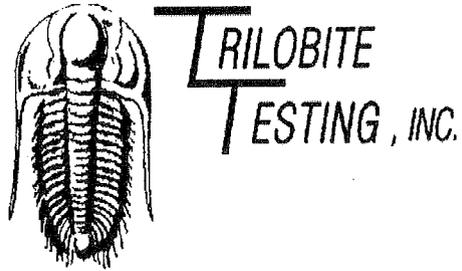


31-12s-19w



DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

117 W Limestone Rd.
Phillipsburg, KS 67661

ATTN: Gator

31-12s-19w/Ellis

Armbrister #7

Start Date: 2006.01.05 @ 15:23:58

End Date: 2006.01.05 @ 21:23:57

Job Ticket #: 23392 DST #: 1

15-051-25477-00-00

RECEIVED

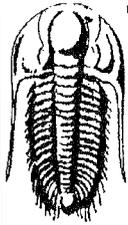
MAR 24 2006

KCC WICHITA

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources
 117 W Limestone Rd.
 Phillipsburg, KS 67661
 ATTN: Gator

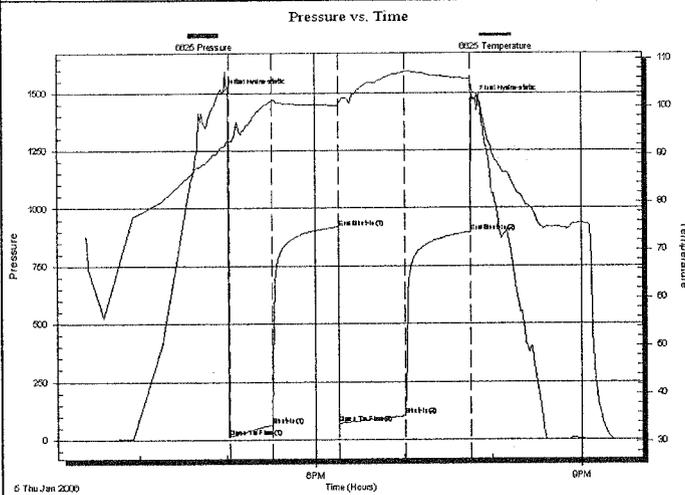
Armbrister #7
31-12s-19w/Ellis
 Job Ticket: 23392 **DST#: 1**
 Test Start: 2006.01.05 @ 15:23:58

GENERAL INFORMATION:

Formation: **Topeka**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:01:27
 Time Test Ended: 21:23:57
 Interval: **3207.00 ft (KB) To 3231.00 ft (KB) (TVD)**
 Total Depth: 3231.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole
 Tester: Brian Fairbank
 Unit No: 15
 Reference Elevations: 2155.00 ft (KB)
 2150.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6625 **Inside**
 Press@RunDepth: 101.08 psig @ 3208.01 ft (KB) Capacity: 7000.00 psig
 Start Date: 2006.01.05 End Date: 2006.01.05 Last Calib.: 2006.01.05
 Start Time: 15:23:58 End Time: 21:23:57 Time On Btm: 2006.01.05 @ 16:57:27
 Time Off Btm: 2006.01.05 @ 19:47:27

TEST COMMENT: IFF - Weak to Good blow - 1/2" - 6 1/4"
 ISI - no blow back
 FFF - Weak to Good blow - surface - 7 1/2"
 FSI - no blow back



PRESSURE SUMMARY

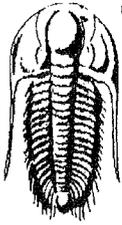
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1501.68	91.57	Initial Hydro-static
4	10.65	92.55	Open To Flow (1)
34	62.72	101.09	Shut-In(1)
79	916.65	100.08	End Shut-In(1)
79	69.20	100.35	Open To Flow (2)
124	101.08	107.25	Shut-In(2)
168	895.34	105.75	End Shut-In(2)
170	1471.39	102.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
145.00	MW 85% W, 15% M	0.92
50.00	MOW 5% O, 90% W, 5% M	0.70
1.00	MO 90% O, 10% M	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Armbrister #7

