



DRILL STEM TEST REPORT

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

250 N. Water
Ste. 300
Wichita Ks. 67202

ATTN: Brad Rine

21 9s27w Sheridan Ks

Kenalwhit # 1-21

Start Date: 2008.11.12 @ 15:15:00

End Date: 2008.11.12 @ 22:28:30

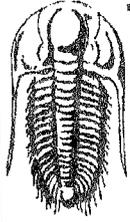
Job Ticket #: 33450 DST #: 1

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MAR 11 2009
CONFIDENTIAL

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KCC WICHITA

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

MLZ - 9 - 17



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. INC.
250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21
21 9s27w Sheridan Ks
Job Ticket: 33450 **DST#: 1**
Test Start: 2008.11.12 @ 15:15:00

Tool Information

Drill Pipe:	Length: 3285.00 ft	Diameter: 3.80 inches	Volume: 46.08 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 35000.00 lb
Drill Collar:	Length: 546.53 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 48.77 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	15.53 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	3839.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

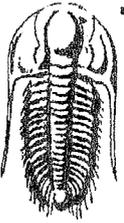
Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3821.00	
Hydraulic tool	5.00			3826.00	
Safety Joint	3.00			3829.00	
Packer	5.00			3834.00	23.00 Bottom Of Top Packer
Packer	5.00			3839.00	
Stubb	1.00			3840.00	
Perforations	10.00			3850.00	
Change Over Sub	1.00			3851.00	
Recorder	0.00	8166	Inside	3851.00	
Recorder	0.00	8356	Inside	3851.00	
Blank Spacing	30.00			3881.00	
Change Over Sub	1.00			3882.00	
Perforations	5.00			3887.00	
Bullnose	3.00			3890.00	51.00 Bottom Packers & Anchor

Total Tool Length: 74.00

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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks
Job Ticket: 33450 DST#: 1
Test Start: 2008.11.12 @ 15:15:00

Mud and Cushion Information

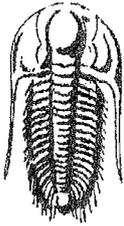
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length:	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	ft		
Water Loss: 5.58 in ³	Cushion Volume:		
Resistivity: ohm.m	bbl		
Salinity: 800.00 ppm	Gas Cushion Type:		
Filter Cake: 2.00 inches	Gas Cushion Pressure:		
	psig		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.58	gmw o-6%g70% m20%w 4%o	0.298
61.41	gmw o-8%g60% m24%w 8%o	0.302
64.71	gmw o-10%g70% m10%w 10%o	0.318
30.32	gmo-1%g80% m19%o	0.149

Total Length: 217.02 ft Total Volume: 1.067 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



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DRILL STEM TEST REPORT

Murfin Drilling Co. INC.

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21

21 9s27w Sheridan Ks

Job Ticket: 33450 **DST#: 1**

Test Start: 2008.11.12 @ 15:15:00

GENERAL INFORMATION:

Formation: **Toronto, LKC, A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:39:30

Time Test Ended: 22:28:30

Interval: **3839.00 ft (KB) To 3890.00 ft (KB) (TVD)**

Total Depth: 3890.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Reference Elevations: 2745.00 ft (KB)

2740.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8356 Inside

Press@RunDepth: 128.66 psig @ 3851.00 ft (KB)

Start Date: 2008.11.12 End Date: 2008.11.12

Start Time: 15:15:05 End Time: 22:28:29

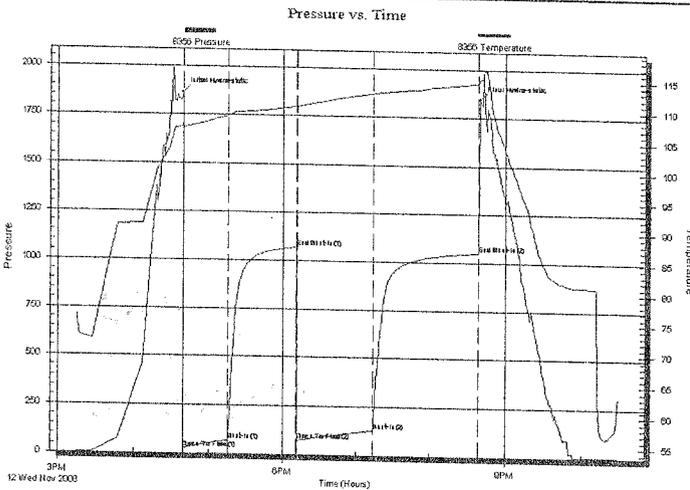
Capacity: 7000.00 psig

Last Calib.: 2008.11.12

Time On Btm: 2008.11.12 @ 16:39:00

Time Off Btm: 2008.11.12 @ 20:40:29

TEST COMMENT: IF: Weak blow built to 3in. over 30 mins
IS: No blow back.
FF: Weak blow built to 1in. over 60 mins.
FSI: No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1863.75	107.13	Initial Hydro-static
1	23.25	106.77	Open To Flow (1)
36	70.22	108.88	Shut-In(1)
92	1067.08	110.45	End Shut-In(1)
93	72.36	109.98	Open To Flow (2)
155	128.66	112.66	Shut-In(2)
240	1048.42	114.52	End Shut-In(2)
242	1847.79	115.09	Final Hydro-static

