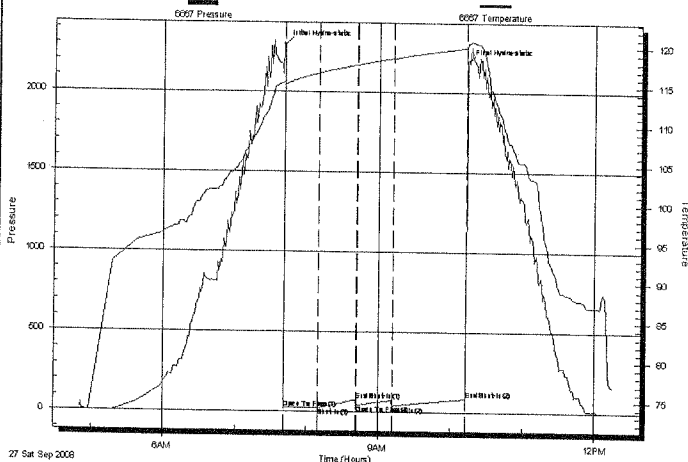
12:16:02

Time On Btm: 2008.09.27 @ 07:41:03

Time Off Btm: 2008.09.27 @ 10:13:33

TEST COMMENT: Weak 1/4" in blow died in 23 min.
No return
No blow
No return

Pressure vs. Time



PRESSURE SUMMARY

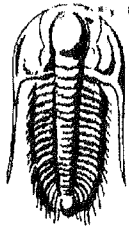
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2295.62	115.61	Initial Hydro-static
1	22.96	115.03	Open To Flow (1)
29	28.74	116.63	Shut-In(1)
60	77.55	117.71	End Shut-In(1)
61	43.48	117.72	Open To Flow (2)
91	38.28	118.53	Shut-In(2)
152	85.11	119.93	End Shut-In(2)
153	2185.80	120.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	heavy mud w/oil spots 100%m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 33404

DST#: 5

ATTN: Tom Funk

Test Start: 2008.09.27 @ 04:50:53

Tool Information

Drill Pipe:	Length: 3965.00 ft	Diameter: 3.80 inches	Volume: 55.62 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: 606.00 ft	Diameter: 2.25 inches	Volume: 2.98 bbl	Weight to Pull Loose: 100000.0 lb
		<u>Total Volume:</u>	<u>58.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 84000.00 lb
Depth to Top Packer:	4579.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

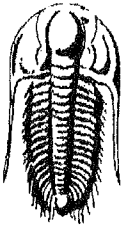
Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Change Over Sub	1.00			4553.00	
Shut In Tool	5.00			4558.00	
Hydraulic tool	5.00			4563.00	
Jars	5.00			4568.00	
Safety Joint	2.00			4570.00	
Packer	5.00			4575.00	27.00 Bottom Of Top Packer
Packer	4.00			4579.00	
Stubb	1.00			4580.00	
Recorder	0.00	6667	Inside	4580.00	
Recorder	0.00	6771	Outside	4580.00	
Perforations	12.00			4592.00	
Change Over Sub	1.00			4593.00	
Drill Pipe	31.00			4624.00	
Change Over Sub	1.00			4625.00	
Bullnose	5.00			4630.00	51.00 Bottom Packers & Anchor

Total Tool Length: 78.00

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**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, INC

Munk 1-30

250 N Water STE 300
Wichita, KS 67202

30 12 32 Logan KS

Job Ticket: 33404

DST#: 5

ATTN: Tom Funk

Test Start: 2008.09.27 @ 04:50:53

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:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4100.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	heavy mud w/oil spots 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

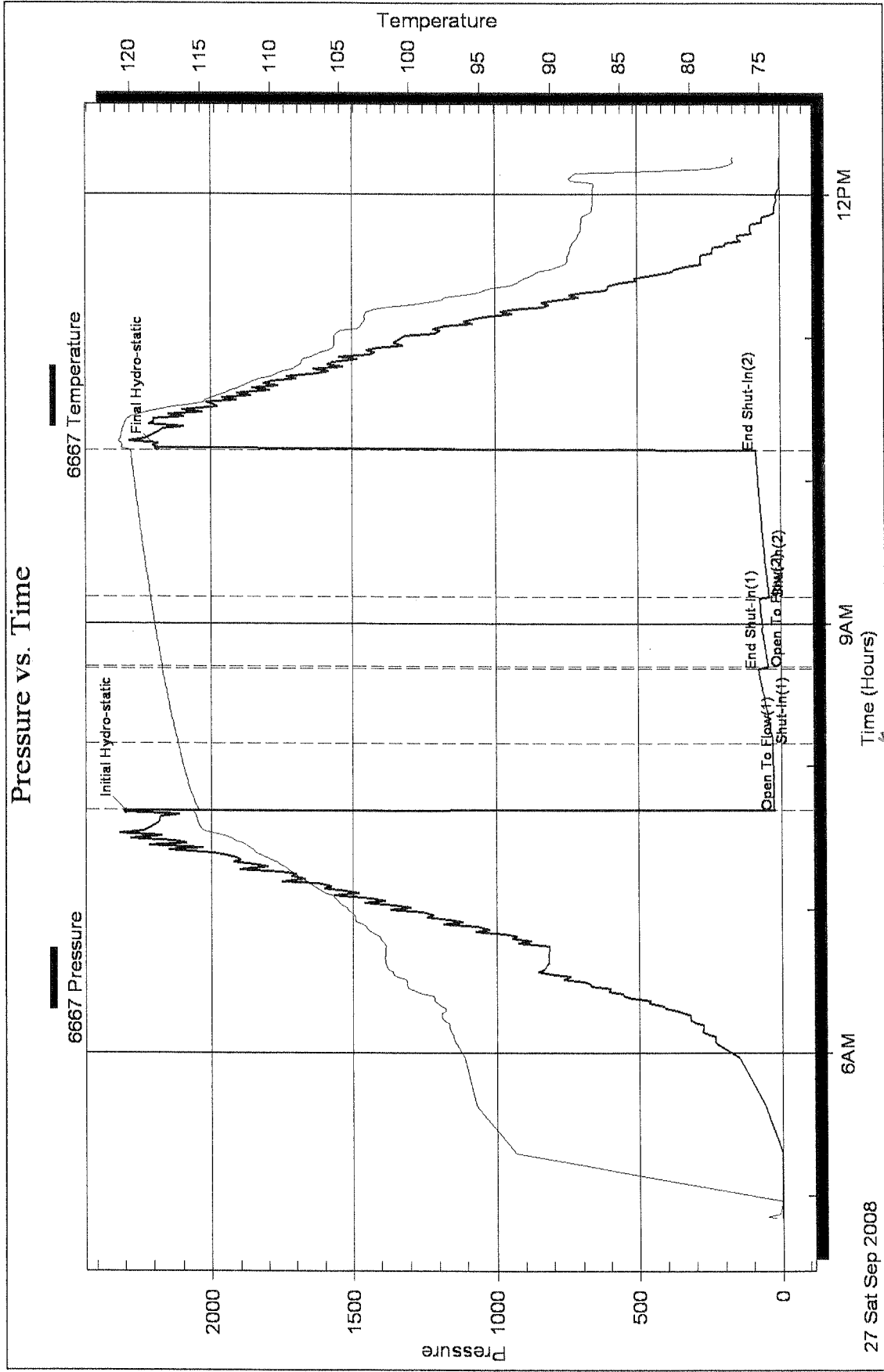
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



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