117 W Limestone Rd.
Phillipsburg, KS 67661

31-12s-19w/Ellis

Job Ticket: 23392

DST#: 1

ATTN: Gator

Test Start: 2006.01.05 @ 15:23:58

Tool Information

Drill Pipe:	Length: 3075.00 ft	Diameter: 3.80 inches	Volume: 43.13 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 38000.00 lb
			<u>Total Volume: 43.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3207.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.02 ft			
Tool Length:	44.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

S.I. Tool	5.00			3192.00	
HYD S.I. Tool	5.00			3197.00	
Packer	5.00			3202.00	20.00 Bottom Of Top Packer
Packer	5.00			3207.00	
Stubb	1.00			3208.00	
Recorder	0.01	6625	Inside	3208.01	
Perforations	20.00			3228.01	
Recorder	0.01	13548	Outside	3228.02	
Bullnose	3.00			3231.02	24.02 Bottom Packers & Anchor
Total Tool Length:	44.02				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources
117 W Limestone Rd.
Phillipsburg, KS 67661

ATTN: Gator

Armbrister #7
31-12s-19w/Ellis
Job Ticket: 23392 **DST#: 1**
Test Start: 2006.01.05 @ 15:23:58

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.96 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: inches			

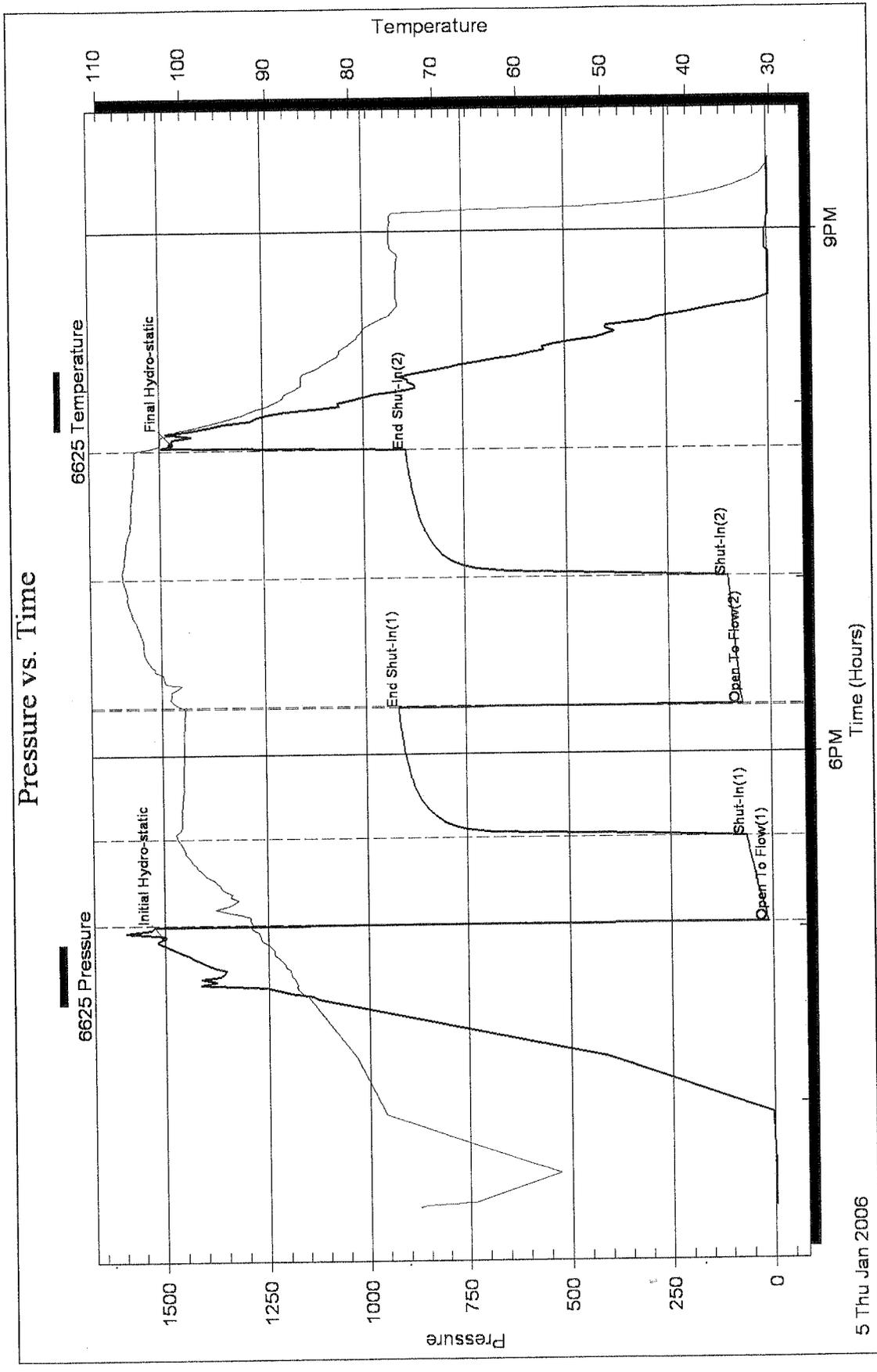
Recovery Information

Recovery Table

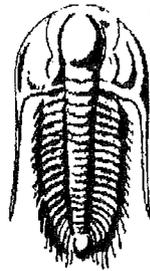
Length ft	Description	Volume bbl
145.00	MW 85% W, 15% M	0.923
50.00	MOW 5% O, 90% W, 5% M	0.701
1.00	MO 90% O, 10% M	0.014