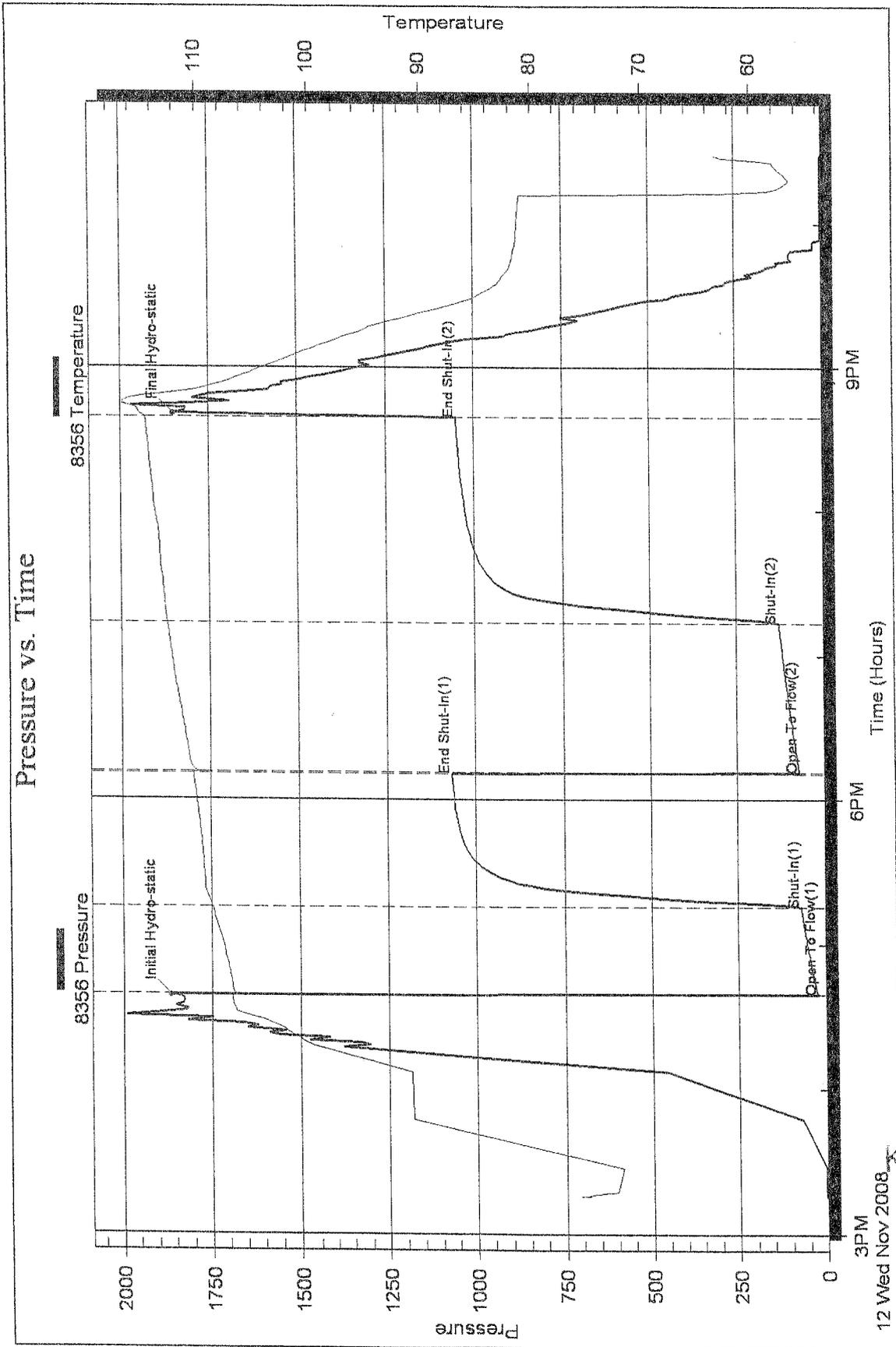
Recovery

Length (ft)	Description	Volume (bbl)
60.58	gmw o-6%g70%m20%w 4%o	0.30
61.41	gmw o-8%g60%m24%w 8%o	0.30
64.71	gmw o-10%g70%m10%w 10%o	0.32
30.32	gmo-1%g80%m19%o	0.15

Gas Rates

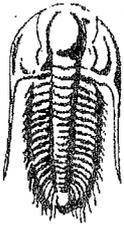
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Pressure vs. Time



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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33376

DST#: 2

Test Start: 2008.11.13 @ 07:10:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 5.99 in³

Resistivity: ohm.m

Salinity: 800.00 ppm

Filter Cake: 2.00 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
61.00	gmo-10%g10%g80%o	0.300
61.00	gmo-20%g40%o40%o	0.300
62.00	go-40%g60%o	0.305
61.00	go-20%g80%o	0.300
61.00	go-36%g64%o	0.300
30.00	go-10%g90%o	0.148

Total Length: 336.00 ft

Total Volume: 1.653 bbl

Num Fluid Samples: 0

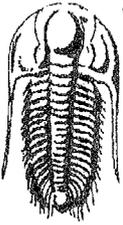
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21

21 9s27w Sheridan Ks

Job Ticket: 33376

DST#: 2

Test Start: 2008.11.13 @ 07:10:00

GENERAL INFORMATION:

Formation: **LKC-Ĉ,D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:42:30

Time Test Ended: 15:00:00

Interval: **3897.00 ft (KB) To 3932.00 ft (KB) (TVD)**

Total Depth: 3932.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Reference Elevations: 2745.00 ft (KB)

2740.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8356 Inside

Press@RunDepth: 145.24 psig @ 3898.00 ft (KB)

Start Date: 2008.11.13

End Date:

2008.11.13

Start Time: 07:10:05

End Time:

14:59:59

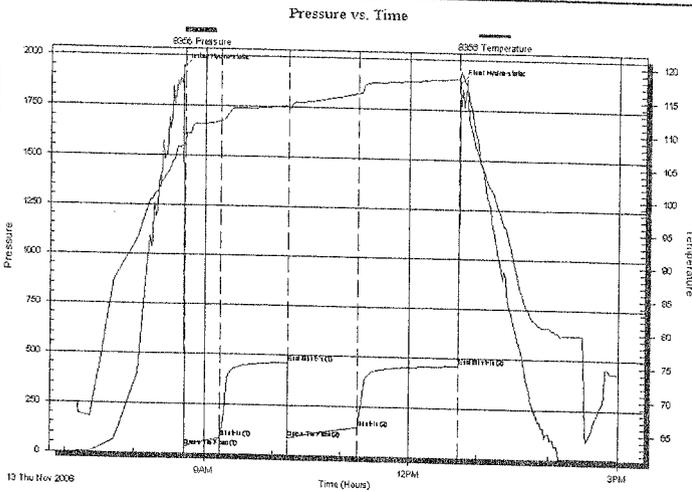
Capacity: 7000.00 psig

Last Calib.: 2008.11.13

Time On Btm: 2008.11.13 @ 08:41:30

Time Off Btm: 2008.11.13 @ 12:45:00

TEST COMMENT:
IF: Fair blow built to 7in. over 30mins.
IS: Weak blow built to 1in. over 60mins.
FF: Fair blow BOB in 60 mins.
FS: Weak blow built to 3/4in. over 90mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1940.85	107.58	Initial Hydro-static
1	31.47	108.01	Open To Flow (1)
32	78.82	111.32	Shut-In(1)
92	459.32	113.78	End Shut-In(1)
92	85.10	113.54	Open To Flow (2)
153	145.24	115.77	Shut-In(2)
243	459.77	118.22	End Shut-In(2)
244	1887.09	118.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	gmo-10%g10%g80%m	0.30
61.00	gmo-20%g40%m40%o	0.30
62.00	go-40%g60%o	0.30
61.00	go-20%g80%o	0.30
61.00	go-36%g64%o	0.30
30.00	go-10%g90%o	0.15

Gas Rates

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



DRILL STEM TEST REPORT

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

250 N. Water
Ste. 300
Wichita Ks. 67202

ATTN: Brad Rine

21 9s27w Sheridan Ks

Kenalwhit # 1-21

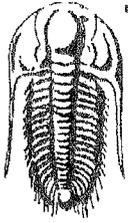
Start Date: 2008.11.13 @ 07:10:00

End Date: 2008.11.13 @ 15:00:00

Job Ticket #: 33376 DST #: 2

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

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DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Site. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33376

DST#: 2

Test Start: 2008.11.13 @ 07:10:00

Tool Information

Drill Pipe:	Length: 3347.00 ft	Diameter: 3.80 inches	Volume: 46.95 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 546.53 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 49.64 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	19.53 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3897.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3879.00	
Hydraulic tool	5.00			3884.00	
Safety Joint	3.00			3887.00	
Packer	5.00			3892.00	23.00 Bottom Of Top Packer
Packer	5.00			3897.00	
Stubb	1.00			3898.00	
Recorder	0.00	8166	Inside	3898.00	
Recorder	0.00	8356	Inside	3898.00	
Perforations	31.00			3929.00	
Bullnose	3.00			3932.00	35.00 Bottom Packers & Anchor
Total Tool Length:	58.00				

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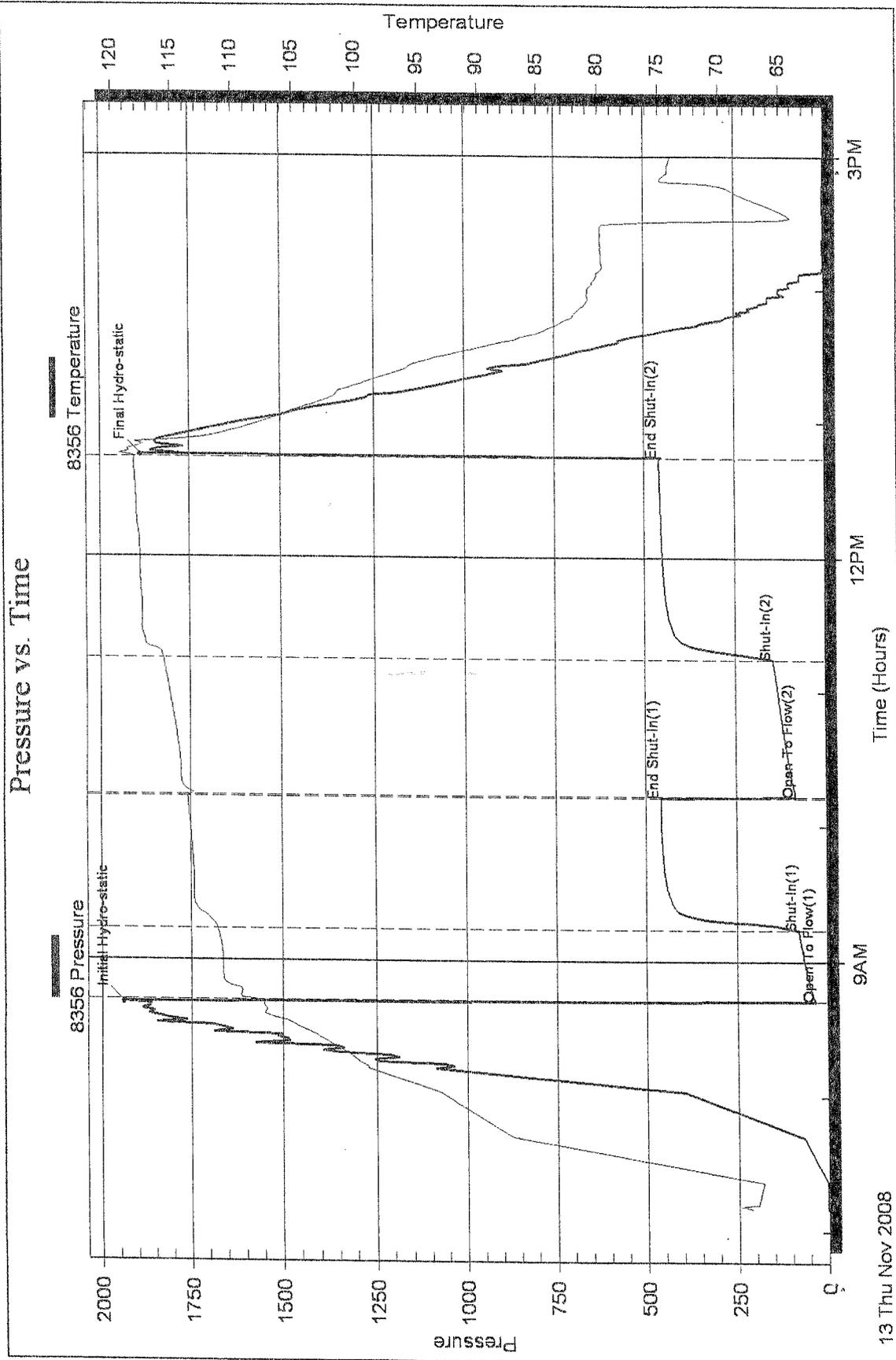
DST Test Number: 2

