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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichita, Ks 67202

CONFIDENTIAL
APR 05 2009
man
KCC

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.06 @ 09:01:22

End Date: 2009.01.06 @ 16:27:22

Job Ticket #: 34934 DST #: 1

API: 15-179-21219

KANSAS CORPORATION COMMISSION

MAY 05 2009

RECEIVED

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling

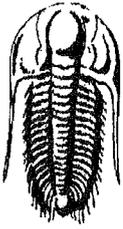
Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 1

Toronto-LKC "C"

2009.01.06



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling

250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21

21-9s27w Sheridan KS

Job Ticket: 34934 DST#: 1

Test Start: 2009.01.06 @ 09:01:22

GENERAL INFORMATION:

Formation: **Toronto-LKC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:07:52
Time Test Ended: 16:27:22

Test Type: Conventional Bottom Hole
Tester: Tyson Flax
Unit No: 44

Interval: **3841.00 ft (KB) To 3898.00 ft (KB) (TVD)**
Total Depth: 3898.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2736.00 ft (KB)
2731.00 ft (CF)
KB to GR/CF: 5.00 ft

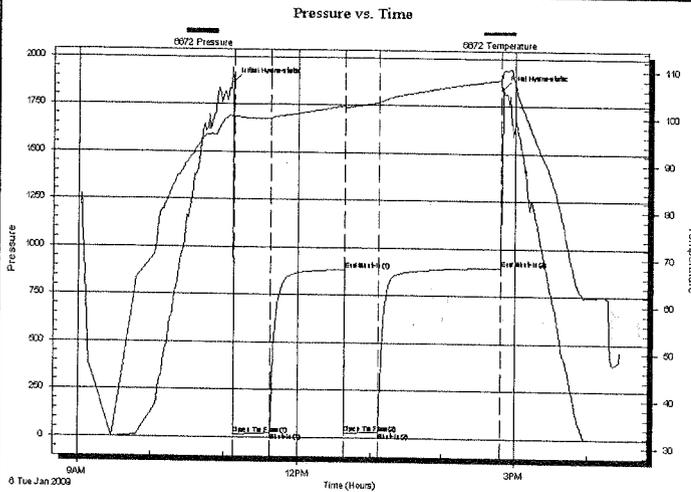
Serial #: 6672

Inside

Press@RunDepth: 30.81 psig @ 3848.00 ft (KB)
Start Date: 2009.01.06 End Date: 2009.01.06
Start Time: 09:01:23 End Time: 16:27:22

Capacity: 7000.00 psig
Last Calib.: 2009.01.06
Time On Btm: 2009.01.06 @ 11:07:22
Time Off Btm: 2009.01.06 @ 14:49:37

TEST COMMENT: IFP-Weak surface blow built to 2"
ISI-no blow back
FFP-Very weak surface blow died in 25 min
FSI-no blow back



PRESSURE SUMMARY

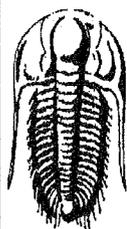
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1867.49	100.59	Initial Hydro-static
1	14.28	99.72	Open To Flow (1)
30	23.32	99.66	Shut-In(1)
91	884.03	102.45	End Shut-In(1)
92	23.97	101.95	Open To Flow (2)
119	30.81	103.18	Shut-In(2)
221	900.05	108.19	End Shut-In(2)
223	1842.83	110.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/scum of oil	0.15

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34934 **DST#: 1**
Test Start: 2009.01.06 @ 09:01:22

Tool Information

Drill Pipe:	Length: 3794.00 ft	Diameter: 3.82 inches	Volume: 53.78 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 53.93 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3841.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3822.00		
Change Over Sub	1.00			3823.00		
Hydraulic tool	5.00			3828.00		
Safety Joint	3.00			3831.00		
Packer	5.00			3836.00	24.00	Bottom Of Top Packer
Packer	5.00			3841.00		
Stubb	1.00			3842.00		
Perforations	5.00			3847.00		
Change Over Sub	1.00			3848.00		
Recorder	0.00	6672	Inside	3848.00		
Recorder	0.00	6669	Inside	3848.00		
Blank Spacing	31.00			3879.00		
Change Over Sub	1.00			3880.00		
Perforations	15.00			3895.00		
Bullnose	3.00			3898.00	57.00	Bottom Packers & Anchor

Total Tool Length: 81.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

21-9s27w Sheridan KS
Job Ticket: 34934 **DST#: 1**
Test Start: 2009.01.06 @ 09:01:22

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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.17 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: inches			