Total Length: 196.00 ft Total Volume: 1.638 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time



5 Thu Jan 2006



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

117 W Limestone Rd.
Phillipsburg, KS 67661

ATTN: Gator

31-12s-19w/Ellis

Armbrister #7

Start Date: 2006.01.06 @ 22:10:40

End Date: 2006.01.07 @ 04:53:39

Job Ticket #: 23393 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Pioneer Resources

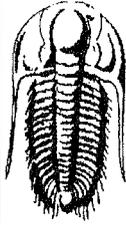
Armbrister #7

31-12s-19w/Ellis

DST # 2

LKC "J,K"

2006.01.06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources
 117 W Limestone Rd.
 Phillipsburg, KS 67661
 ATTN: Gator

Armbrister #7
31-12s-19w/Ellis
 Job Ticket: 23393 **DST#: 2**
 Test Start: 2006.01.06 @ 22:10:40

GENERAL INFORMATION:

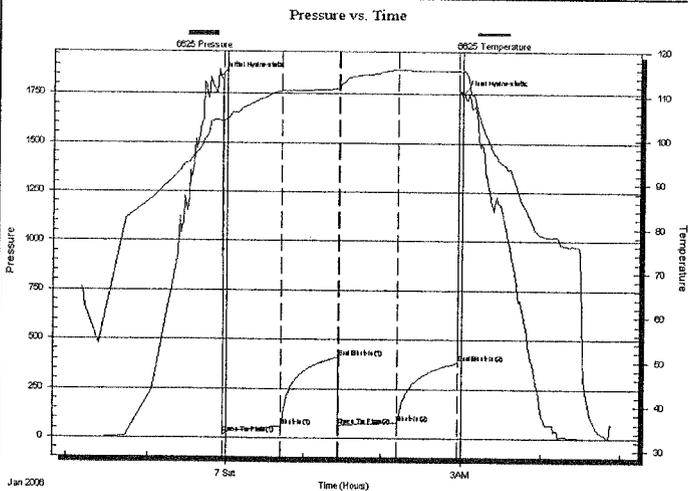
Formation: **LKC "J,K"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole
 Time Tool Opened: 23:57:09
 Tester: Brian Fairbank
 Time Test Ended: 04:53:39
 Unit No: 15
 Interval: **3628.00 ft (KB) To 3670.00 ft (KB) (TVD)**
 Reference Elevations: 2155.00 ft (KB)
 Total Depth: 3670.00 ft (KB) (TVD)
 2150.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 5.00 ft

Serial #: 6625

Inside

Press@RunDepth: 77.64 psig @ 3634.01 ft (KB) Capacity: 7000.00 psig
 Start Date: 2006.01.06 End Date: 2006.01.07 Last Calib.: 2006.01.07
 Start Time: 22:10:40 End Time: 04:53:39 Time On Btm: 2006.01.06 @ 23:55:09
 Time Off Btm: 2006.01.07 @ 03:00:09