21 9s27w Sheridan Ks

Murfin Drilling Co. INC.

Inside

Serial #: 8356



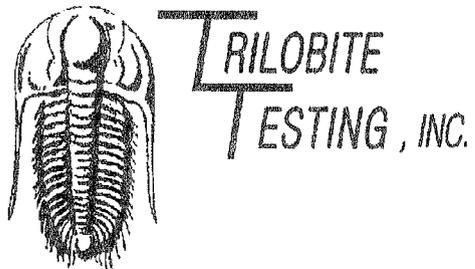
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Ref. No: 33376

Printed: 2008.11.24 @ 16:19:40 Page 5

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DRILL STEM TEST REPORT

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

250 N. Water
Ste. 300
Wichita Ks. 67202

ATTN: Brad Rine

21 9s27w Sheridan Ks

Kenalwhit # 1-21

Start Date: 2008.11.13 @ 21:40:00

End Date: 2008.11.14 @ 06:03:00

Job Ticket #: 33377 DST #: 3

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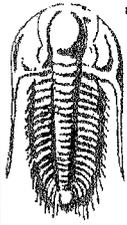
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**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33377

DST#: 3

Test Start: 2008.11.13 @ 21:40:00

Tool Information

Drill Pipe:	Length: 3384.00 ft	Diameter: 3.80 inches	Volume: 47.47 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 32000.00 lb
Drill Collar:	Length: 546.53 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 50.16 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	17.53 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	3936.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

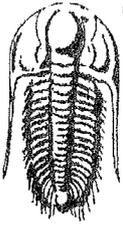
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3918.00	
Hydraulic tool	5.00			3923.00	
Safety Joint	3.00			3926.00	
Packer	5.00			3931.00	23.00 Bottom Of Top Packer
Packer	5.00			3936.00	
Stubb	1.00			3937.00	
Recorder	0.00	8166	Inside	3937.00	
Recorder	0.00	8356	Inside	3937.00	
Perforations	27.00			3964.00	
Bullnose	3.00			3967.00	31.00 Bottom Packers & Anchor
Total Tool Length:	54.00				

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Murfin Drilling Co. INC.

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21

21 9s27w Sheridan Ks

Job Ticket: 33377

DST#: 3

Test Start: 2008.11.13 @ 21:40:00

GENERAL INFORMATION:

Formation: LKC- E,F

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:21:00

Time Test Ended: 06:03:00

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Interval: 3936.00 ft (KB) To 3966.00 ft (KB) (TVD)

Total Depth: 3966.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2745.00 ft (KB)

2740.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8356

Inside

Press@RunDepth: 1068.27 psig @ 3937.00 ft (KB)

Start Date: 2008.11.13

End Date:

2008.11.14

Start Time: 21:40:05

End Time:

06:02:59

Capacity: 7000.00 psig

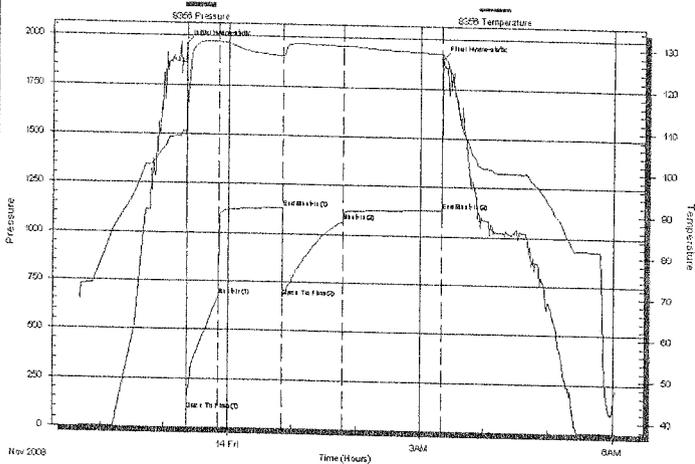
Last Calib.: 2008.11.14

Time On Btm: 2008.11.13 @ 23:20:30

Time Off Btm: 2008.11.14 @ 03:21:30

TEST COMMENT: IF: Strong blow BOB in 3mins.
IS: Weak surface blow died after 5mins.
FF: Strong blow BOB in 3mins.
FSI: No blow back.