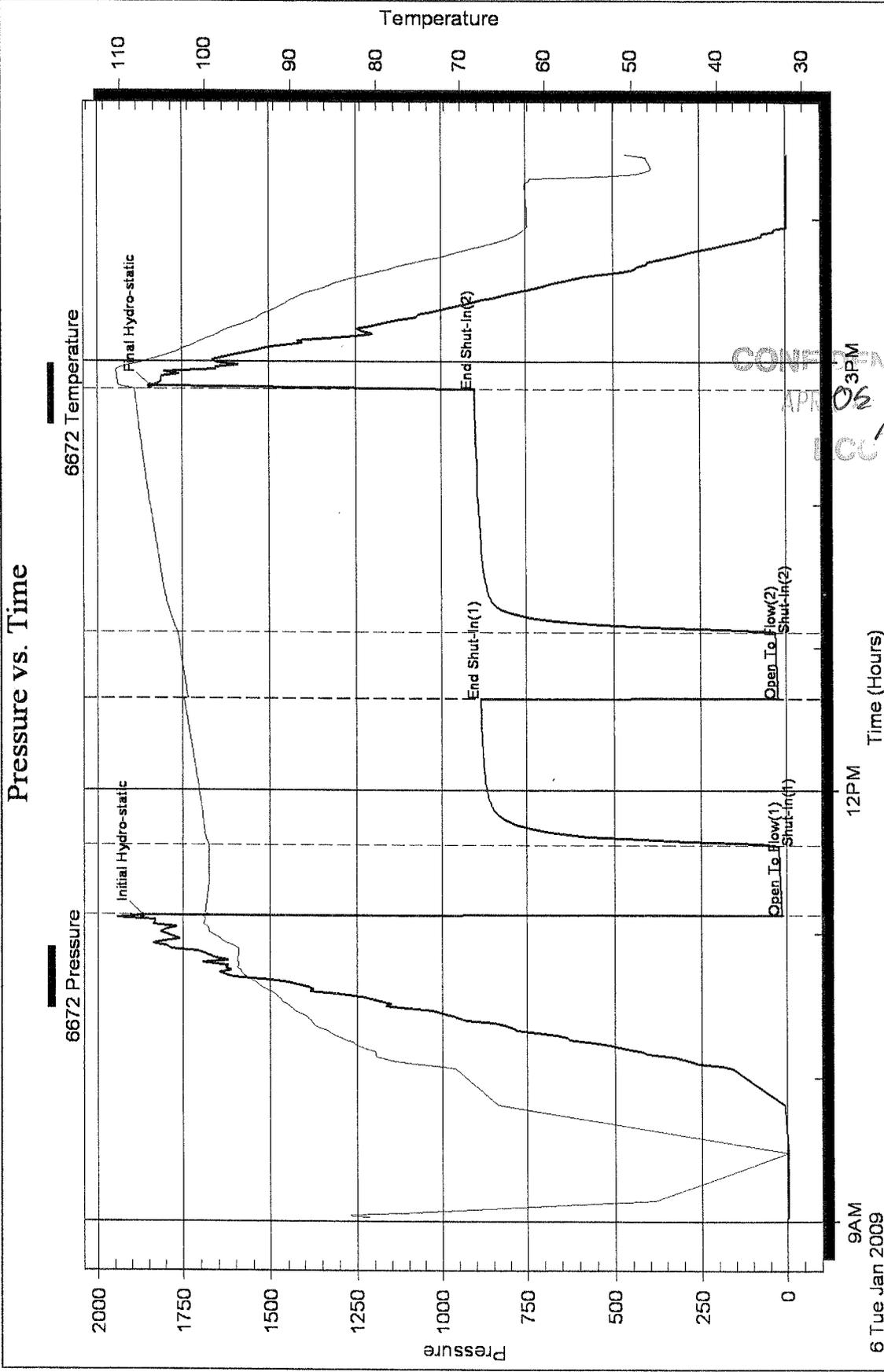
Recovery Information

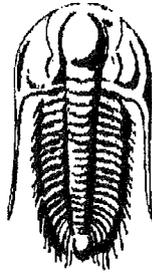
Recovery Table

Length ft	Description	Volume bbl
30.00	Mud w /scum of oil	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:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichitra, Ks 67202

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.07 @ 00:17:51

End Date: 2009.01.07 @ 07:50:06

Job Ticket #: 34935 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling

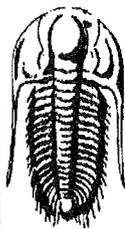
Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 2

LKC "C-D"

2009.01.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34935 **DST#: 2**
Test Start: 2009.01.07 @ 00:17:51

Tool Information

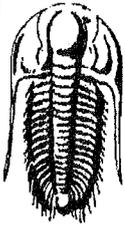
Drill Pipe:	Length: 3857.00 ft	Diameter: 3.82 inches	Volume: 54.67 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3897.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3878.00	
Change Over Sub	1.00			3879.00	
Hydraulic tool	5.00			3884.00	
Safety Joint	3.00			3887.00	
Packer	5.00			3892.00	24.00 Bottom Of Top Packer
Packer	5.00			3897.00	
Stubb	1.00			3898.00	
Perforations	5.00			3903.00	
Change Over Sub	1.00			3904.00	
Recorder	0.00	6672	Inside	3904.00	
Recorder	0.00	6669	Inside	3904.00	
Blank Spacing	29.00			3933.00	
Change Over Sub	1.00			3934.00	
Perforations	1.00			3935.00	
Bullnose	3.00			3938.00	41.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water
Suite 300

21-9s27w Sheridan KS

Wichitra, Ks 67202

Job Ticket: 34935

DST#: 2

ATTN: Paul Gnzelman

Test Start: 2009.01.07 @ 00:17:51

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	HOCM 40%O,60%M	0.360

Total Length: 45.00 ft

Total Volume: 0.360 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

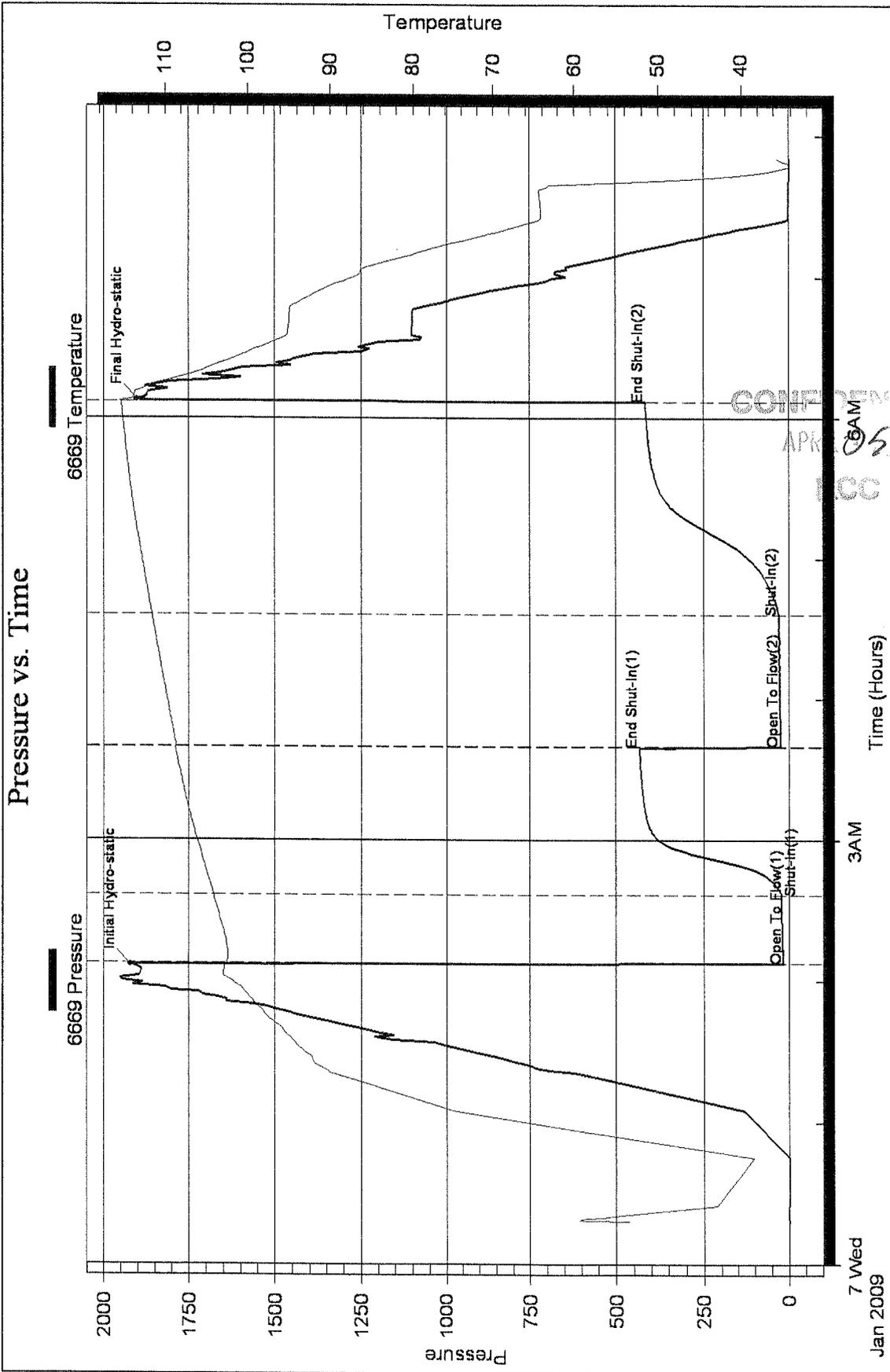
Serial #:

Laboratory Name:

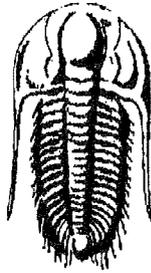
Laboratory Location:

Recovery Comments:

Pressure vs. Time



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**TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichitra, Ks 67202