TEST COMMENT: IFP - Weak to Fair blow - 1/4" - 5"
 ISI - no blow back
 FFP - surface to Weak blow - surface - 1 1/2"
 FSI - no blow back



PRESSURE SUMMARY

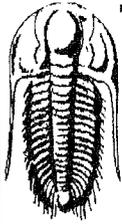
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.60	104.42	Initial Hydro-static
2	17.26	104.02	Open To Flow (1)
47	59.70	111.14	Shut-In(1)
91	410.80	111.59	End Shut-In(1)
92	62.73	111.52	Open To Flow (2)
137	77.64	115.97	Shut-In(2)
182	382.74	115.70	End Shut-In(2)
185	1752.11	115.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
142.00	MW show O 50%, M50% W	0.88

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources
117 W Limestone Rd.
Phillipsburg, KS 67661

ATTN: Gator

Armbrister #7
31-12s-19w/Ellis
Job Ticket: 23393 **DST#: 2**

Test Start: 2006.01.06 @ 22:10:40

Tool Information

Drill Pipe:	Length: 3513.00 ft	Diameter: 3.80 inches	Volume: 49.28 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 41000.00 lb
			<u>Total Volume: 49.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3628.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.02 ft			
Tool Length:	62.02 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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S.I. Tool	5.00			3613.00	
HYD S.I. Tool	5.00			3618.00	
Packer	5.00			3623.00	20.00 Bottom Of Top Packer
Packer	5.00			3628.00	
Stubb	1.00			3629.00	
Perforations	5.00			3634.00	
Recorder	0.01	6625	Inside	3634.01	
Perforations	33.00			3667.01	
Recorder	0.01	13548	Outside	3667.02	
Bullnose	3.00			3670.02	42.02 Bottom Packers & Anchor
Total Tool Length:	62.02				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources
117 W Limestone Rd.
Phillipsburg, KS 67661
ATTN: Gator

Armbrister #7
31-12s-19w/Ellis
Job Ticket: 23393 **DST#: 2**
Test Start: 2006.01.06 @ 22:10:40

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: 7.96 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