Pressure vs. Time



PRESSURE SUMMARY

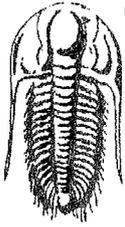
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.00	109.78	Initial Hydro-static
1	86.59	110.04	Open To Flow (1)
31	672.62	130.62	Shut-In (1)
90	1129.38	127.46	End Shut-In (1)
91	673.99	127.30	Open To Flow (2)
148	1068.27	130.02	Shut-In (2)
241	1129.33	128.58	End Shut-In (2)
241	1901.30	128.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2271.00	water	26.88

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks
Job Ticket: 33377 **DST#: 3**
Test Start: 2008.11.13 @ 21:40:00

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:	70000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2271.00	water	26.878

Total Length: 2271.00 ft Total Volume: 26.878 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW .132 @ 60.8F 70,000 chlorides

DST Test Number: 3

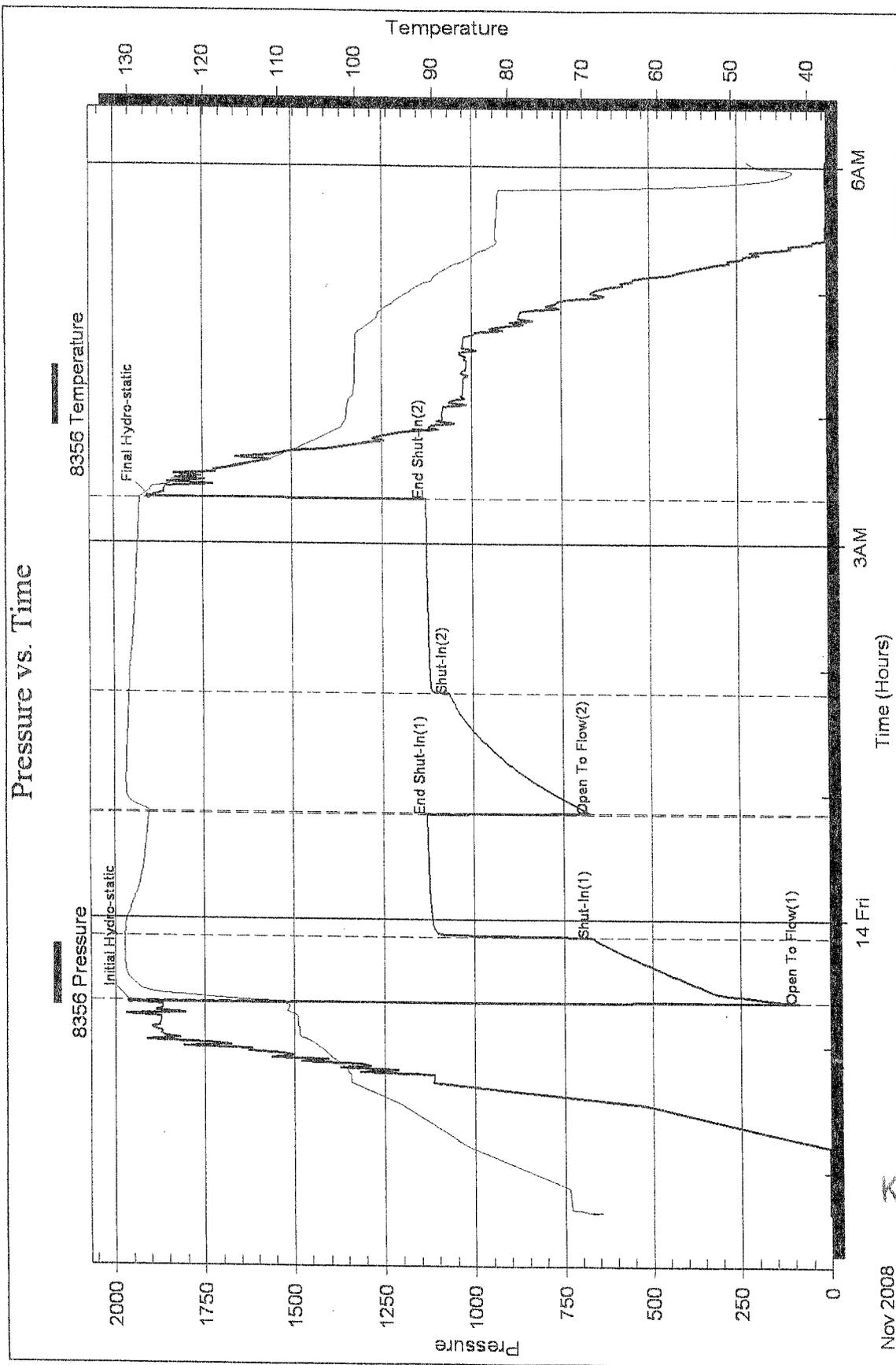
21 9s27w Sheridan Ks

Murfin Drilling Co. INC.

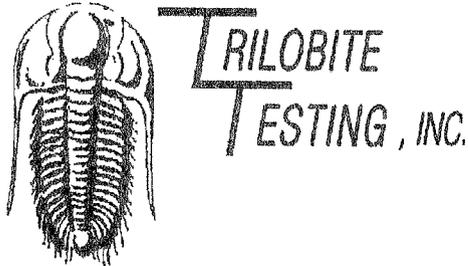
Inside

Serial #: 8356

Pressure vs. Time



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DRILL STEM TEST REPORT

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

250 N. Water
Ste. 300
Wichita Ks. 67202

ATTN: Brad Rine

21 9s27w Sheridan Ks

Kenalwhit # 1-21

Start Date: 2008.11.14 @ 00:30:00

End Date: 2008.11.14 @ 07:47:00

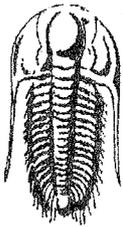
Job Ticket #: 33378 DST #: 4

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

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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33378 **DST#: 4**

Test Start: 2008.11.14 @ 00:30:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

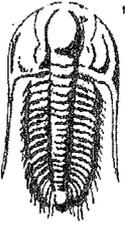
Length ft	Description	Volume bbl
30.00	mud	0.148

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:



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. INC.