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.07 @ 16:20:19

End Date: 2009.01.07 @ 18:21:48

Job Ticket #: 34936 DST #: 3

KANSAS CORPORATION COMMISSION

MAY 05 2009
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Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling

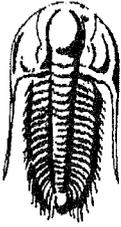
Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 3

LKC"E-G"

2009.01.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

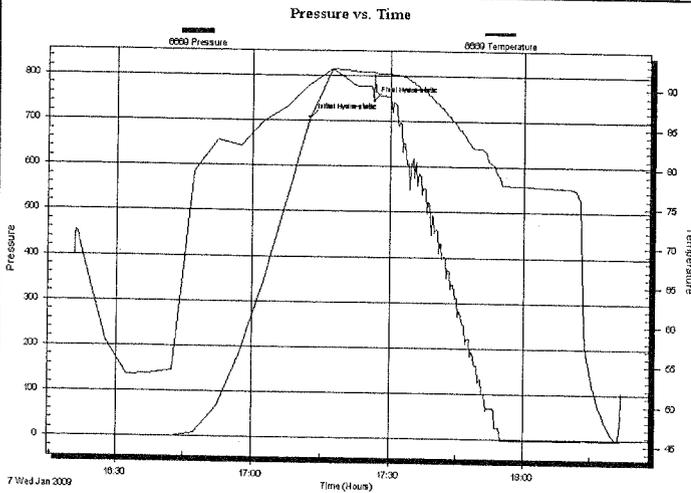
Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34936 DST#: 3
Test Start: 2009.01.07 @ 16:20:19

GENERAL INFORMATION:

Formation: **LKC"E-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened:
Time Test Ended: 18:21:48
Interval: **3938.00 ft (KB) To 3992.00 ft (KB) (TVD)**
Total Depth: 3898.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Tyson Flax
Unit No: 44
Reference Elevations: 2736.00 ft (KB)
2731.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6669 Inside
Press@RunDepth: psig @ 3942.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.07 End Date: 2009.01.07 Last Calib.: 2009.01.07
Start Time: 16:20:19 End Time: 18:21:48 Time On Btm: 2009.01.07 @ 17:12:18
Time Off Btm: 2009.01.07 @ 17:26:18

TEST COMMENT: IFP-
ISI-
FFP-
FSI-



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	707.26	90.50	Initial Hydro-static
14	744.34	92.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34936 **DST#: 3**
Test Start: 2009.01.07 @ 16:20:19

Tool Information

Drill Pipe:	Length: 3887.00 ft	Diameter: 3.82 inches	Volume: 55.10 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: lb
		Total Volume: 55.25 bbl		Tool Chased: ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial lb
Depth to Top Packer:	3938.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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APR 06 2009
mom

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3919.00	
Change Over Sub	1.00			3920.00	
Hydraulic tool	5.00			3925.00	
Safety Joint	3.00			3928.00	
Packer	5.00			3933.00	24.00 Bottom Of Top Packer
Packer	5.00			3938.00	
Stubb	1.00			3939.00	
Perforations	2.00			3941.00	
Change Over Sub	1.00			3942.00	
Recorder	0.00	6672	Inside	3942.00	
Recorder	0.00	6669	Inside	3942.00	
Blank Spacing	31.00			3973.00	
Change Over Sub	1.00			3974.00	
Perforations	15.00			3989.00	
Bullnose	3.00			3992.00	54.00 Bottom Packers & Anchor

Total Tool Length: 78.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water

21-9s27w Sheridan KS

Suite 300

Wichitra, Ks 67202

Job Ticket: 34936

DST#: 3

ATTN: Paul Gnzelman

Test Start: 2009.01.07 @ 16:20:19

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: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6669

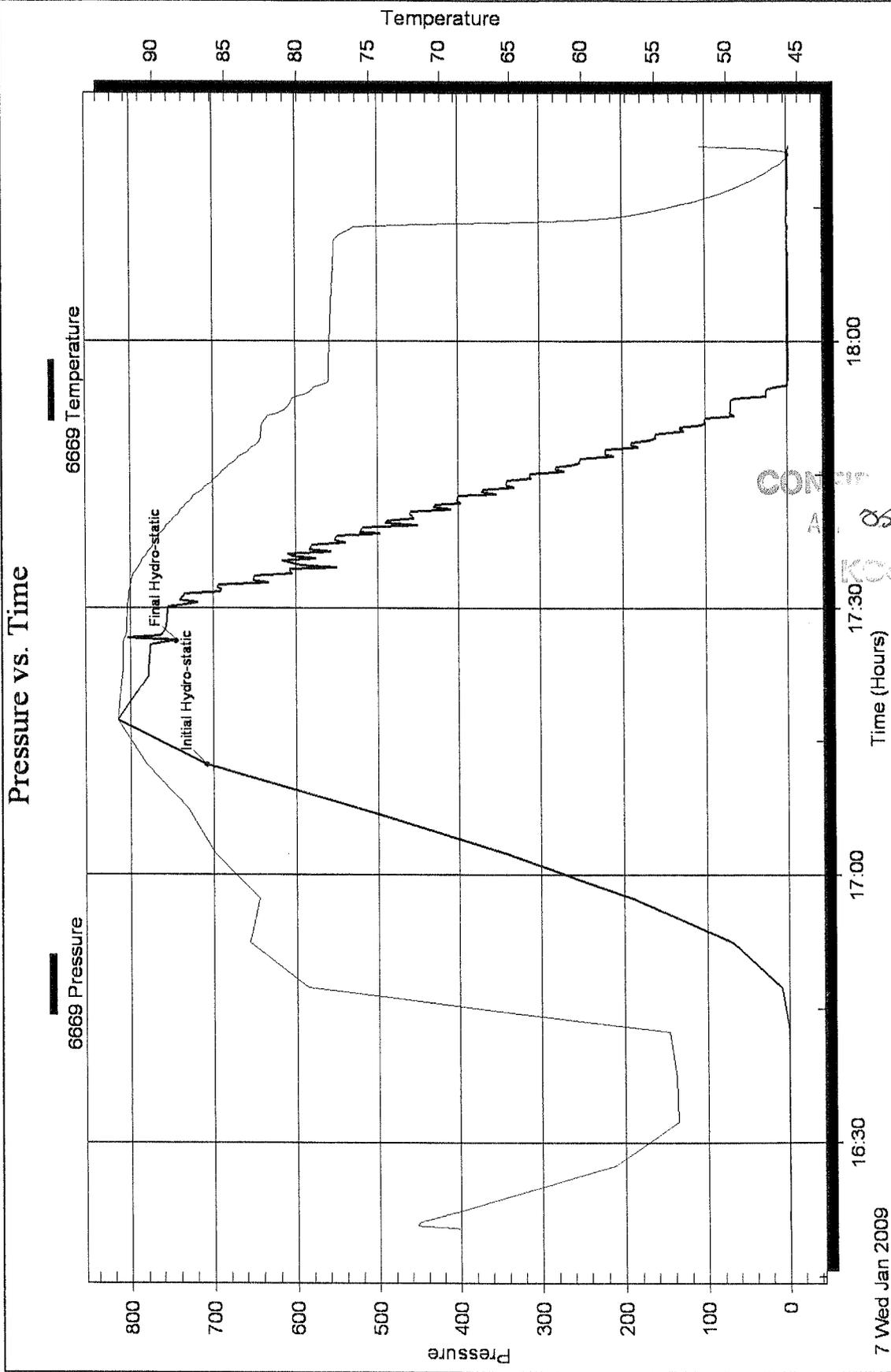
Inside

Murfin Drilling

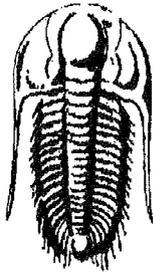
21-9s27w Sheridan KS

DST Test Number: 3

Pressure vs. Time



7 Wed Jan 2009



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**
250 N Water
Suite 300
Wichita, Ks 67202