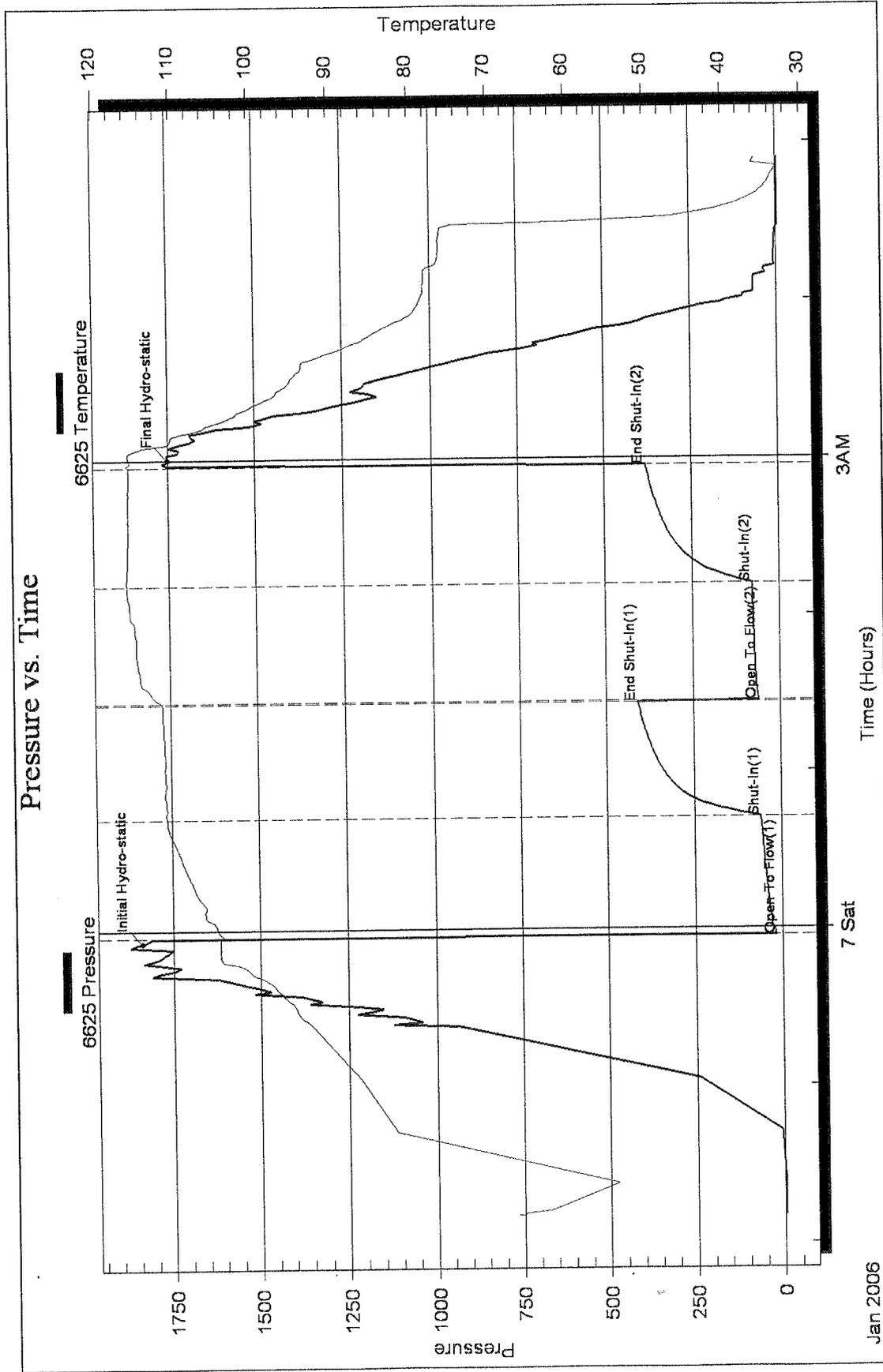
Recovery Information

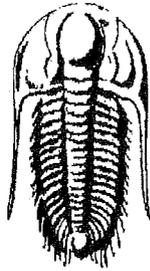
Recovery Table

Length ft	Description	Volume bbl
142.00	MW show O 50%, M 50% W	0.881

Total Length: 142.00 ft Total Volume: 0.881 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: **Pioneer Resources**

117 W Limestone Rd.
Phillipsburg, KS 67661

ATTN: Gator

31-12s-19w/Ellis

Armbrister #7

Start Date: 2006.01.07 @ 15:40:28

End Date: 2006.01.07 @ 20:50:27

Job Ticket #: 23394 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Pioneer Resources

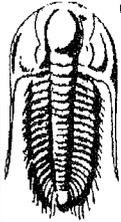
Armbrister #7

31-12s-19w/Ellis

DST # 3

Conglomerate

2006.01.07



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Armbrister #7

117 W Limestone Rd.
Phillipsburg, KS 67661

31-12s-19w/Ellis

Job Ticket: 23394

DST#: 3

ATTN: Gator

Test Start: 2006.01.07 @ 15:40:28

Tool Information

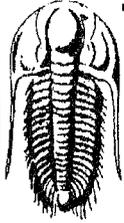
Drill Pipe:	Length: 3637.00 ft	Diameter: 3.80 inches	Volume: 51.02 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 51.62 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3760.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.02 ft			
Tool Length:	67.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

S.I. Tool	5.00			3745.00	
HYD S.I. Tool	5.00			3750.00	
Packer	5.00			3755.00	20.00 Bottom Of Top Packer
Packer	5.00			3760.00	
Stubb	1.00			3761.00	
Perforations	5.00			3766.00	
C.O. Sub	1.00			3767.00	
Recorder	0.01	6625	Inside	3767.01	
Blank Spacing	31.00			3798.01	
C.O. Sub	1.00			3799.01	
Perforations	5.00			3804.01	
Recorder	0.01	13548	Outside	3804.02	
Bullnose	3.00			3807.02	47.02 Bottom Packers & Anchor

Total Tool Length: 67.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources
117 W Limestone Rd.
Phillipsburg, KS 67661
ATTN: Gator

Armbrister #7
31-12s-19w/Ellis
Job Ticket: 23394 **DST#: 3**
Test Start: 2006.01.07 @ 15:40:28

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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time