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21

21 9s27w Sheridan Ks

Job Ticket: 33378 **DST#: 4**

Test Start: 2008.11.14 @ 00:30:00

GENERAL INFORMATION:

Formation: **LKC - H,I,J,K,L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:26:30
Time Test Ended: 07:47:00

Test Type: Conventional Bottom Hole
Tester: Chuck Kreutzer Jr.
Unit No: 30

Interval: **3992.00 ft (KB) To 4122.00 ft (KB) (TVD)**
Total Depth: 4122.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2745.00 ft (KB)
2740.00 ft (CF)
KB to GR/CF: 5.00 ft

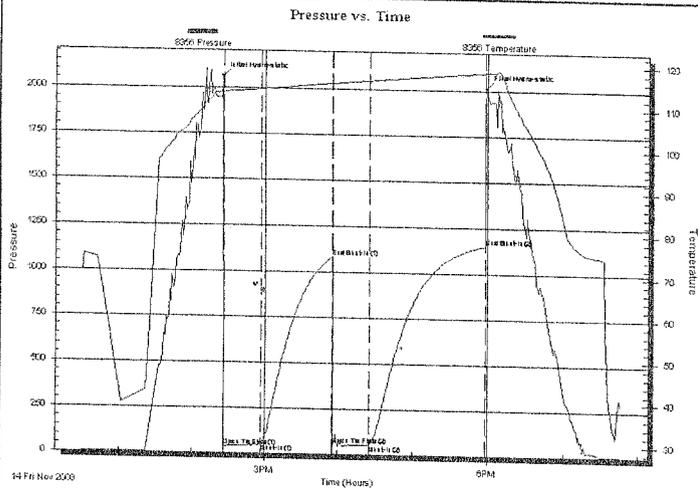
Serial #: 8356

Inside

Press@RunDepth: 52.70 psig @ 4021.00 ft (KB)
Start Date: 2008.11.14 End Date: 2008.11.14
Start Time: 12:30:05 End Time: 19:46:59

Capacity: 7000.00 psig
Last Calib.: 2008.11.15
Time On Btm: 2008.11.14 @ 14:25:30
Time Off Btm: 2008.11.14 @ 17:58:59

TEST COMMENT: IF: Weak blow built to 3/4in. over 30mins.
IS: No blow back.
FF: No blow over 30mins.
FSI: No blow back.



PRESSURE SUMMARY

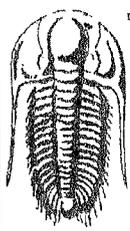
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2064.25	113.29	Initial Hydro-static
1	36.51	113.12	Open To Flow (1)
32	49.08	113.97	Shut-In(1)
90	1082.70	115.55	End Shut-In(1)
91	52.38	115.39	Open To Flow(2)
120	52.70	116.27	Shut-In(2)
213	1149.29	118.36	End Shut-In(2)
214	2013.22	118.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud	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.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33378 **DST#: 4**
Test Start: 2008.11.14 @ 00:30:00

Tool Information

Drill Pipe:	Length: 3444.00 ft	Diameter: 3.80 inches	Volume: 48.31 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 40000.00 lb
Drill Collar:	Length: 546.53 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 51.00 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	21.53 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	3992.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	130.00 ft			
Tool Length:	153.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