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.07 @ 20:29:41
End Date: 2009.01.08 @ 04:19:56
Job Ticket #: 34937 DST #: 4

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34937 **DST#: 4**
Test Start: 2009.01.07 @ 20:29:41

Tool Information

Drill Pipe:	Length: 3887.00 ft	Diameter: 3.82 inches	Volume: 55.10 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 55.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3938.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	83.00 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			3914.00		
Change Over Sub	1.00			3915.00		
Hydraulic tool	5.00			3920.00		
Jars	5.00			3925.00		
Safety Joint	3.00			3928.00		
Packer	5.00			3933.00	29.00	Bottom Of Top Packer
Packer	5.00			3938.00		
Stubb	1.00			3939.00		
Perforations	2.00			3941.00		
Change Over Sub	1.00			3942.00		
Recorder	0.00	6672	Inside	3942.00		
Recorder	0.00	6669	Inside	3942.00		
Blank Spacing	31.00			3973.00		
Change Over Sub	1.00			3974.00		
Perforations	15.00			3989.00		
Bullnose	3.00			3992.00	54.00	Bottom Packers & Anchor
Total Tool Length:	83.00					

APR 05 2009
mew
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

21-9s27w Sheridan KS
Job Ticket: 34937 **DST#: 4**
Test Start: 2009.01.07 @ 20:29:41

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:	42000 ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: inches			

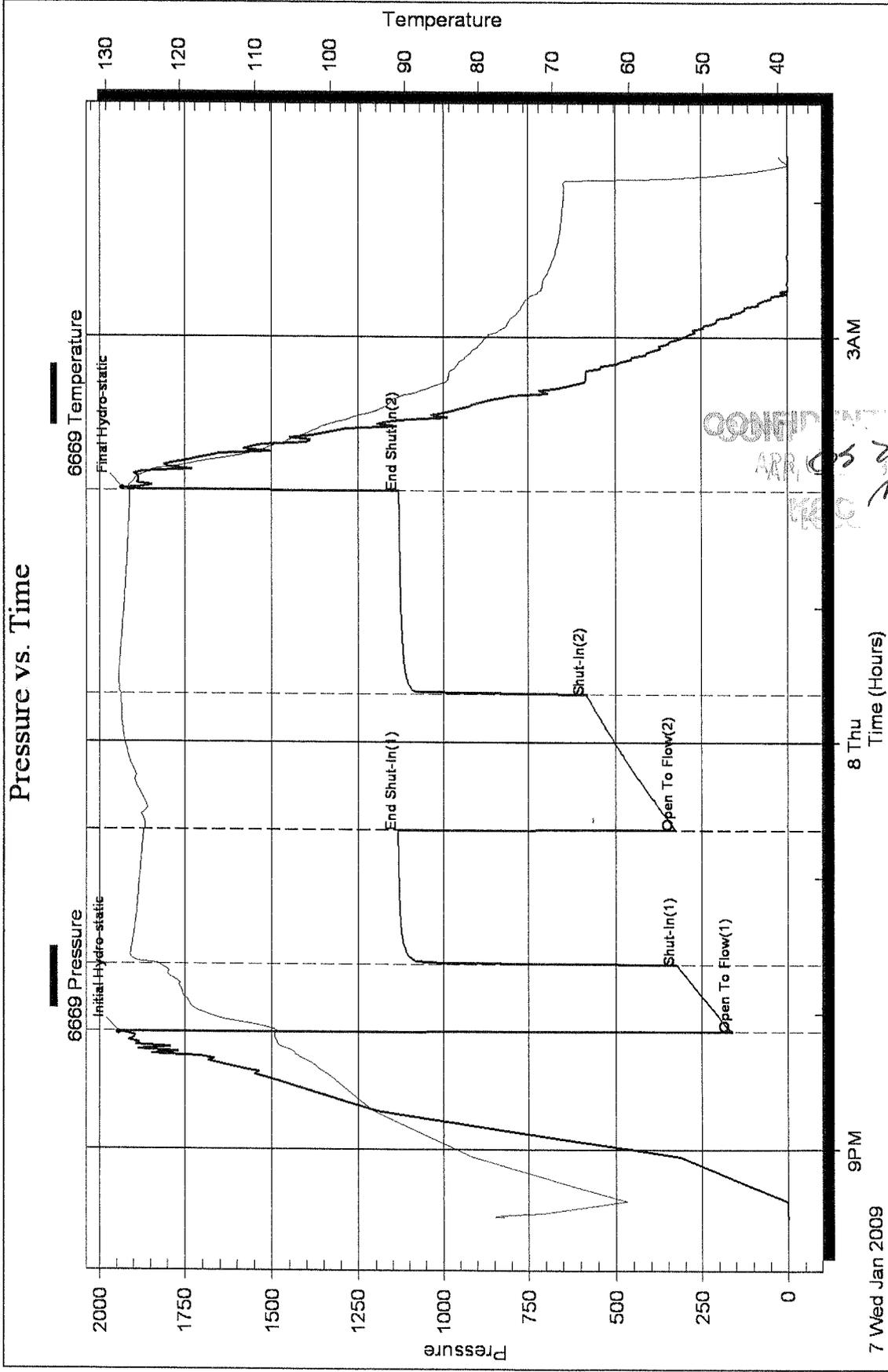
Recovery Information

Recovery Table

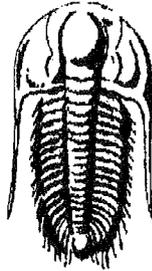
Length ft	Description	Volume bbl
870.00	MW 90%W,10%M	12.055
120.00	MW 70%W,30%M	1.701
180.00	Mud	2.552

Total Length: 1170.00 ft Total Volume: 16.308 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW .22 @ 55F chlorides 42000 ppm

Pressure vs. Time



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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**
250 N Water
Suite 300
Wichitra, Ks 67202

CONFIDENTIAL
APR 05 2009
KCC mem

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.08 @ 12:15:35
End Date: 2009.01.08 @ 19:18:35
Job Ticket #: 34938 DST #: 5

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

KANSAS CORPORATION COMMISSION

**MAY 05 2009
RECEIVED**

Murfin Drilling

Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 5

LKC"HJ"

2009.01.08



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling
 250 N Water
 Suite 300
 Wichitra, Ks 67202
 ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
 Job Ticket: 34938 **DST#: 5**
 Test Start: 2009.01.08 @ 12:15:35

GENERAL INFORMATION:

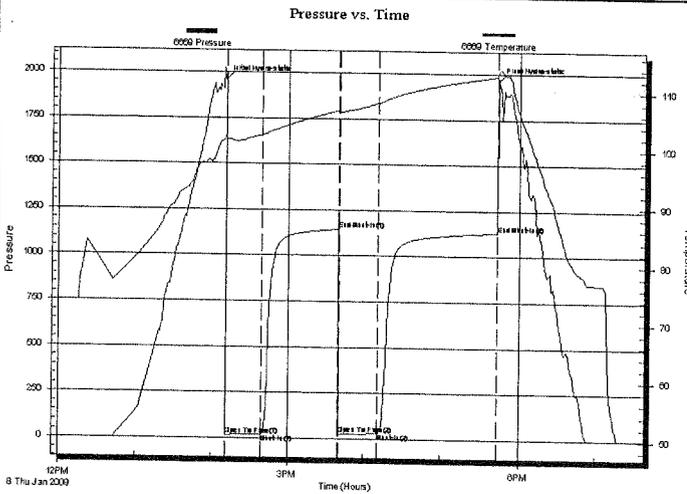
Formation: **LKC"H-I"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:11:05
 Time Test Ended: 19:18:35
 Test Type: Conventional Bottom Hole
 Tester: Tyson Flax
 Unit No: 44
 Interval: **3997.00 ft (KB) To 4042.00 ft (KB) (TVD)**
 Total Depth: 4042.00 ft (KB) (TVD)
 Reference Elevations: 2736.00 ft (KB)
 2731.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good
 KB to GR/CF: 5.00 ft

Serial #: 6669

Inside

Press@RunDepth: 30.23 psig @ 4002.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2009.01.08 End Date: 2009.01.08 Last Calib.: 2009.01.08
 Start Time: 12:15:36 End Time: 19:18:35 Time On Btm: 2009.01.08 @ 14:10:35
 Time Off Btm: 2009.01.08 @ 17:43:50

TEST COMMENT: IFP-Weak surface blow built to 1"
 IS- no blow back
 FFP- no blow
 no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1960.26	102.31	Initial Hydro-static
1	17.02	101.93	Open To Flow (1)
29	23.59	102.44	Shut-In (1)
90	1144.11	106.74	End Shut-In (1)
90	27.18	106.41	Open To Flow (2)
121	30.23	108.08	Shut-In (2)
213	1129.63	112.76	End Shut-In (2)
214	1964.38	113.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34938 **DST#: 5**
Test Start: 2009.01.08 @ 12:15:35

Tool Information

Drill Pipe:	Length: 3948.00 ft	Diameter: 3.82 inches	Volume: 55.96 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3997.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	45.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3973.00	
Change Over Sub	1.00			3974.00	
Hydraulic tool	5.00			3979.00	
Safety Joint	3.00			3982.00	
Jars	5.00			3987.00	
Packer	5.00			3992.00	29.00 Bottom Of Top Packer
Packer	5.00			3997.00	
Stubb	1.00			3998.00	
Perforations	3.00			4001.00	
Change Over Sub	1.00			4002.00	
Recorder	0.00	6672	Inside	4002.00	
Recorder	0.00	6669	Inside	4002.00	
Blank Spacing	31.00			4033.00	
Change Over Sub	1.00			4034.00	
Perforations	5.00			4039.00	
Bullnose	3.00			4042.00	45.00 Bottom Packers & Anchor
Total Tool Length:	74.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water
Suite 300
Wichitra, Ks 67202
ATTN: Paul Gnzelman

21-9s27w Sheridan KS
Job Ticket: 34938 **DST#: 5**
Test Start: 2009.01.08 @ 12:15:35

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: 6.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud	0.074

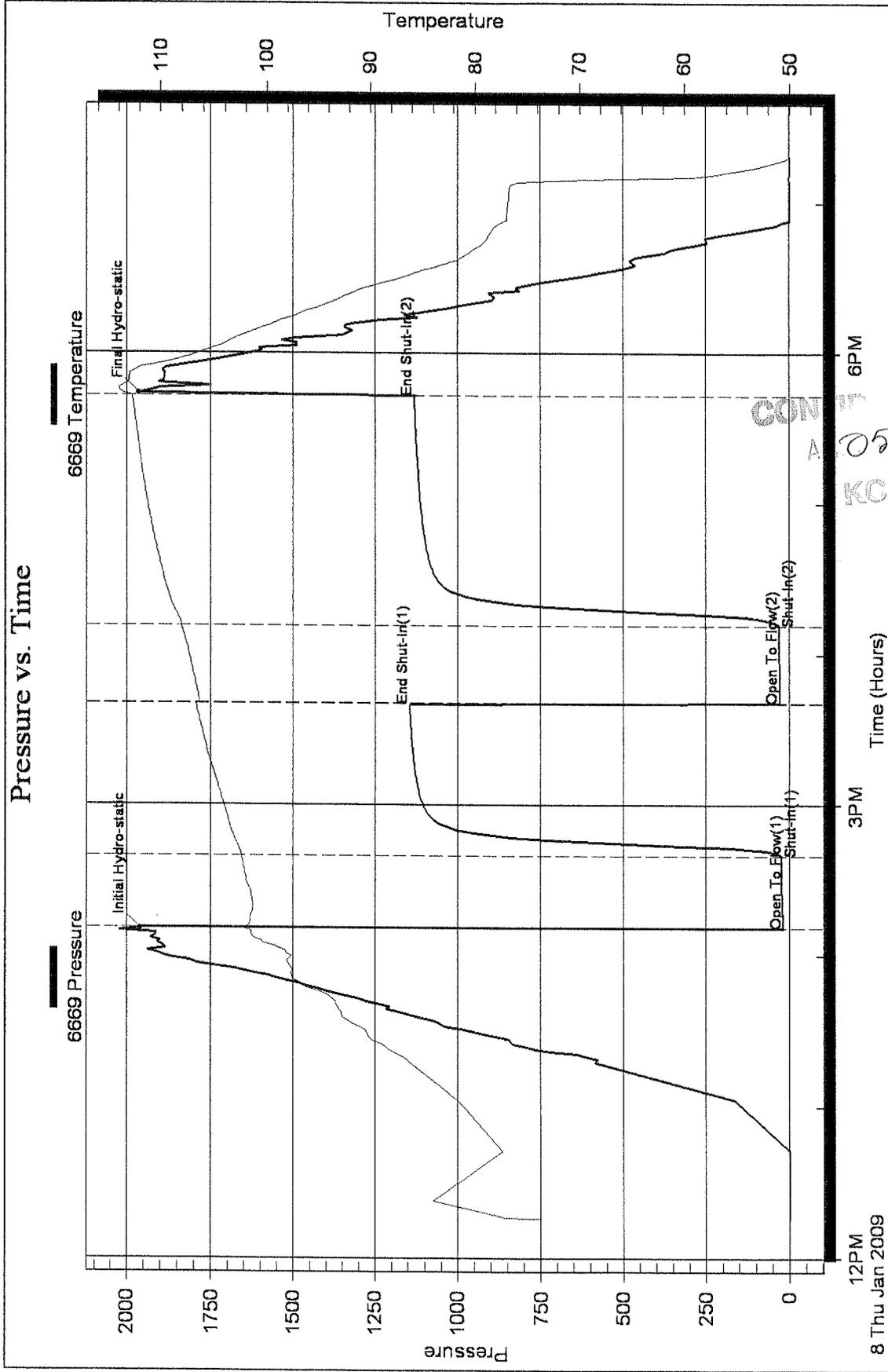
Total Length: 15.00 ft Total Volume: 0.074 bbl

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

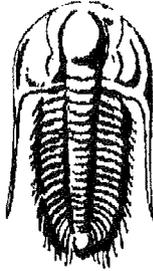
Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



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 A 05 0009
 KCC
 MVM



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichitra, Ks 67202

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.09 @ 05:04:18

End Date: 2009.01.09 @ 09:15:18

Job Ticket #: 34939 DST #: 6

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APR 07 2009
KCC *man*

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APR 07 2009
KCC

KANSAS CORPORATION COMMISSION

**MAY 05 2009
RECEIVED**

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

Murfin Drilling

Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 6

LKC"J-L"

2009.01.09



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N Water
 Suite 300
 Wichita, Ks 67202
 ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
 Job Ticket: 34939 **DST#: 6**
 Test Start: 2009.01.09 @ 05:04:18

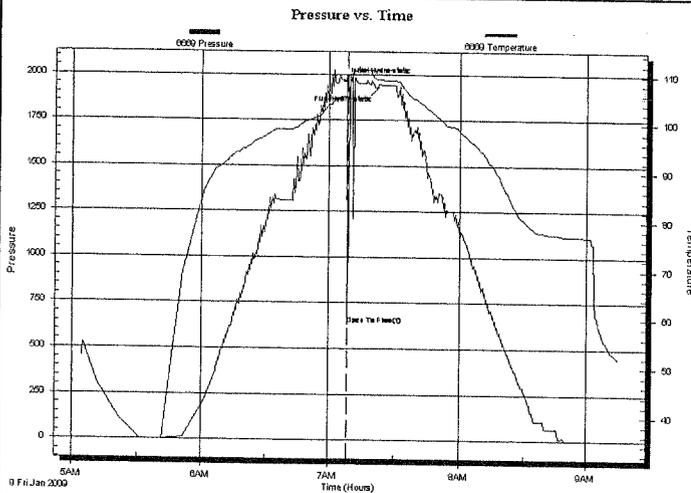
GENERAL INFORMATION:

Formation: **LKC"J-L"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:08:18
 Time Test Ended: 09:15:18
 Interval: **4040.00 ft (KB) To 4107.00 ft (KB) (TVD)**
 Total Depth: 4107.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole
 Tester: Tyson Flax
 Unit No: 44
 Reference Elevations: 2736.00 ft (KB)
 2731.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6669 Inside
 Press@RunDepth: psig @ 4047.00 ft (KB)
 Start Date: 2009.01.09 End Date: 2009.01.09
 Start Time: 05:04:19 End Time: 09:15:18
 Capacity: 7000.00 psig
 Last Calib.: 2009.01.09
 Time On Btm: 2009.01.09 @ 07:06:33
 Time Off Btm: 2009.01.09 @ 07:22:03

TEST COMMENT: IFP-Packer failure
 IS-
 FFP-
 FS-



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1963.62	105.65	Initial Hydro-static
2	632.51	105.16	Open To Flow (1)
16	1925.21	109.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34939 **DST#: 6**
Test Start: 2009.01.09 @ 05:04:18

Tool Information

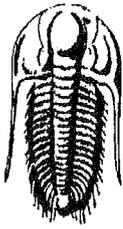
Drill Pipe:	Length: 4013.00 ft	Diameter: 3.82 inches	Volume: 56.89 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 57.04 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial: lb
Depth to Top Packer:	4040.00 ft			Final: lb
Depth to Bottom Packer:	ft			
Interval between Packers:	67.00 ft			
Tool Length:	91.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

CONFIDENTIAL

Tool Description *APR 04 2009 from KCC*

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4021.00	
Change Over Sub	1.00			4022.00	
Hydraulic tool	5.00			4027.00	
Safety Joint	3.00			4030.00	
Packer	5.00			4035.00	24.00 Bottom Of Top Packer
Packer	5.00			4040.00	
Stubb	1.00			4041.00	
Perforations	5.00			4046.00	
Change Over Sub	1.00			4047.00	
Recorder	0.00	6672	Inside	4047.00	
Recorder	0.00	6669	Inside	4047.00	
Blank Spacing	31.00			4078.00	
Change Over Sub	1.00			4079.00	
Perforations	25.00			4104.00	
Bullnose	3.00			4107.00	67.00 Bottom Packers & Anchor
Total Tool Length:	91.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34939 DST#: 6
Test Start: 2009.01.09 @ 05:04:18

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: 6.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