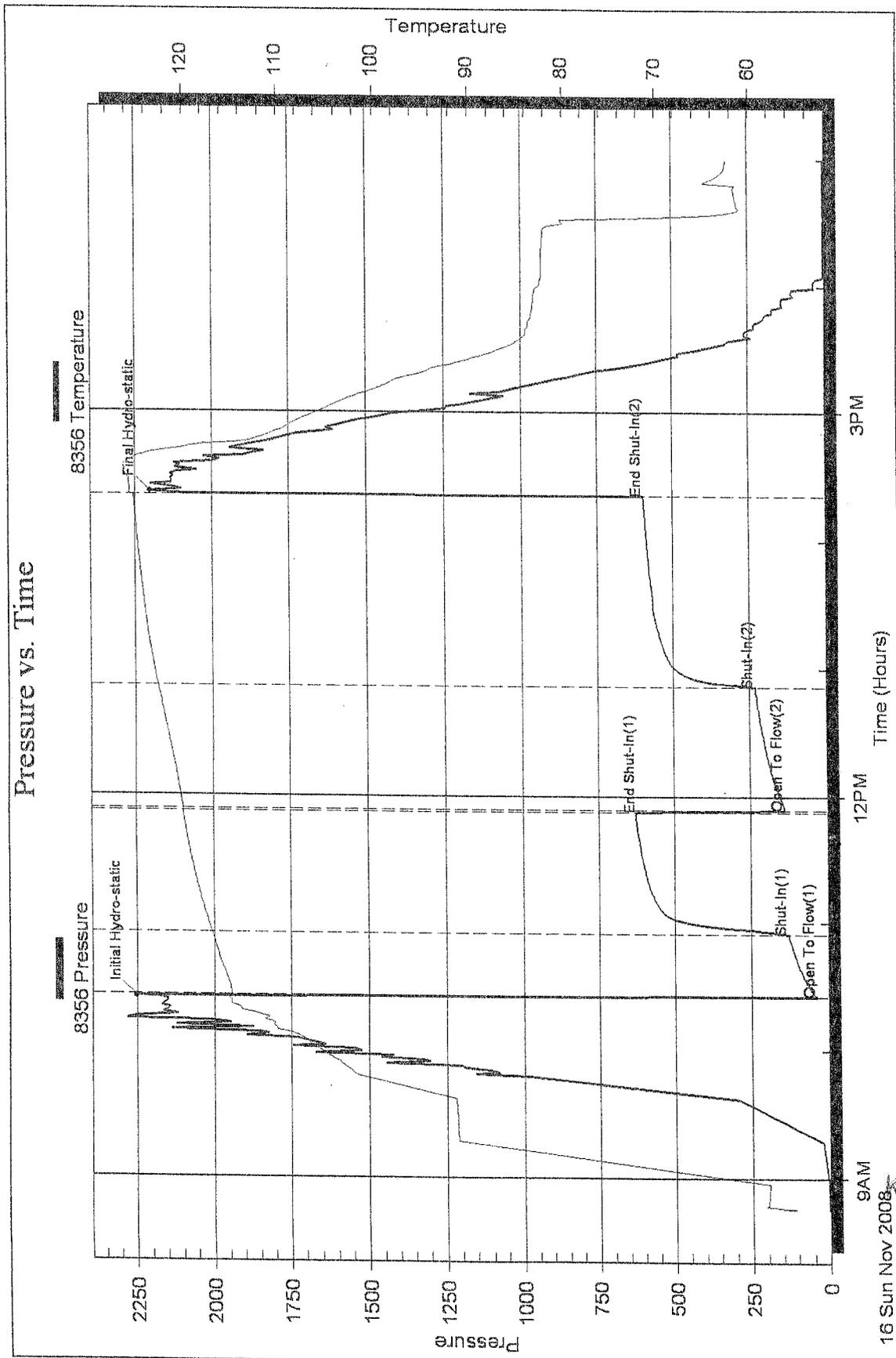
Tool Description

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

Shut In Tool	5.00			3974.00	
Hydraulic tool	5.00			3979.00	
Safety Joint	3.00			3982.00	
Packer	5.00			3987.00	23.00 Bottom Of Top Packer
Packer	5.00			3992.00	
Stubb	1.00			3993.00	
Perforations	27.00			4020.00	
Change Over Sub	1.00			4021.00	
Recorder	0.00	8166	Inside	4021.00	
Recorder	0.00	8356	Inside	4021.00	
Blank Spacing	93.00			4114.00	
Change Over Sub	1.00			4115.00	
Perforations	4.00			4119.00	
Bullnose	3.00			4122.00	130.00 Bottom Packers & Anchor
Total Tool Length:	153.00				

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Pressure vs. Time



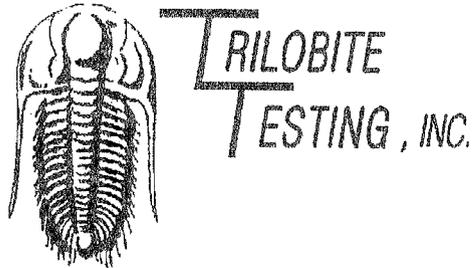
3PM

12PM

9AM

16 Sun Nov 2008

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DRILL STEM TEST REPORT

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

250 N. Water
Ste. 300
Wichita Ks. 67202

ATTN: Brad Rine

21 9s27w Sheridan Ks

Kenalwhit # 1-21

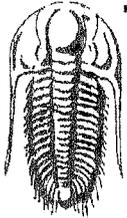
Start Date: 2008.11.16 @ 08:45:00

End Date: 2008.11.16 @ 17:00:00

Job Ticket #: 33379 DST #: 5

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks

Job Ticket: 33379 DST#: 5

Test Start: 2008.11.16 @ 08:45:00

Tool Information

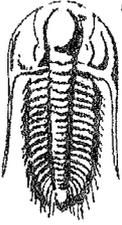
Drill Pipe:	Length: 3785.00 ft	Diameter: 3.80 inches	Volume: 53.09 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 38000.00 lb
Drill Collar:	Length: 546.53 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 110000.0 lb
			Total Volume: 55.78 bbl	Tool Chased 4.00 ft
Drill Pipe Above KB:	6.53 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4348.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	80.00 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			4330.00	
Hydraulic tool	5.00			4335.00	
Safety Joint	3.00			4338.00	
Packer	5.00			4343.00	23.00 Bottom Of Top Packer
Packer	5.00			4348.00	
Stubb	1.00			4349.00	
Perforations	17.00			4366.00	
Change Over Sub	1.00			4367.00	
Recorder	0.00	8166	Inside	4367.00	
Recorder	0.00	8356	Inside	4367.00	
Blank Spacing	30.00			4397.00	
Change Over Sub	1.00			4398.00	
Perforations	4.00			4402.00	
Bullnose	3.00			4405.00	57.00 Bottom Packers & Anchor

Total Tool Length: 80.00

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. INC.

Kenalwhit # 1-21

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

21 9s27w Sheridan Ks
Job Ticket: 33379 DST#: 5
Test Start: 2008.11.16 @ 08:45:00

Mud and Cushion Information

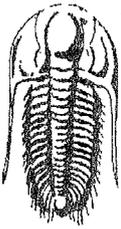
Mud Type: Gel Chem *	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	gom-10%g20%o60%m	0.300
120.00	gmo-34%g30%m36%o	0.590
182.00	gmo-30%g30%m40%o	0.895
122.00	gmo-10%g25%m65%o	0.600
61.00	go-20%g80%o	0.300

Total Length: 546.00 ft Total Volume: 2.685 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. INC.

250 N. Water
Ste. 300
Wichita Ks. 67202
ATTN: Brad Rine

Kenalwhit # 1-21

21 9s27w Sheridan Ks

Job Ticket: 33379

DST#: 5

Test Start: 2008.11.16 @ 08:45:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:25:30

Time Test Ended: 17:00:00

Interval: **4348.00 ft (KB) To 4405.00 ft (KB) (TVD)**

Total Depth: 4405.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 30

Reference Elevations: 2745.00 ft (KB)

2740.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **8356** Inside

Press@RunDepth: 231.86 psig @ 4367.00 ft (KB)