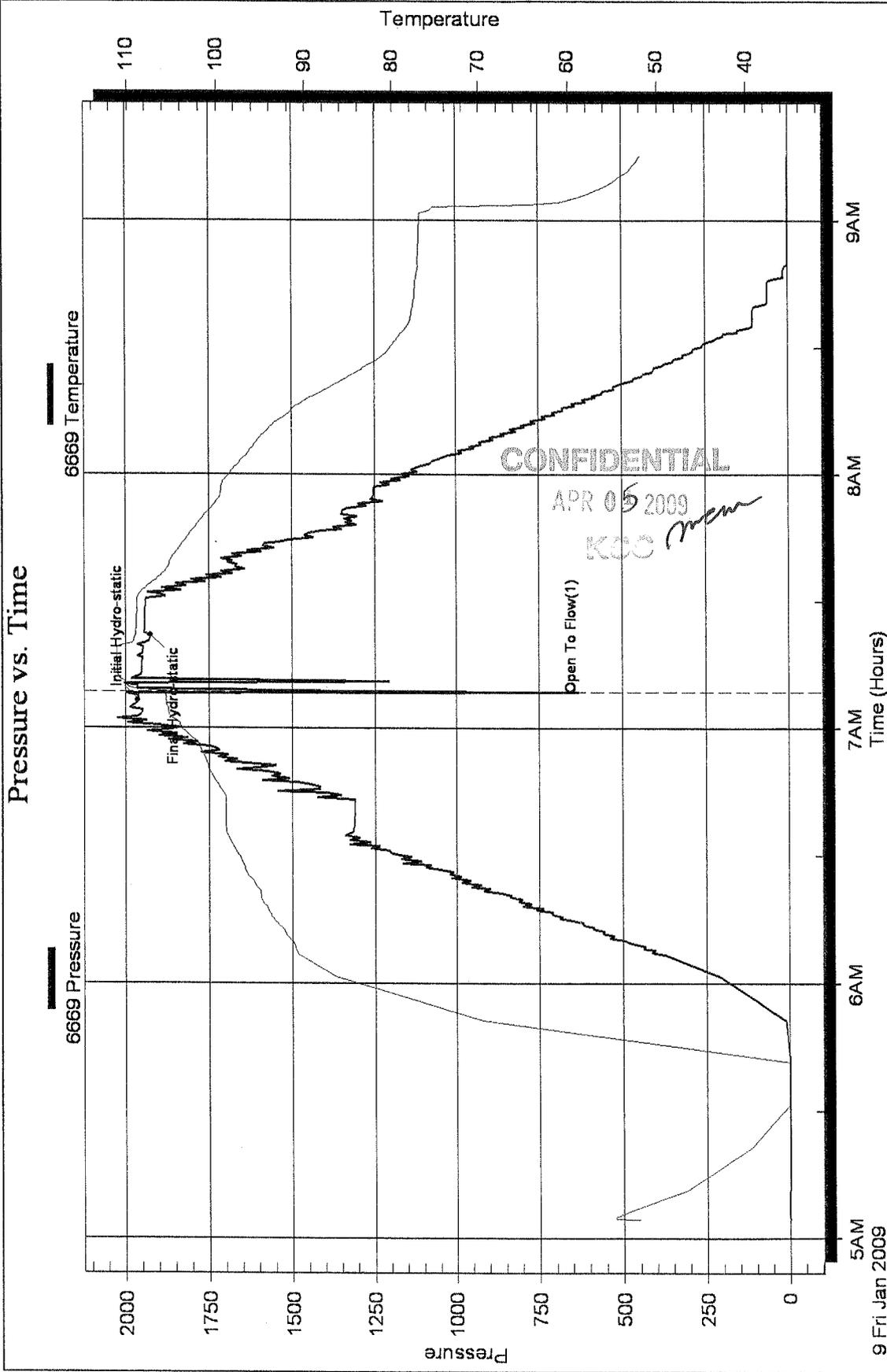
Total Length: ft Total Volume: bbl

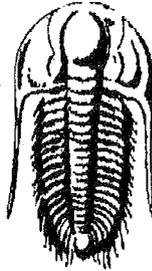
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichitra, Ks 67202

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APR 05 2009
KCC *mem*

ATTN: Paul Gnzelman

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.09 @ 09:24:57

End Date: 2009.01.09 @ 16:14:42

Job Ticket #: 34940 DST #: 7

KANSAS CORPORATION COMMISSION

MAY 05 2009
RECEIVED

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

Murfin Drilling

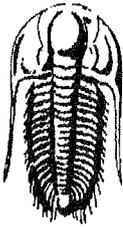
Albert Whitmer #1-21

21-9s27w Sheridan KS

DST # 7

LKC "I-J"

2009.01.09



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

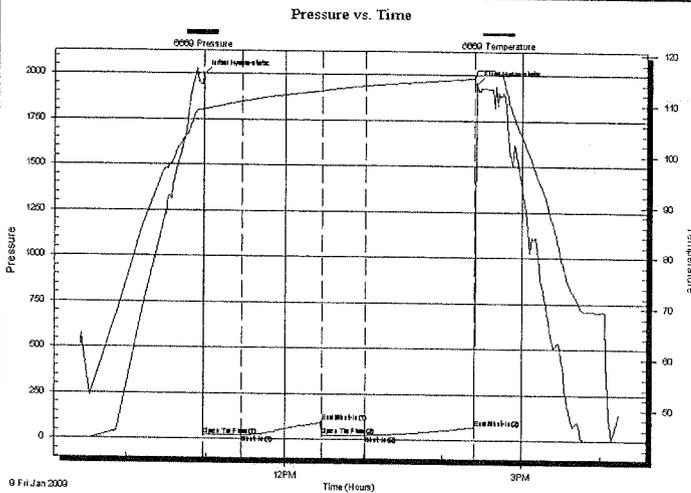
Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34940 **DST#: 7**
Test Start: 2009.01.09 @ 09:24:57

GENERAL INFORMATION:

Formation: **LKC" I-J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:58:27
Time Test Ended: 16:14:42
Interval: **4022.00 ft (KB) To 4107.00 ft (KB) (TVD)**
Total Depth: 4107.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Tyson Flax
Unit No: 44
Reference Elevations: 2736.00 ft (KB)
2731.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6669 Inside
Press@RunDepth: 21.42 psig @ 4026.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.09 End Date: 2009.01.09 Last Calib.: 2009.01.09
Start Time: 09:24:58 End Time: 16:14:42 Time On Btm: 2009.01.09 @ 10:57:57
Time Off Btm: 2009.01.09 @ 14:25:42

TEST COMMENT: IFP-Weak surface blow built to 1/2"
ISI-no blow back
FFP-no blow
FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1999.88	109.32	Initial Hydro-static
1	19.27	109.07	Open To Flow (1)
29	20.27	110.56	Shut-In(1)
90	93.49	112.72	End Shut-In(1)
90	20.85	112.67	Open To Flow(2)
123	21.42	113.74	Shut-In(2)
207	71.81	115.33	End Shut-In(2)
208	1952.08	116.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34940 **DST#: 7**
Test Start: 2009.01.09 @ 09:24:57

Tool Information

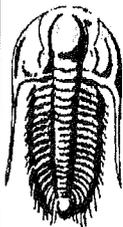
Drill Pipe:	Length: 3983.00 ft	Diameter: 3.82 inches	Volume: 56.46 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4022.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	109.00 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			4003.00	
Change Over Sub	1.00			4004.00	
Hydraulic tool	5.00			4009.00	
Safety Joint	3.00			4012.00	
Packer	5.00			4017.00	24.00 Bottom Of Top Packer
Packer	5.00			4022.00	
Stubb	1.00			4023.00	
Perforations	2.00			4025.00	
Change Over Sub	1.00			4026.00	
Recorder	0.00	6672	Inside	4026.00	
Recorder	0.00	6669	Inside	4026.00	
Blank Spacing	62.00			4088.00	
Change Over Sub	1.00			4089.00	
Perforations	15.00			4104.00	
Bullnose	3.00			4107.00	85.00 Bottom Packers & Anchor

Total Tool Length: 109.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34940 DST#: 7
Test Start: 2009.01.09 @ 09:24:57

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: 6.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: inches			

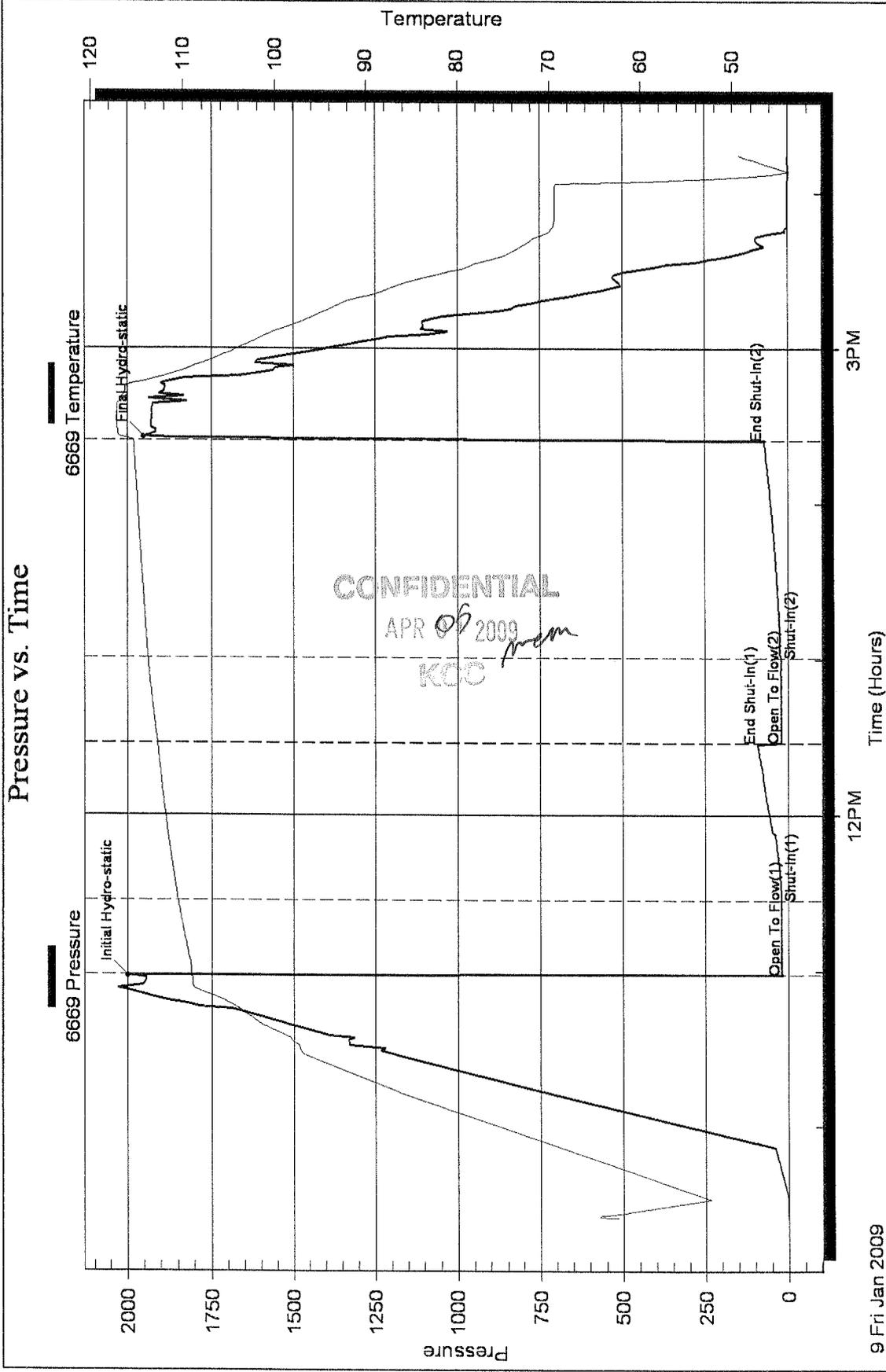
Recovery Information

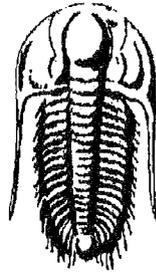
Recovery Table

Length ft	Description	Volume bbl
5.00	Mud	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





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water
Suite 300
Wichita, Ks 67202

ATTN: Paul Gnzelman

CONFIDENTIAL
APR 05 2009
KCC mem

21-9s27w Sheridan KS

Albert Whitmer #1-21

Start Date: 2009.01.10 @ 12:45:05

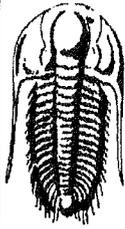
End Date: 2009.01.10 @ 21:19:35

Job Ticket #: 34941 DST #: 8

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
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

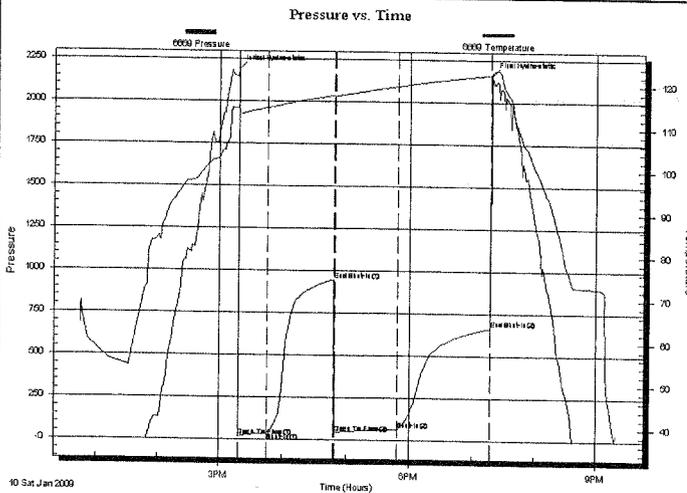
Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34941 **DST#: 8**
Test Start: 2009.01.10 @ 12:45:05

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:18:50
Time Test Ended: 21:19:35
Interval: **4348.00 ft (KB) To 4393.00 ft (KB) (TVD)**
Total Depth: 4393.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Tyson Flax
Unit No: 44
Reference Elevations: 2736.00 ft (KB)
2731.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6669 **Inside**
Press@RunDepth: 64.79 psig @ 4353.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.10 End Date: 2009.01.10 Last Calib.: 2009.01.10
Start Time: 12:45:06 End Time: 21:19:35 Time On Btm: 2009.01.10 @ 15:18:35
Time Off Btm: 2009.01.10 @ 19:18:20

TEST COMMENT: IFP-Weak surface blow built to 2"
ISI-no blow back
FFP-Weak surface blow built to 2.5"
FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2187.69	114.37	Initial Hydro-static
1	18.71	113.84	Open To Flow (1)
28	38.30	114.63	Shut-In (1)
90	945.64	117.54	End Shut-In (1)
91	41.70	117.36	Open To Flow (2)
150	64.79	119.78	Shut-In (2)
239	662.41	122.53	End Shut-In (2)
240	2159.96	122.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbt)
60.00	MCO 40%O,60%M	0.30
55.00	MCO 70%O,30%M	0.27
5.00	CO	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

Albert Whitmer #1-21
21-9s27w Sheridan KS
Job Ticket: 34941 **DST#: 8**
Test Start: 2009.01.10 @ 12:45:05

Tool Information

Drill Pipe:	Length: 4168.00 ft	Diameter: 3.82 inches	Volume: 59.08 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume: 59.97 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4348.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	69.00 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			4329.00	
Change Over Sub	1.00			4330.00	
Hydraulic tool	5.00			4335.00	
Safety Joint	3.00			4338.00	
Packer	5.00			4343.00	24.00 Bottom Of Top Packer
Packer	5.00			4348.00	
Stubb	1.00			4349.00	
Perforations	3.00			4352.00	
Change Over Sub	1.00			4353.00	
Recorder	0.00	6672	Inside	4353.00	
Recorder	0.00	6669	Inside	4353.00	
Blank Spacing	31.00			4384.00	
Change Over Sub	1.00			4385.00	
Perforations	5.00			4390.00	
Bullnose	3.00			4393.00	45.00 Bottom Packers & Anchor

Total Tool Length: 69.00

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APR 05 2009
KCS



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Albert Whitmer #1-21

250 N Water
Suite 300
Wichita, Ks 67202
ATTN: Paul Gnzelman

21-9s27w Sheridan KS
Job Ticket: 34941 **DST#: 8**
Test Start: 2009.01.10 @ 12:45:05

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: 50.00 sec/qt	ft		
Water Loss: 7.19 in ³	Cushion Volume:		
Resistivity: ohm.m	Gas Cushion Type:		
Salinity: 1100.00 ppm	Gas Cushion Pressure:		
Filter Cake: inches	psig		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MCO 40%O,60%M	0.295
55.00	MCO 70%O,30%M	0.270
5.00	CO	0.025

Total Length: 120.00 ft Total Volume: 0.590 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time