Start Date: 2008.11.16 End Date: 2008.11.16

Start Time: 08:45:05 End Time: 16:59:59

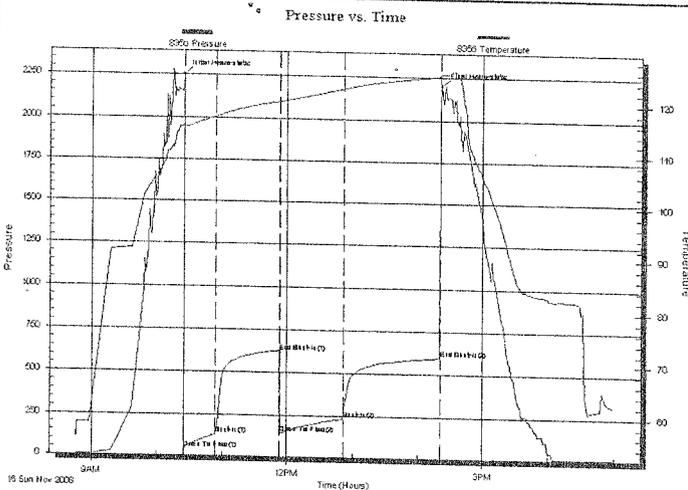
Capacity: 7000.00 psig

Last Calib.: 2008.11.16

Time On Btm: 2008.11.16 @ 10:25:00

Time Off Btm: 2008.11.16 @ 14:22:29

TEST COMMENT: IF: Fair blow built to 8in. over 30mins
IS: Weak blow back, surface.
FF: Fair blow built to B.O.B in 35mins.
FS: Weak blow back, built to 3/4in. over 90mins.



PRESSURE SUMMARY

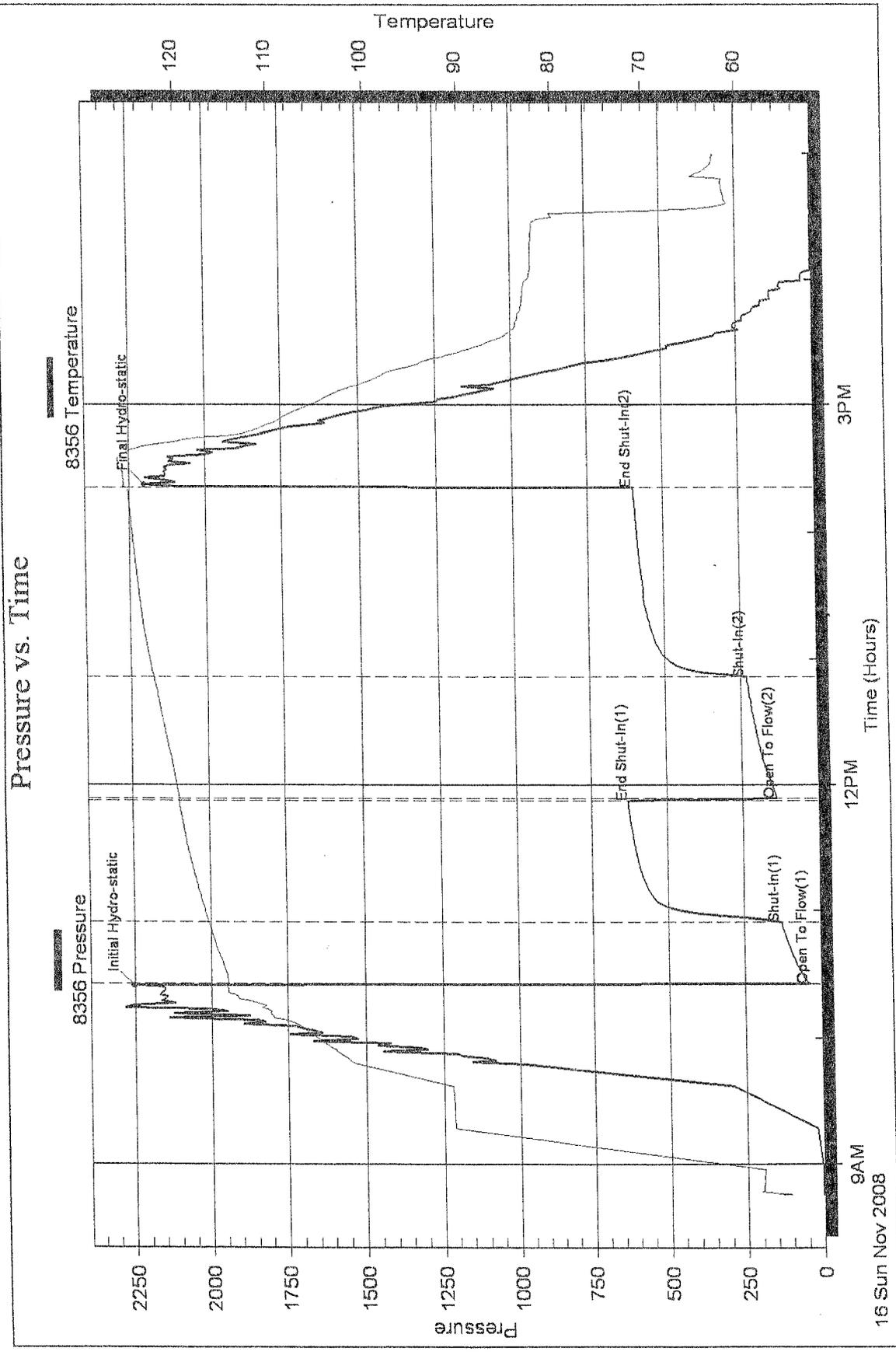
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2253.69	115.67	Initial Hydro-static
1	38.45	115.16	Open To Flow (1)
30	129.66	117.13	Shut-In(1)
88	622.30	120.14	End Shut-In(1)
89	139.29	120.10	Open To Flow (2)
146	231.86	122.64	Shut-In(2)
236	596.69	125.23	End Shut-In(2)
238	2201.53	125.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (tbl)
61.00	gom-10%g20%o60%m	0.30
120.00	gmo-34%g30%m36%o	0.59
182.00	gmo-30%g30%m40%o	0.90
122.00	gmo-10%g25%m65%o	0.60
61.00	go-20%g80%o	0.30

Gas Rates

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



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